पेटेंट कार्यालय
शासकीय जर्नल

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पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(Shri Rajendra Ratnoo)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

9th JULY, 2021

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THE PATENT OFFICE
KOLKATA, 09/07/2021
Address of the Patent Offices/Jurisdictions
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2	The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: mumbai-patent@nic.in ❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli	5	The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector –V, Salt Lake City, Kolkata- 700 091 Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: kolkata-patent@nic.in ❖ Rest of India
3	The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi – 110075 Phone: (91)(11) 25300200 & 28032253 Fax: (91)(11) 28034301 & 28034302 E.mail: delhi-patent@nic.in ❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.		

Website: www.ipindia.nic.in
www.patentoffice.nic.in

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

कोलकाता, दिनांक 09/07/2021

• कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए है:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिहन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in	4	पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91)(44) 2250 2081-84 फ़ैक्स: (91)(44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली.	5	पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91)(33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91)(33) 2367 1988 ई. मेल: kolkata-patent@nic.in ❖ भारत का अवशेष क्षेत्र
3	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91)(11) 25300200, 28032253 फ़ैक्स: (91)(11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब,राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़		

वेबसाइट: http://www.ipindia.nic.in
www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाए, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे।

शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है ।

SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

(Shri Rajendra Ratnoo)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18th months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

Early Publication:

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011008475 A

(19) INDIA

(22) Date of filing of Application :28/02/2020

(43) Publication Date : 09/07/2021

(54) Title of the invention : PATELLAR ANATOMICAL LOCKING HOOK PLATE

(51) International classification	:A61F0002380000, E05C0019000000, B60J0007185000, A61B0090000000, A61B0034100000	(71)**Name of Applicant :** **1)ROOP BHUSHAN KALIA** Address of Applicant :10-C, CURZON ROAD, DEHRADUN UTTARAKHAND-248001, INDIA Uttarakhand India **2)MISS JYOTSNA KALIA**
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)ROOP BHUSHAN KALIA**
(33) Name of priority country	:NA	**2)MISS JYOTSNA KALIA**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A patellar anatomical locking hook plate is disclosed. A main body or plate (102) having at least two pairs of vertical and horizontal limbs (104, 106), joined together in order to form said plate (102). A pair of curved surfaces/hooks (122) disposed at each inferior end of said pair vertical limbs (104) in order to grip an inferior pole (114) of said patella (112) on both sides of a patella tendon (108). A pair of superior tines (110) disposed at each superior end of said pair of vertical limbs (104). A plurality of annular holes (130) disposed at each end of said pair of horizontal limbs (106), wherein said annular holes (130) comprises a pair of second level holes (132) and a pair of third level holes (134) which are configured to receive a plurality of locking head screws.

No. of Pages : 25 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202111027829 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : REMOTE CONTROLLED PORTABLE AIR CONDITIONER

(51) International classification	:F24F0005000000, G08C0017020000, F24F0001040000, G03G0021200000, F24F0001000700	(71)**Name of Applicant :** **1)Danish Ahmed** Address of Applicant :House No. 8, Sector E1 Jeelanabad, Peerbagh, Srinagar-190014, J & K Jammu & Kashmir India (72)**Name of Inventor :** **1)Danish Ahmed**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The remote controlled portable air conditioner is easy to carry, Eco friendly and does not require conventional power connection as it can be operated on a 12 Volts battery. The designed air conditioner consists of two small box containers which are then placed in the small body of the air conditioner. The upper box container has a high speed 12 volt DC fan for blowing out chilled air. Apart from this, there is a chilling mechanism of two peltiers fitted with water circulation coolers on the lower side to absorb the heat generated and transfer it to the lower box container. The water circulation coolers serve as the heat sinks. The upper flat surface of the peltiers becomes extremely cold and is provided with an arrangement to absorb heat. The air flow is designed in an efficient way. The high speed fan sucks air which goes through this heat absorbing arrangement and becomes very cold and is finally blown out. The lower box container has a 12 Volt DC submersible small water pump and a piping system attached to it. The pump circulates normal water placed in the lower box arrangement and carries it to the upper box to extract the heat generated. After a long time, the water in the lower box can be changed if required. The whole arrangement works by a remote control. The remote has a good range of around 7 to 10 meters. An LED light is provided which indicates the working of the air conditioner. An antenna has been provided to increase the range of remote. The remote controlled portable air conditioner is light weight, easy to carry and has a great look. The body of the air conditioner is made of smooth white plastic with a black front panel.

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021057158 A
(19) INDIA
(22) Date of filing of Application :30/12/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : FLEXIBLE MULTI-USAGE EMERGENCY PATIENT CARRIAGE AND TRANSFER SYSTEM

(51) International classification	:H04W0076500000, H04W0004900000, B65G0069180000, D05C0007040000, B63B0027240000	(71)**Name of Applicant :** **1)SIDDHARTH SHRIVASTAVA** Address of Applicant :HOUSE NO.159, WARD NO.22, HANUMAN JI WARD, MAHARAJPUR, MANDLA, MADHYA PRADESH, INDIA - 481 665, INDIA. Madhya Pradesh India **2)ADITYA VERMA** **3)DR. SHWETA CHOUHAN**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	(72)**Name of Inventor :** **1)SIDDHARTH SHRIVASTAVA** **2)ADITYA VERMA** **3)DR. SHWETA CHOUHAN**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The said invention proposes commutation of patients in lying down and in sitting position using the unique equipment as a stretcher and wheel chair respectively. The said invention proposes to provide one solution to all requirements of patient commutation which is light weight, with power assisted driven facility and flexible to use in between stretcher and wheel chair and easy to be accommodated in any form of patient emergency vehicle (air and road based ambulances). The proposed invention which is power assisted driven will also provide low cost alternative to various size patient transfer system that will be helpful to commute patient with minimum of manpower and in more efficient manner. Due to its light weight and improved exclusive design, the said invention can help saving precious lives by alienating the requirement of different set of patient transfer equipments in different phases of patient transfer, for example, from place of accident/incident to emergency room in a hospital. It will also provide low cost efficient patient commuting system in hospitals and places of medical practices that lack adequate infrastructure. The proposed invention introduces advanced design of a stretcher which can also be utilized as a wheel chair as and when required using combination of foldable sections and wheels. Also, the said stretcher cum wheel chair is proposed to be made up of such material which is light weight, durable and easy to handle by operators.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202027033456 A
(19) INDIA
(22) Date of filing of Application :05/08/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND INSTALLATION FOR THE CONTINUOUS DYEING OF YARNS OR FABRIC WEBS

(51) International classification	:D06B 3/18, D06B 3/06, D06B 3/12
(31) Priority Document No	:102018000001329
(32) Priority Date	:19/01/2018
(33) Name of priority country	:Italy
(86) International Application No	:PCT/IT2019/050011
Filing Date	:18/01/2019
(87) International Publication No	:WO 2019/142224
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :Via Locatelli, 23 24022 Alzano Lombardo (BG) Italy
(72)**Name of Inventor :**
1)FRESCURA, Attilio

(57) Abstract :
A method for the continuous dyeing of yarns or fabric webs comprises the following phases: a. bringing the dye to the surface of the fiber by means of a series of impregnations of new dyeing baths; b. supporting the diffusion and the fixation of the dye by means of an adequate time of exposure in an inert atmosphere ensuring ring dyeing by means of the white fiber core and enhancing the adsorption partially; and c. alternating with pressing processes in order to have the baths in conditions of releasing color several times. The method is performed by an installation for the continuous dyeing of yarns or fabric webs.

No. of Pages : 8 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/01/2021
(21) Application No.202121001107 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN APPARATUS FOR AERATION OF WASTE WATER

(51) International classification	:C02F0007000000, C02F0001720000, B01F0007000000, C02F0001740000, A01G0025090000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)CHANCHAL SANGAMNERKAR
2)ARUN GUPTA

(57) Abstract :
TITLE OF THE PRESENT INVENTION AN APPARATUS FOR AERATION OF WASTE WATER • ABSTRACT OF THE PRESENT INVENTION Present invention refers to a device meant for treatment of waste water through aeration technique wherein oxygen contained in atmospheric air along with microorganisms is artificially injected for refinement of involved waste water. More specifically, the present invention employs a hollow shaft (20) coupled to an electric motor (30) using a coupling (40) for supply of atmospheric air through its bore (53) to an Air Jet Screw (60) having spiral blade profile along with plurality of notches (66) for agitating the surrounding water, and a jet nozzle (70) provided underside the Air Jet Screw (60) for amplification kinetic energy of stream of air coming into contact with waste water. Wherein, the respective lengths secured by said coupling (40) of hollow shaft (50) and spindle (31) of the electric motor (30) prevents wobbling of the prolonged hollow shaft (50) eliminating need of bearings, and the adjustable support structure (90) used with the casing (20) facilitates manual tuning of inclination in the present invention.

No. of Pages : 39 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121002782 A
(19) INDIA
(22) Date of filing of Application :20/01/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SAFE AND ECOFRIENDLY PERSISTENT SANITIZING GEL FOR TOPICAL APPLICATION •

(51) International classification	:A61K0036470000, A61Q0017000000, A61K0031140000, A01N0065000000, A61Q0005060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)BARI, Kishor Pundalik
4)MOMIN, Bilal
5)KHANDEKAR, Sushant
6)TALUKDAR, Sukanya
7)SAVLA, Parag Narendra
8)HODAGE, Ananda Shamrao
9)VAIDYA, Pooja

(57) Abstract :
The invention discloses persistent antimicrobial protection of hands and/or surfaces of different objects using the hydro-alcoholic gel composition of the present invention. In particular, the invention provides water-resistant sanitizing hydro-alcoholic gel compositions based on ethyl alcohol, silver nanoparticles and fatty acids of Tung seed oil (Aleurites fordii). More particularly, it discloses the compositions that keep the surface sanitized well beyond the instant sanitization provided by volatile ethyl alcohol. The compositions of the present invention have ˜natural origin™ index of minimum 99 % as per ISO 16128-2.

No. of Pages : 50 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/02/2021

(21) Application No.202121004749 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ASIC DESIGN OF RADIX-2, 8-POINT FAST FOURIER TRANSFORM (FFT).

(51) International classification	:G06F0017140000, G06F0009300000, H04L0027260000, G06F0009380000, H04L0005140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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2)Hogade Balaji G
(72)**Name of Inventor :**
1)Kulkarni Prasad Anant
2)Hogade Balaji G

(57) Abstract :
This invention describes a Fast Fourier Transform (FFT) processor employed with pipeline architecture consist of series of Processing Elements (PE). PE has computational and data storing element. Computational elements known as butterfly Unit (BU) are responsible for performing arithmetic operations. In most of cases memory is used as storing element. Here in this invention a 16- bit fast Fourier transform (FFT) processor is designed where the series of processing elements (PE) is replaced by single BU. Here the Arithmetic computations are performed in floating point form to overcome the nonlinearities and all computations are controlled by tailored instruction set. Here all instructions are of same size and have same execution time. Twiddle constants are implicitly available in the instruction. Internal computations are stored in register set to avoid the load and store operations with memory. TITLE ASIC Design of Radix-2, 8-point Fast Fourier Transform (FFT).

No. of Pages : 24 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121006341 A
(19) INDIA
(22) Date of filing of Application :15/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR FABRICATING A MULTI-LAYERED CERAMIC CAPACITOR

(51) International classification	:H01L0049020000, H01G0004120000, H01L0021316000, C23C0014280000, C25D0003560000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :Department of Electronics and Communication Engineering, School of Electrical Engineering and Computing, Adama Science and Technology University, P. O. Box No. 1888, Adama, Oromia, Ethiopia, pin code - 311-2118 Ethiopia
(72)**Name of Inventor :**
1)Dr. Ruthramurthy Balachandran
2)Dr. Hanabe Chowdappa Ananda Murthy
3)Mr. Tadesse Hailu Ayane
4)Mr. Gemechu Dengia
5)Mr. Amanuel Abebe
6)Dr. Aschalew Tadesse

(57) Abstract :
The present invention relates to a multi-layered ceramic capacitor and a process for fabricating the same. The process includes providing a first layer (102) having a thickness of 1000 µm and consisting of a copper substrate, pulse electrodepositing a second layer (104), having a thickness of 250 nm and consisting of nickel-iron alloy on said first layer (102), said nickel-iron alloy having nickel in the range of 80 wt. %, and iron in the range of 20 wt. %, depositing a third layer (106), having a thickness of 665 nm, and consisting of ZrO2 doped Ba0.5Sr0.5TiO3, by pulsed laser deposition process on said second layer (104), and depositing a fourth layer (108), having a thickness of 100 nm, and consisting of platinum, on said third layer (106). The capacitor has a dielectric constant of 700, a dielectric loss of 0.03, and a leakage current density of 30 nA/cm2.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121010705 A
(19) INDIA
(22) Date of filing of Application :14/03/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : WEARABLE INTELLIGENT BREATHING ASSISTANT DEVICE WITH BUILTIN AIR CIRCULATION CONFIGURED TO BREATHED IN PATTERN, REUSABLE AIR-PURIFICATION, ENVIRONMENTAL SENSORS AND DETACHABLE MEDICATION FEATURES TO RENOVATE ANY FACE MASK INTO SMART CONNECTED MASK

(51) International classification	:A62B0007100000, A62B0023020000, A62B0009060000, A62B0009000000, A62B0018020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :H-402, Shlok Parisar, Gota, S.G. Highway, Ahmedabad, Gujarat, India. PIN-382481 Gujarat India
(72)**Name of Inventor :**
1)RATHOD BHAVDIPSINH MAHENDRASINH

(57) Abstract :
The wearable intelligent breathing assistant device is retrofitted solution for traditional mask and convert it into safe and comfortable smart connected face mask with IoT feature. In this way, a wearer of this device is able to ensure the quality of breathed in air, configurable breathing pattern, medicated inhalation, pure oxygen supply and environmental conditions insights.

No. of Pages : 13 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/03/2021
(21) Application No.202121011749 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ZNS/CDTE CORE/SHELL NANOWIRES FOR FABRICATION OF SOLAR CELL •

(51) International classification	:H01L0031180000, H01L0031029600, C09K0011880000, H01L0029775000, C30B0029480000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Rishit S. Shukla
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2)Vidit B. Zala
3)Sanjeev K. Gupta
4)P. N. Gajjar
(72)**Name of Inventor :**
1)Rishit S. Shukla
2)Vidit B. Zala
3)Sanjeev K. Gupta
4)P. N. Gajjar

(57) Abstract :
ZnS/CdTe Core/Shell Nanowires for Fabrication of Solar Cell • The present invention provides stable ZnS/CdTe Core/Shell nanowires for fabrication of solar cell which is highly efficient. Said stable structure consists of plurality of atoms of ZnS/CdTe; each in equal atom being in proportion to another where Zn equals to S atoms and Cd equals to Te atoms. There are six atoms each of Zinc (Zn) and Sulphur (S) that make up the core of the nanowire and 18 atoms each of Cadmium (Cd) and Tellurium (Te) to make up the shell, In all, there are 48 atoms in the unit cell of the ZnS/CdTe core/shell nanowire. In order to avoid the interactions between ZnS nanowires and CdTe nanowires, the vaccum of 1 nm is there along the X-direction and Y-direction and multiplied along the Z-direction to elongate the nanowire. (Fig.1)

No. of Pages : 21 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121014270 A
(19) INDIA
(22) Date of filing of Application :30/03/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IMPROVED SYSTEM FOR PROSTHETIC HAND

(51) International classification	:A61F0002580000, A61F0002680000, A61F0002500000, A61F0002760000, A61F0002700000	(71)**Name of Applicant :** **1)Damodar, Dinesh Ramesh** Address of Applicant :A-145, Bhavani Nagar tekra, Nr. Rahul kiranastore, Opp.Jognimatanu mandir, Rabari Vasahat, Odhav, Ahmedabad-382415, Gujarat, India. Gujarat India
(31) Priority Document No	:NA	**2)Suthar, Umang**
(32) Priority Date	:NA	**3)Chitrodiya, Sarika Jaykarbhai**
(33) Name of priority country	:NA	**4)Patel, Chintan Amrutbhai**
(86) International Application No	:NA	(72)**Name of Inventor :**
Filing Date	:NA	**1)Damodar, Dinesh Ramesh**
(87) International Publication No	: NA	**2)Suthar, Umang**
(61) Patent of Addition to Application Number	:NA	**3)Chitrodiya, Sarika Jaykarbhai**
Filing Date	:NA	**4)Patel, Chintan Amrutbhai**
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTARCT AN IMPROVED SYSTEM FOR PROSTHETIC HAND • The present invention relates to an improved system for the prosthetic hand, which recognize muscle activities efficiently. Said invention provides robust, efficient and cost effective system for prosthetic hand providing different grip patterns and hand positions making it efficient. It is based on closed loop feedback.

No. of Pages : 27 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121018424 A
(19) INDIA
(22) Date of filing of Application :21/04/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IMPROVED BICYCLE HANDLEBAR MECHANISM •

(51) International classification	:B62K0021120000, B62K0021160000, B62K0021200000, B62K0021060000, B62K0021180000	(71)**Name of Applicant :** **1)E-VEGA MOBILITY LABS LLP.** Address of Applicant :30/349, Shivam apartments Near Octroy Naka, Nava Vadaj Ahmedabad Gujarat India Gujarat India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)SHUBHAM RAMDEV MISHRA**
(33) Name of priority country	:NA	**2)NATANSH NIRAV VYAS**
(86) International Application No	:NA	**3)BHAVIK NATVARBHAI SOLANKI**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Abstract AN IMPROVED BICYCLE HANDLEBAR MECHANISM The present invention provides bicycle handlebar with self-adjustable bi-stable mechanism for varying the handlebar position and height, without any complex movement. Said bicycle handlebar mechanism comprises: Steering tube (1), Spring (2), V-shaped tab (3), Welding of steering tube and spring (4), Head tube (5), Slots (6), Triple tree (7), Handlebar (8), Stem (9), Frame (10) and Suspension forks (11). Fig. 4

No. of Pages : 17 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121018958 A
(19) INDIA
(22) Date of filing of Application :24/04/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A DYNAMIC MOUTH MIRROR AND A METHOD FOR ENABLING THE DYNAMIC MOUTH MIRROR THEREOF

(51) International classification	:G01S0007481000, G02B0026080000, B60R0001060000, B60R0001020000, F27D0021000000	(71)**Name of Applicant :** **1)DR. APURVA DESAI** Address of Applicant :11 rushil bungalows behind pride hotel , bodakdev, Ahmedabad , Gujarat Gujarat India **2)Dr. Ridhima Harjai**
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)DR. APURVA DESAI**
(33) Name of priority country	:NA	**2)Dr. Ridhima Harjai**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A DYNAMIC MOUTH MIRROR AND A METHOD FOR ENABLING THE DYNAMIC MOUTH MIRROR THEREOF In this invention, the problems associated with a Static Mouth Mirror is solved by using a Dynamic Mouth Mirror. The method to enable the Dynamic Mouth Mirror (100) may comprise placing a Dynamic Mouth Mirror (100) in a buccal cavity, determining the position of Dynamic Mouth Mirror (100) to analyze a deformity in the buccal cavity. The method may further comprise enabling micro-adjustments of the position of the Dynamic Mouth Mirror (100) based on a first set of controllers (109A). The method may also include enabling streamlined illumination directed to the deformity by a light source (105) and enabling a wiper action to form a clear reflective surface on a reflective surface of the connector head (103A) of the Dynamic Mouth Mirror (100) based on a second set of controllers (109B). The method may also include a CCD censor (111) to detect dental deformities. FIG. 1

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121020333 A
(19) INDIA
(22) Date of filing of Application :04/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A COMPOSITION FOR PREPARING RECYCLED CERAMIC COMPOSITE AND PROCESS THEREOF •

(51) International classification	:A61K0047380000, C04B0035630000, C04B0035626000, C04B0035640000, C09D0011500000	(71)**Name of Applicant :** **1)EARTH TATVA INNOVATION PVT. LTD.** Address of Applicant :8, Indraprasth Apartments Opp. St. Xavier™s School, Near Adarsh Society, Ghod Dod Road Surat,Gujarat,India. Gujarat India
(31) Priority Document No	:NA	**2)SHASHANK NIMKAR**
(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)SHASHANK NIMKAR**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT A COMPOSITION FOR PREPARING RECYCLED CERAMIC COMPOSITE AND PROCESS THEREOF • The present invention relates to a composition for preparing recycled ceramic composite and a process for preparing the same. Said composition comprises of: 30%-70% by weight pulverized ceramic waste (250-400 mesh), 30%-70% by weight binder, 0.10%-0.50% by weight deflocculating agent and 30%-50% by weight water. Said invention provides zero-waste manufacturing process for preparing the recycle ceramic composite. Said process for preparing recycled ceramic composite facilitates equal and uniform dispersion of waste and binding particles for stable and higher strength of the material.

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/05/2021
(21) Application No.202121020997 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AQUEOUS LIQUID CONCENTRATE OF PTEROCARPUS MARSUPIUM AND GOMUTRA

(51) International classification	:A61K0036480000, C02F0001440000, A61K0033240000, A61K0031455000, C02F0001280000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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2)PROF.(DR.) NAVIN R. SHETH
3)DR. HITESH I. JANI
(72)**Name of Inventor :**
1)SHUKLA RIDDHI H.
2)PROF.(DR.) NAVIN R. SHETH
3)DR. HITESH I. JANI

(57) Abstract :
ABSTRACT AN AQUEOUS LIQUID CONCENTRATE OF PTEROCARPUS MARSUPIUM AND GOMUTRA The present invention is an aqueous liquid concentrate of Pterocarpus marsupium and Gomutra. The present invention is in particular an aqueous liquid concentrate of Pterocarpus marsupium and Gomutra which is a concentrated water extract of Pterocarpus marsupium and liquid concentrate of Gomutra. The present invention is process of preparing the same.

No. of Pages : 30 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121021115 A
(19) INDIA
(22) Date of filing of Application :10/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD OF PREPARATION OF FORWARD OSMOSIS MEMBRANE USING SYNTHESIZED POLY(SULFONE-CO-AMIDE) POLYMER

(51) International classification	:B01D0061000000, C02F0001440000, B01D0067000000, B01D0069120000, B01D0071560000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Dr Asim K.Ghosh
2)Vijay S Mamtani
3)Dr. Ramesh Chandra Bindal

(57) Abstract :
Abstract A Method of Preparation of forward Osmosis Membrane using Synthesized poly(sulfone-co-amide) (PSAm) Polymer The present invention relates to a novel method for the development of forward osmosis membrane using synthesized Poly(sulfone-co-amide) (PSAm). The process involves steps like: (1) Synthesis of the poly(sulfone-co-amide) polymer, (2) Preparation of polymer casting solution and forward osmosis membrane using casting machine. (3) Assembling of the FO membranes in spiral module form. The prepared membranes are capable of giving water flux of 22-23 L.m-2.h-1 and very nominal back diffusion of salt of only 0.5 0.7 % from draw solution to the feed (draw solution salt rejection99.3 99.5%) at standard FO test condition (Feed: DM water; draw solution: 1 M NaCl with no pressure). These membranes are useful in concentration of desired product in pharmaceutical /biotech, food &beverage industries and diary industries. Figure 6

No. of Pages : 36 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121021322 A
(19) INDIA
(22) Date of filing of Application :11/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LIQUID TRAP

(51) International classification	:H01M0002120000, B01D0017020000, H01L0023310000, B01D0001300000, C02F0001400000	(71)**Name of Applicant :** **1)Padam Singh** Address of Applicant :C-704, Harshvardhan, 185, Saki Vihar Road, Andheri East, Mumbai 400072, Maharashtra, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Padam Singh**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Liquid Trap will be used as a compact and smart equipment for separation of oil, water and gas without any instrumentation in place.

No. of Pages : 3 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121021686 A
(19) INDIA
(22) Date of filing of Application :13/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : GRAVEL PACK FOR UNCONSOLIDATED RESERVOIR

(51) International classification	:E21B0043040000, C01B0005020000, E21B0043243000, E21B0043080000, E21B0043120000	(71)**Name of Applicant :** **1)Padam Singh** Address of Applicant :C-704, Harshvardhan, 185, Saki Vihar Road, Andheri East, Mumbai 400072, Maharashtra Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Padam Singh**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Gravel Pack shall ensure sustained production of oil without lose sands and cleaning of the pack once it gets chocked by reservoir fine sand.

No. of Pages : 3 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121021752 A
(19) INDIA
(22) Date of filing of Application :13/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CHEMICAL STIMULATION FOR HEAVY OIL RESERVOIR

(51) International classification	:E21B0043240000, C01B0005020000, B01J0029080000, B01J0037020000, C10G0045080000	(71)**Name of Applicant :** **1)Padam Singh** Address of Applicant :C-704, Harshvardhan, 185, Saki Vihar Road, Andheri East, Mumbai 400072, Maharashtra Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Padam Singh**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Chemical Stimulation is a unique treatment for reservoir by injecting exothermic chemicals which helps improved production from the reservoir in the long run.

No. of Pages : 3 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121021902 A
(19) INDIA
(22) Date of filing of Application :15/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SERVO GAS SCRUBBER

(51) International classification	:A61M0011000000, A01N0043560000, A61K0009240000, B04B0007020000, F01M0013040000	(71)**Name of Applicant :** **1)Padam Singh** Address of Applicant :C-704, Harshvardhan, 185, Saki Vihar Road, Andheri East, Mumbai 400072, Maharashtra Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Padam Singh**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The Servo Gas Scrubber due to its unique design shall enhance instruments life be supplying liquid free clean gas for operations.

No. of Pages : 3 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/05/2021
(21) Application No.202121022263 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TOOTHBRUSH WITH ROTATABLE BRUSH HEAD

(51) International classification	:B29C0065000000, H04N0007140000, H01L0029780000, B29L0031000000, H01L0027120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)PENDYALA, Gowri Swaminatham
2)JOSHI, Saurabh Ramesh
3)VANJARI, Ajinkya
4)MANI, Ameet

(57) Abstract :
A toothbrush with a rotatable head is provided. The toothbrush includes a brush head assembly having an upper end, a lower end, a plurality of brush bristles configured on a surface of the upper end; and a handling member rotatably configured with lower end of the brush head assembly such that the one of the handling member and the brush head assembly is configured to rotate with respect to another of the handling member and the brush head assembly about an axis.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121023403 A
(19) INDIA
(22) Date of filing of Application :26/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : POLYHERBAL FORMULATION USED FOR THE TREATMENT OF PULMONARY DISORDERS

(51) International classification	:A61K0036530000, A61K0036590000, A61K0036670000, A61K0036190000, A61K0036710000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)Dr. Sumeet Dwivedi
2)Dr. Neetesh K. Jain
3)Dr. Gaurav Jain
4)Dr. Mohit Chaturvedi
5)Dr. Sweta Srivastava
6)Ms. Devshree Gayakwad

(57) Abstract :
Provided are herbal formulations and more particularly, polyherbal formulations which can be used in the treatment of pulmonary disorders. The present invention more particularly relates to polyherbal formulations in the form of an ayurvedic vati which can be used in the treatment of pulmonary (respiratory) disorders and prepared using at least two or more plant materials selected from the group consisting of Tinospora cordifolia (Stem), Piper longum (Fruits), Adhatoda vasica (Leaves), Leucas aspera (Whole plant), Acorus calamus (Rhizomes), Nigella sativa (Seeds) and Ocimum sanctum (Leaves).

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121023541 A
(19) INDIA
(22) Date of filing of Application :27/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR PROVIDING PREDICTIVE INFORMATION THROUGH INTERACTION

(51) International classification	:G06Q0010100000, H04W0064000000, G06Q0040020000, G06K0009000000, G06F0016280000	(71)**Name of Applicant :** **1)SHOPTION PRIVATE LIMITED** Address of Applicant :Sr. No. 3/2A/11, Shivaji Chowk, Rahatani, Pune - 411017, Maharashtra, India. Maharashtra India (72)**Name of Inventor :** **1)SHARAD RAMDAS KALE**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present disclosure provides a system (100) and method (400) for providing predictive information in response to a query placed by a requesting entity (112), by analyzing a pattern of interactions between a computing device (102) and multiple entities (112A, 112B, 112C), upon identification of the multiple entities belonging to within a predetermined distance from the geographical location of the requesting entity (112). Based on the determined pattern, pertaining to one or more predetermined first time interval preceding the reception of the query, and on a set of attributes related to said geographical location, a prediction of information requested by the query is established by a processing unit (104) coupled to the computing device (102), the prediction pertaining to one or more predetermined second time interval after reception of the query. A customized response to the query is determined by a weighted combination of multiple attributes and the response is transmitted to the requesting entity (112) through a secured network (106).

No. of Pages : 38 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024067 A
(19) INDIA
(22) Date of filing of Application :30/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN INSTANT HEALTHY AND NUTRITIOUS DRINK MIX COMPOSITION AND PROCESS FOR PREPRATION THEREOF

(51) International classification	:A23L0033160000, A23L0002390000, A23L0002520000, A23G0004060000, A23L0033105000	(71)**Name of Applicant :** **1)Pranali Salil Gokarn** Address of Applicant :E-401 Shree Sai Sneha Complex, Opposite UCO bank, Ramdev park road, Mira road (East)-401105, District: Thane. Maharashtra, India. Maharashtra India **2)Salil Sudhir Gokarn**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)Pranali Salil Gokarn**
(86) International Application No	:NA	**2)Salil Sudhir Gokarn**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
AN INSTANT HEALTHY AND NUTRITIOUS DRINK MIX COMPOSITION AND PROCESS FOR PREPRATION THEREOF
The present invention provides a composition and method for preparation of an instant healthy and nutritious drink mix thereof. The present invention more particularly relates to an instant wholesome and nourishing mix known for its digestive, refreshing, cleansing and cooling properties. In addition, present invention provides a composition and method for preparation of an instant healthy and nutritious drink mix thereof which can be prepared and served rapidly. The instant healthy and nutritious drink mix also possesses tremendous health benefits and good shelf life. Furthermore, the instant healthy and nutritious drink mix has appearance, color, consistency, taste and property to be relished as a digestive drink similar to the conventional drink made in the traditional way.

No. of Pages : 25 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024352 A
(19) INDIA
(22) Date of filing of Application :01/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART UTILITY POLE: AUTOMATIC POWER OFF WITH AN INTELLIGENT SYSTEM

(51) International classification	:H04L0029080000, H04W0088080000, G06K0009000000, H04N0007180000, H04N0005225000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Poonam Banchhor
(72)**Name of Inventor :**
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3)Poonam Banchhor

(57) Abstract :
The main purpose of this present invention is to provide a smart utility pole for automatically turns off the power through captured image data using an intelligent system. The main design of our invention discloses the smart utility pole: automatic power off with an intelligent system, which comprises the intelligent camera. Usually, the power cut occurs after the tree falls on the power line, during lightning, wind, excavation digging, or any other disturbance in the power line. But, in our present invention, the power cut occurs automatically through the captured image through the intelligent camera whenever necessary. Initially, the camera captures the surrounding area of utility and transmits the captured image to the base station for extracting the required data. Finally, the classification unit automatically turns off the power based on the processed data whenever it is required. [To be published with Figure.1]

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/06/2021

(21) Application No.202121024463 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VARIABLE TRANSMISSION SYSTEM

(51) International classification	:F16H0003760000, F16H0001460000, F16H0003660000, F16H0029080000, F16H0035020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT Parallel shafting gearbox have problems like the frictional losses, gear shifting is very hard under load,wear and tear of gears while shifting and operating of the gears, less options for gear ratio selection, need assistance of clutch and it is hard to derive large reductions gear ratio easily. Present invention introduces a gearbox as a solution for above problems using MIMU(Mechanical input multiplierunit) such that the rotational motion converted to linear motion by input unit received by MIMU is varied by fulcrum pin adjustment, varying the length™s ratio of effort arm to load arm, divided by pivot point (fulcrum pin)on the slotted beam by displacement of fulcrum pin location and transferring the resulting linear motion to output unit where this linear motion is converted to rotational motion.

No. of Pages : 27 No. of Claims : 23

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/06/2021
(21) Application No.202121024489 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED MATERIAL REPLENISHMENT SYSTEM AND METHOD THEREOF

(51) International classification	:G06Q0010080000, B65G0001137000, B60T0017220000, C12M0001360000, H01L0021670000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT AUTOMATED MATERIAL REPLENISHMENT SYSTEM AND METHOD THEREOF An automated material replenishment system (100), the system (100) comprising: a first container (102) designed to house a plurality of articles; a second container (104) housing a backup stock of the articles stored in the first container (102); a stock detection device (106) connected to the first container (102) and the second container (104), the stock detection device (106) comprises: a sensor (118) configured to sense signal representing the presence of the articles within the first container (102); a controller (120) connected to the sensor (118), the controller (120) is configured to receive a sensed signal representing the presence of the articles within the first container (102) from the sensor (118); determine the quantity of the articles inside the first container (102) based on the received sensed signal; and generate a stock replenishment signal when the determined quantity of the articles is less than or equal to the predefined threshold quantity.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024507 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : HADOOP AND MACHINE LEARNING BASED TWO PHASE INTRUSION DETECTION SYSTEM (TPIDS)

(51) International classification	:H04L0029060000, H04L0012260000, H04L0012733000, G06K0009620000, G06N0020000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Network security and data security are the biggest concerns now a days. Every organization decides their future business process based on the past and day to day transactional data. This data may consist of consumers confidential data, which needs to be kept secure. Also, the network connections when established with the external communication devices or entities, a care should be taken to authenticate these and block the unwanted access. This consists of identification of the malicious connection nodes or identification of normal connection nodes. We expect, everytime whenever there is a connection request, it should be recognized as a type of normal node or malicious node connection request. For that, we use a continuous monitoring of the network input traffic to recognize the malicious connection request called as an intrusion and this type of monitoring system is called as Intrusion detection system(IDS). IDS helps us to protect our network and data from insecure and malicious network connections. Many such systems exists in the real time scenario, but they have critical issues of performance like accuracy and timeliness. These issues are addressed as a part of this research work of IDS using machine learning techniques. The Two Phase Intrusion Detection System (TP-IDS) is designed in two phases for increasing accuracy. In phase I of TP-IDS, Suppor Vector Machine (SVM) and k Nearest Neighbor (kNN) are used. In phase II of TP-IDS, Decision Tree (DT) and Na¯ve Bayes (NB) are used, where phase II is the validation phase of the system for increasing accuracy. Also, both the phases are having Hadoop distributed file system underlying data storage & processing architecture, which allows parallel processing to increase the speed of the system and hence achieve the timeliness in TP-IDS.

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024516 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DESIGN AND DEVELOPMENT OF A INNOVATIVE MANUALLY OPERATED SEED SOWING MACHINE.

(51) International classification	:A01C0005060000, A01G0013020000, A01G0009080000, A01C0007020000, A01C0007180000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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5)Siddhant Prakash Sanghvi
6)Sakshi Shailesh Suryawanshi

(57) Abstract :
Abstract The Present disclosure indicates the manual Seed Sowing Machine which is easy to operate and is also cost efficient. This machine will decrease the time for seed sowing. This machine raises the efficiency of labor and enhances the seed sowing quantum per hector land within less time. The proposed seed sowing machine reduces the quantum of labor required to the seed sowing per hector land which helps to reduce the labor cost. Different researchers have concluded that farm mechanization enhances the sowing process for different crops as compared to conventional farmer practice. Yield increase is attributed to higher plant density per hector compared to conventional practice. The crop yielding output by using proposed seed sowing machine will be uniformly distributed over the land which helps for chemical fertilization. The time require for fertilization will also reduce due to uniformly distributed crop. The seed sowing machine is an easy to use machine which is operated manually, to sow the seeds uniformly over the soil. On pushing the handle, the roller is given a sufficient torque to move. The spring-gear mechanism ensures the falling of seed at a defined interval into the soil. This is done by fixing the gear ratio. The leveling roller levels the soil. A leveling roller is connected to the handle rod which helps to support it during rest position. The main purpose of leveling roller is to level the soil after the seed has been sowed inside the soil. Keywords: Seed Sowing Machine, Farming

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024526 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : APPLICATION OF CLUSTERING IN WIRELESS SENSOR NETWORK FOR FOREST FIRE DETECTION AND PREVENTION

(51) International classification	:H04W0084180000, G08B0017000000, G08B0017120000, A62C0003020000, G08B0025100000	(71)**Name of Applicant :** **1)DIPAK W. WAJGI** Address of Applicant :SVPCET, NAGPUR, WARDHA ROAD, NAGPUR,MAHARASHTRA, INDIA, PIN CODE: 441108 Maharashtra India
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Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
9. ABSTRACT OF INVENTION Wireless sensor network is widely used for information gathering and processing from the remote areas where human being cannot reach. Wireless sensor network provides cheap and efficient solution in many remote application. Forest fire detection and monitoring is still one of the big challenge before the world. Forest fire has caused lot of loss to the habitat, humans, and the natural property. Early detection of the forest fire can reduce these losses and preventive actions can be initiated to control forest fire and save the forest property and habitat. The proposed localization method in wireless sensor network using clustering technique is efficient in detecting the forest fire at its early stage and fire control mechanisms can be applied. This low cost and efficient solution is more suitable as compared to conventional methods employed for forest fire detection and control.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024579 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SECURITY MECHANISM FOR OIL PILFERAGE AND LEAKAGE DETECTION BY LASER USING IOT

(51) International classification	:F17D0005020000, F16L0009180000, F17D0005000000, F16H0057040000, G01M0003020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Abstract: - A System has been designing a security mechanism for the oil pilferage and leakage Detection. Pipelines are widely used for transportation of oil over millions of miles throughout the world. In this project we are using a Double wall pipeline made up of carbon steel. Pipelines are designed to withstand several environmental conditions to ensure safe and reliable transmission of oil from point of production to the distributor. there are some major causes of innumerable losses in pipeline due to natural calamities and manmade reasons. This incident results in series ecological disasters, agriculture lands and disturbance to humans with also financial losses. To prevent such menace and ensure safe and reliable oil transmission efforts have been devoted to implement A security Mechanism for oil pilferage and leakage detection in pipelines. There will be a LDR (Light Dependent Resistor) at one end of the outer pipe and the laser circuit at another end of the pipe. Laser rays of low intensity will be passed through every 15 minutes from one end to another end of outer pipe. These laser rays are received at LDR. So, if there exists some obstacle in the way of laser rays it will reflect back the LDR responses the admin system with buzzer and we get to know that there is some fault in the pipeline. Now, in case of leakage if the beam passes through a drop of Oil, then the intensity of light gets slightly changed that changes will be detected by the LDR. KEYWORDS:Oil Leak detection; Double wall Pipe; Leakage location; Pilferage Detection; Transportation pipeline; LDR; Laser.

No. of Pages : 15 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024624 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : POLYMER MORTAR COMPOSITE FROM POST-CONSUMER PET WASTE MODIFIED WITH MMA AND POFA AND PROCESS FOR PREPARATION THEREOF •

(51) International classification	:E01H0001120000, C09J0151080000, E04G0023020000, C04B0028020000, C04B0026180000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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(57) Abstract :
The present invention relates to Polymer mortar composite from post-consumer polyethylene terephthalate (PET) waste modified with methyl methacrylate (MMA) and Palm oil fuel ash (POFA) and process for the preparation thereof. More particularly, the present invention relates to Polymer mortar composition containing palm oil fuel ash (POFA) as filler & unsaturated polyester (UP) resin prepared from post consumed PET waste modified with methyl methacrylate as binder in the said composition. The present invention also relates to a process for the preparation of Polymer mortar composition containing palm oil fuel ash (POFA) & unsaturated polyester (UP) resin prepared from post consumed PET waste modified with methyl methacrylate. The use of the said Polymer mortar can completely eliminate the use of cement. Further, the said composition can help in reducing the use of styrene which is hazardous to environment and landfills.

No. of Pages : 37 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024660 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD OF CHLORELLA PYRENOIDOSA MICROALGAE MEDIATED GREEN SYNTHESIS OF SELENIUM (SE) NANOCATALYST

(51) International classification	:C12N0001120000, B82Y0040000000, B82Y0030000000, C02F0003320000, C12P0007640000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
This invention relates to a method for green synthesis of Selenium (Se) nanocatalyst using Chlorella pyrenoidosa microalgae. The method for synthesis includes steps such as getting cell free extracts of the algae Chlorella pyrenoidosa, preparing reaction mixture by adding the cell free extract of algae Chlorella pyrenoidosa and precursor solution Na2SeO3 and shaking the reaction mixture in a shaker for a particular time at controlled temperature condition. Synthesized nano Selenium (Se) particles are spherical in shape, crystalline, monodisperse, stable and having a size in a range of 30 70 nm.

No. of Pages : 26 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/06/2021
(21) Application No.202121024661 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL SYNTHESIS AND CHARACTERIZATION OF SOME NOVEL 1,2,4-TRIAZOLE DERIVATIVES AND IT™S ANTICANCER ACTIVITY

(51) International classification	:C07D0401040000, A61K0031419600, C07D0401120000, C07D0249120000, A01N0043653000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention related to a novel synthesis and characterization of some novel 1,2,4-triazole derivatives and it™s anticancer activity. More particularly present invention new series of 1,2,4-triazole derivatives were synthesized by conventional and microwave assisted method and screened for anticancer activity. The time required for synthesis is drastically reduced by the microwave assisted synthesis. The synthesis of a number of organic molecules is provided with a clean, simple, efficient, fast and economical tool of organic synthesis.

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024847 A
(19) INDIA
(22) Date of filing of Application :04/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONTROLLED FORCE PERIODONTAL BONE GRAFT CARRIER AND CONDENSER

(51) International classification	:G01L0001220000, A61F0002280000, B25B0023142000, G01G0003140000, A61F0002460000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention generally relates to field of periodontal flap surgery and is a utility device which is used for carrying the graft material into the periodontal bone defects and condensing the graft material used for regenerative periodontal flap surgeries with controlled force with the help of force transducer encompassing a strain gauge and wheatstone bridge circuit as embodiments. The double ended hollow instrument has two working ends the spoon shaped carrier on one side for grafting and the other end it has strain gauge for the calculating Newtonian force applied to the condenser and if the force exceeds the desired range an audible and visionary warning with the help of a beeper and LED blinker respectively will be seen on the handle.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024867 A
(19) INDIA
(22) Date of filing of Application :04/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD OF PASSIVE HEAT REMOVAL FROM REINFORCED CEMENT CONCRETE ROOF OF A BUILDING.

(51) International classification	:G21C0015180000, F24H0009120000, E04B0001348000, F24D0017000000, F28D0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Dr. Sunil Vasant Prayagi
2)Mr. Chaitanya Vivek Bhore

(57) Abstract :
ABSTRACT: The present invention discloses a method for passive heat removal from reinforced cement concrete roof slab of a building comprising constructing a reinforced cement concrete roof slab (102) from a plurality of reinforced steel bars (103), constructing a parapet enclosure (101) by vertically extending the said reinforced steel bars (103) from the reinforced cement concrete roof slab (102), installing an open ended piping system with plurality of pipes that includes pipe for cold water inlet (104A) and pipe for hot water outlet or removal (104B), welding the said vertically extended reinforced steel bars (103A) in the parapet enclosure (101) to the open ended piping system carrying the water, supplying cold water through pipe and removing the heated water and collecting it into a hot water tank (201) for further use. The passive heat removal from the reinforced cement concrete roof slab (102) of the present invention leads to a drop in temperature of reinforced concrete cement slab by 5°C-10°C with heat removal rate of ranging from 800 W/m2/hr to 850 W/m2/hr to, further reducing the cooling load by 15%. (FIG.3)

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121024904 A
(19) INDIA
(22) Date of filing of Application :04/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ANTI-INFLAMMATORY PYRIMIDINE-BENZIMIDAZOLE HYBRID COMPOUND(S) AND METHOD FOR PREPARING THEREOF

(51) International classification	:A61K0038000000, C07D0487040000, A61K0008895000, C07D0403140000, C07F0009656100
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
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Filing Date	:NA
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(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Dr. Suresh Laxman Jadhav
(72)**Name of Inventor :**
1)Mr. Sachin Subhash Kadam
2)Dr. Pratap Yashwant Pawar
3)Dr. Suresh Laxman Jadhav

(57) Abstract :
The present invention relates to a novel pyrimidine-benzimidazole hybrid compound(s) of formula I. Furthermore, it relates to a method for preparing the pyrimidine-benzimidazole hybrid compound(s). The compounds shows anti-inflammatory activities.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025019 A
(19) INDIA
(22) Date of filing of Application :04/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTI-SPINDLE TORQUING SYSTEM, IN PARTICULAR A COMMON MECHANISM FOR POSITIONING MULTIPLE TORQUING TOOLS

(51) International classification	:B23B0039160000, A61F0002910000, B25B0023142000, B65D0090020000, B25B0013480000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Shreyash Hanumant Khedekar
4)Hrishikesh Dilip Dhokare
(72)**Name of Inventor :**
1)Amit Chandrakant Nemade
2)Satyanjay Mohan Pedgaonkar
3)Shreyash Hanumant Khedekar
4)Hrishikesh Dilip Dhokare

(57) Abstract :
Disclosed is a Multi-spindle torquing system, in particular a common mechanism for positioning multiple torquing tools (100 comprises a vertical supporting body, LM block and rail assembly, a mounting base plate for positioning the torquing tools, torquing tools, fixation plate, a spring balance and a set of nesting plates. The system offers the feasibility to adjust the position of the torquing tools in accordance to the number of bolts and the location of the bolts in the workpiece. The torquing system (100) fastens multiple bolts at the same time safeguarding preset torque value at each bolt. The system provides a mechanism that reconcile the system for fastening two, four six bolts configuration with a quick setting. Moreover, the torquing system (100) offers cost-effective and long cycle run mechanism thereby offering wise substitute in opposition to traditional expensive multi-spindle torquing tools.

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025090 A
(19) INDIA
(22) Date of filing of Application :05/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR MAKING NATURAL CANDY

(51) International classification	:A23G0003480000, A23G0003360000, A23G0003420000, A23G0009040000, A23B0007020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Abhay Ajmere

(57) Abstract :
ABSTRACT The present invention relates to a method of making completely natural fruit based hard candies. Conventional methods of making candies use artificial flavouring agents and colours or fruit juices and extracts to make candies and don™t use natural fruits. The present disclosure teaches a method of using actual fruits for making candies. It involves de-hydrating the fruits using a de-hydrating machine, freeze storing the dehydrated fruits, making the sugar syrup, adding liquid glucose, heating it to 260 degree Fahrenheit, pouring the liquid to mixing tray. Parallelly, the frozen dehydrated fruits are powdered and added to the mixing tray. It is then mixed and allowed to dry and cut into pieces to make candies.

No. of Pages : 21 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025117 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD TO ANALYZE THE OPTIMUM POLE ANGLE FOR REDUCING WEIGHT & COPPER LOSS OF THE RADIAL MAGNETIC BEARING

(51) International classification	:F16C0032040000, G06F0001200000, B60L0058210000, B63B0071000000, G06F0030170000	(71)**Name of Applicant :** **1)Dr. SANTOSH N SHELKE** Address of Applicant :Sir Visvesvaraya Institute of Technology, Nashik, Maharashtra 422009, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Dr. SANTOSH N SHELKE**
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT METHOD TO ANALYZE THE OPTIMUM POLE ANGLE FOR REDUCING WEIGHT & COPPER LOSS OF THE RADIAL MAGNETIC BEARING A method to analyze the optimum pole angle for reducing weight & copper loss of the radial magnetic bearing (100), the method comprising steps of identifying major design parameters selected from one of, load to be supported, power loss, maximum current density, flux density allowed, or a combination thereof; choosing a required number of design variables; determining a cross-sectional area of the air gap, the volume of the coil, the cross-sectional area of the coil using given equations; determining maximum and minimum current densities corresponding to maximum and minimum forces, air gap; finding maximum and minimum flux densities corresponding to maximum and minimum forces, using corresponding given equations; determining operating current and values of objective function corresponding to operating forces equations, when the constraints are satisfied.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025192 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SOFT TISSUE GRAFT FORCEPS FOR MUCOGINGIVAL SURGERY

(51) International classification	:A61L0027360000, A61B0017300000, A61C0008020000, A61C0019060000, A61L0027380000	(71)**Name of Applicant :** **1)DR.AMIT MANI** Address of Applicant :RURAL DENTAL COLLEGE LONI PRAVARA INSTITUTE OF MEDICAL SCIENCES Maharashtra India
(31) Priority Document No	:NA	**2)DR.RAVINDRA MANERIKAR**
(32) Priority Date	:NA	**3)DR.SHIVANI SACHDEVA**
(33) Name of priority country	:NA	(72)**Name of Inventor :**
(86) International Application No	:NA	**1)DR.AMIT MANI**
Filing Date	:NA	**2)DR.RAVINDRA MANERIKAR**
(87) International Publication No	: NA	**3)DR.SHIVANI SACHDEVA**
(61) Patent of Addition to Application Number	:NA	**4)DR.KIRTI CHAWLA**
Filing Date	:NA	**5)DR.SHUBHANGI MANI**
(62) Divisional to Application Number	:NA	**6)DR.HARISH SALUJA**
Filing Date	:NA	**7)RURAL DENTAL COLLEGE LONI**

(57) Abstract :
The present invention is the forceps for holding and inserting the soft tissue into the pouch and tunnel for esthetics root coverage or in increasing the width of attached gingiva. The pouch and tunnel technique of connective tissue grafting, if performed correctly, is the most predictable periodontal plastic surgery procedure. It is a very sensitive procedure and requires using delicate handling of the tissues and ample patience while, undermining the interdental papilla and inserting a graft in pouch to avoid folding of the graft and excess pressure. The embodiments holding arm end and working platform arm hold the graft and along with locking mechanism incorporated as one of the embodiments places the graft at the site of surgery.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025261 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IOT ENABLED HYBRID OUTDOOR LIGHTING SYSTEM AND ITS METHOD OF OPERATION

(51) International classification	:F21S0008080000, H05B0047190000, F21W0131103000, F21S0009030000, G08G0001040000	(71)**Name of Applicant :** **1)INDIVISIBLE SOLUTIONS PRIVATE LIMITED** Address of Applicant :B-13, 4th Floor, Garden View Apartment, Near Ozone Guest House, Nal Stop, Ernadwane, Pune 411004, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)MOHATA, Rohit**
(33) Name of priority country	:NA	**2)ALASPURE, Sujay**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT AN IOT ENABLED HYBRID OUTDOOR LIGHTING SYSTEM AND ITS METHOD OF OPERATION The present invention is an outdoor lighting system (100) in which the illumination of the light source (111) can be controlled remotely via communication through IoT technology. The present invention provides a smart street light system which utilizes Artificial Intelligence for controlling and assessing the fault in the system. The present invention can automatically initiate the message if any fault occurs in the module. The present invention also incorporates image capturing device (110) which is used to predict and identify any suspicious activities going in any area by using image processing and if any such kind of activity gets identified then it will immediately send the notification to police. Further a speaker (112) is also connected to manage traffic or to provide some emergency notifications. Figure 1

No. of Pages : 22 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025318 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PETRI DISH

(51) International classification	:C12M0001220000, G02B0025000000, G01N0003080000, C12M0001000000, C12M0001340000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)SUNITA SANJAY DANGE
2)SANJAY RAMCHANDRA DANGE
3)REKHA MOHAN GULVE

(57) Abstract :
A petri dish is provided. The petri dish includes a base plate configured to hold a material. The base plate includes a graduate scale with marking. The base plate also includes a plurality of sector lines arranged to divide the base plate into a plurality of sections. The petri dish also includes a top plate configured to be operable with the base plate; a detachable absorbent pad ring operatively coupled to a rim of the top plate. The detachable absorbent pad ring is configured to absorb moisture from the material within the petri dish. The petri dish also includes a magnifying glass of a predefined size housed on an inner surface of the top plate. The magnifying glass is configured to provide an enlarged view of the material. The magnifying glass operates when the top plate is closed on top of the base plate. FIG. 1

No. of Pages : 18 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025382 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : HOMEOPATHIC COMPOSITION OF THE MEDICINES FOR CURE OF LEUKEMIA.

(51) International classification	:G01N0015140000, G01N0015000000, G01N0033500000, G01N0033800000, G01N0033569000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)VIJAYKUMAR ANANDRAO MANE

(57) Abstract :
ABSTRACT OF THE INVENTION Leukemia is a blood cancer caused by a rise in number of white blood cells in your body. Blood has three types of cells white blood cells red blood cells and platelets. And white blood cells fight infection, red blood cells that carry oxygen and platelets that help the blood clot. Everyday bone marrow makes millions of new cells most of the red cells when we have a leukemia our body makes more white cells then requirement of body. This leukemia cells can't fight infection the normal white cells do. There are so many of the start to affect the way organs work. After sometime we may not have enough resources to supply oxygen enough platelets to clot the blood and enough normal blood cells to fight infection. Classification of classification of leukemia as follows: Leukemia classifications: Leukemia is grouped by how fast it develops and gets worse, and by which type of blood cell is involved. The first group, how fast it develops, is divided into acute and chronic leukemia. Acute leukemia happens when most of the abnormal blood cells don™t mature and can™t carry out normal functions. It can get bad very fast. Chronic leukemia happens when there are some immature cells, but others are normal and can work the way they should. It gets bad more slowly than acute forms do. The second group, what type of cell is involved, is divided into lymphocytic and myelogenous leukemia. Lymphocytic (or lymphoblastic) leukemia involves bone marrow cells that become lymphocytes, a kind of white blood cell. Myelogenous (or myeloid) leukemia involves the marrow cells that create red blood cells, platelets, and other kinds of white blood cells. Types of leukemia: The four main types of leukemia are: Acute lymphocytic leukemia (ALL): This is the most common form of childhood leukemia. It can spread to your lymph nodes and central nervous system. Acute myelogenous leukemia (AML): This is the second most common form of childhood leukemia and one of the most common forms for adults. Chronic (CLL). This is the other most common form of adult leukemia. Some kinds of CLL will be stable for years and won™t need treatment. But with others, your body isn™t able to create normal blood cells, and you™ll need treatment. Chronic (CML). With this form, you might not have noticeable symptoms. You might not be diagnosed with it until you have a routine blood test. People 65 and older have a higher risk of this type. Leukemia Diagnosis: Your doctor will need to check for signs of leukemia in your blood or bone marrow. They might do tests including: Blood tests: A complete blood count (CBC) looks at the number and maturity of different types of blood cells. A blood smear looks for unusual or immature cells. Bone marrow biopsy: This test involves marrow taken from your pelvic bone with a long needle. It can tell your doctor what kind of leukemia you have and how severe it is. Spinal tap: This involves fluid from your spinal cord. It can tell your doctor whether the leukemia has spread. Imaging tests: Things like CT, MRI, and PET scans can spot signs of leukemia. In accordance with the present invention, there is provided a formulation for healing 0f Leukemia, said formulation comprising, along with physiologically acceptable carriers, tinctures and/or homeopathic preparations.

No. of Pages : 11 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025383 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HOMEOPATHIC COMPOSITION OF THE MEDICINES FOR CURE OF CORONARY ARTERY DISEASE.

(51) International classification	:A61K0036810000, A61K0031355000, A61K0036185000, A61B0005020000, A61K0031070000	(71)**Name of Applicant :** **1)VIJAYKUMAR ANANDRAO MANE** Address of Applicant :198/C-3,E-WARD,NEAR GEETA MANDIR,KAWALA NAKA,KOLHAPUR,416003 Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)VIJAYKUMAR ANANDRAO MANE**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT OF THE INVENTION The coronary arteries are the blood vessels that carry blood to your heart. Coronary artery disease is the narrowing or blockage of the coronary arteries. This condition is usually caused by atherosclerosis. Atherosclerosis is the build-up of cholesterol and fatty deposits (called plaques) inside the arteries. These plaques can clog the arteries or damage the arteries, which limits or stops blood flow to the heart muscle. If the heart does not get enough blood, it cannot get the oxygen and nutrients it needs to work properly. This can cause chest pain (angina) or a heart attack. Healthy coronary arteries are smooth and elastic. The inside of these muscular hollow tubes are lined with a layer of cells called the endothelium. The endothelium helps protect the vessel walls and keep the arteries working properly so blood can flow freely. Coronary artery disease starts when you are very young. Before your teen years, the blood vessel walls start to show streaks of fat. As you get older, the fat builds up, causing minor damage to your blood vessel walls. With time, other substances that move through your blood stream, such as inflammatory cells, cellular waste products, proteins and calcium, stick to the vessel walls. These things combine with the fat and form plaque. Plaques are different sizes, and many are soft on the inside with a hard, fibrous cap • that covers the outside. If the hard surface cracks or tears, the soft, fatty inside is exposed. Platelets (disc-shaped particles in the blood that help form clots) move to the area, and blood clots form around the plaque. The endothelium can also become irritated and stop working properly, which causes the artery to squeeze at the wrong times. This causes the artery to narrow even more. Sometimes, the blood clot breaks apart and blood can flow through the area again. Other times, the blood clot suddenly blocks the blood supply to the heart muscle, causing one of three serious conditions known as an acute coronary syndrome. There has been an alarming increase over the past two Coronary Artery diseases in the prevalence of CHD and cardiovascular mortality in India and other south Asian countries. India is going through an epidemiologic transition whereby the burden of communicable diseases have declined slowly, but that of non-communicable diseases (NCD) has risen rapidly, thus leading to a dual burden. There has been a 4-fold rise of CHD prevalence in India during the past 40 years. Current estimates from epidemiologic studies from various parts of the country indicate a prevalence of CHD to be between 7% and 13% in urban3 and 2% and 7% in rural populations. Epidemiologic studies have shown that there are at present over 30 million cases of CHD in this country. A study by Gajalakshmi et al during 1995“1997 showed that CVD deaths are the highest (38.6%) in urban Chennai. Similar data are published by Joshi et al from Andhra Pradesh. The Global Burden of Diseases Study reported that the disability-adjusted life years lost by CHD in India during 1990 was 5.6 million in men and 4.5 million in women; the projected figures for 2020 were 14.4 million and 7.7 million in men and women respectively. and risk factors in India On the brink of an epidemic M.N. KrishnanIndian Heart J. 2012 Jul; 64(4): 364“367. In present invention, there is provided a formulation for healing 0f Coronary heart disease said formulation comprising, along with physiologically acceptable carriers, tinctures and/or homeopathic preparations. The drug used in our new approach for the treatment of Coronary heart disease consists of multi-component drugs of Homoeopathic origin.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025392 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HOMEOPATHIC COMPOSITION OF THE MEDICINES FOR CURE OF PANCREATITIS.

(51) International classification	:A61K0038000000, A61K0038480000, G16H0050500000, A61K0047640000, A61K0033260000	(71)**Name of Applicant :** **1)VIJAYKUMAR ANANDRAO MANE** Address of Applicant :198/C-3,E-WARD,NEAR GEETA MANDIR,KAWALA NAKA,KOLHAPUR,416003 Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)VIJAYKUMAR ANANDRAO MANE**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT OF THE INVENTION Pancreatitis is a disease in which your pancreas becomes inflamed. The pancreas is a large gland behind your stomach and next to your small intestine. Your pancreas does two main things: it releases powerful digestive enzymes into your small intestine to help you digest food. It releases insulin and glucagon into your bloodstream. These hormones help your body control how it uses food for energy. Your pancreas can be damaged when digestive enzymes begin working before your pancreas releases them. A total of 1,086 patients had been studied for over a period of 18 months. Complete information on risk factors was available on 1,033 subjects and all subsequent analyses were carried out on these subjects. The mean age was 39.7±14.1 years. The mean duration of the disease was 6.95±8.16 years. The mean BMI was 19.8±3.3 kg/m2. Among the subjects studied, 733 (71.0%) were male and 300 (29.0%) were female. The socioeconomic distribution of the subjects was: upper class 84 (8.1%), middle class 600 (58.1%) and lower class 349 (33.8%).The drug used in our new approach for the treatment of pancreatitis consists of multi-component drugs of Homoeopathic origin. In accordance with the present invention, there is provided a formulation for healing 0f pancreatitis said formulation comprising, along with physiologically acceptable carriers, tinctures and/or homeopathic preparations.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025400 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR RESPIRATORY CO2 MEASUREMENT & MONITORING

(51) International classification	:A61B0005083000, A61B0005000000, A61B0005080000, A61M0016080000, A61B0005097000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)PARMAR BHAVESHKUMAR HARISHBHAI
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(57) Abstract :
CO2 (Carbon Dioxide) is a colorless gas. It is the product of cellular aerobic metabolism. All living cells in the human body require energy to survive and carry out physiological activities. This energy (ATP) is generated by the metabolic process of the mitochondrion of the cell. This process consumes oxygen and nutrients, produces CO2 and water as a by-product. CO2 is produced by cellular metabolism and is diffused to local capillaries and the venous system. Then it is transported to the lungs through blood, it then diffuses to alveoli and is then expired by the lung ventilation. Accurate measurement of CO2 concentration is an important factor for clinicians to understand cellular metabolism, blood circulation, and ventilation. CO2 is measured in three ways but, the most common way is by capnography. Capnography continuously measures and records the CO2 concentration in respiratory gases. The results of capnography are shown numerically and graphically. Capnography • term refers to the measurement technique. Capnograph • refers to the equipment. Capnogram • is the graphical value displayed on capnography. Capnometry • is the numerical value displayed. The present disclosure of invention provides a system that instantiates the time-varying signal concerning respiration, thereby measuring the CO2 concentration, EtCO2 (End Tidal CO2), and FiCO2 (Fractional Concentration of Inspired CO2). The invention mainly includes a CO2 sensor, embedded system, display, and rechargeable battery. The exhaled air captured by the CO2 sensor and/is transmitted to the embedded system where the data is manipulated accordingly. The embedded system is connected with the display which presents vital parameters of the patient. If the measured data is unfitted in the normal range, the device produces an alerting sound and flashing light, to report to the medical staff.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025410 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HOMEOPATHIC COMPOSITION OF THE MEDICINES FOR CURE OF SKIN CANCER.

(51) International classification	:G16H0050300000, A61K0036280000, A61K0033240000, H04M0003360000, G16B0050000000	(71)**Name of Applicant :** **1)VIJAYKUMAR ANANDRAO MANE** Address of Applicant :198/C-3,E-WARD,NEAR GEETA MANDIR,KAWALA NAKA,KOLHAPUR,416003 Maharashtra India
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(32) Priority Date	:NA	**1)VIJAYKUMAR ANANDRAO MANE**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT OF THE INVENTION Skin cancers are commonly divided into two broad heads, nonmelanoma skin cancers (NMSCs) which consist of basal cell carcinomas (BCC) and squamous cell carcinomas (SCC) and melanomas. The latter is not as common as the NMSCs in India, but their severity is far more than that of nonmelanomas. NMSCs have a high incidence in European populations. Of the NMSCs, SCC is more common than BCC among dark-skinned individuals. Radiotherapy commonly induces BCC while human papillomavirus predisposes to SCC MSCs. Melanomas can also be cured in its early stages but if left untreated, it is likely to spread to other parts of the body, where it can be very difficult to treat. A total of 18.1 million new cases and 9.6 million deaths from skin cancer were estimated globally in 2018. Global burden of disease study 2015 included data on melanoma incidence, mortality, and disability life years (DALY) and the assessment of global, regional, and national estimates. The worldwide incidence of NMSC was systematically reviewed using 75 studies, it was observed that most of the studies focused on white populations in Europe, the USA, and Australia, but there were limited studies in Africa. The review revealed that NMSC is a growing problem and stressed the need for studies on the prevention of the disease. A recent study on the epidemiology of skin cancer stated that in Europe, the incidence would increase to 40“50/100,000 inhabitants per year in the next decade. Studies from India report clinicopathological evaluation and also focus on the current scenarios of NMSCs, but a systematic pan-India data analysis hasnotpublished. Cancer statistics are available from several cancer registries in various countries globally. A cancer registry is an organization for systematic collection, storage, analysis, interpretation, and reporting of data on subjects with cancer. These provide population-based incidence and mortality rates from population-based cancer registries (PBCRs). Knowledge of the burden of cancer helps in etiologic studies and the effectiveness of the activities that have been undertaken to control cancer. Incidence data on skin cancers from India and its global comparison are perhaps not reported. Although the full cancer statistics is available on Globocan and in different cancer registry sites, a summary of important cancers such as melanoma and nonmelanoma might help researchers and policy-makers as a ready record to understand the magnitude of this cancer. Thus, we aimed to summarize and report incidence of melanoma of the skin and other skin cancers using data from the National Cancer Registry Programme (NCRP) India and GLOBOCAN. In accordance with the present invention, there is provided a formulation for healing 0f Skin Cancer said formulation comprising, along with physiologically acceptable carriers, tinctures and/or homeopathic preparations.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025437 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR EFFICIENCY OF BIG DATA

(51) International classification	:G06F0016220000, G06F0016955000, A01K0001000000, G06F0016130000, B01D0009000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)MR. MANOJ KUMAR CHOUKIKER
5)MR. SHARAD SAHU
6)DR. BHANU SAHU

(57) Abstract :
7. ABSTRACT In the modern era business intelligence searching new business growth, retrieve useful data from large data, and analyzing data. In this proposed invention BDEM (Big Data Efficiency Model) we have used the decision-making factor and decision ranking factor with fuzzy set and softest based decision. In the industry sector various applications used of big data like personalized marketing, predictive inventory ordering, discovering consumer shopping habits, live road mapping for autonomous vehicles, streamlined media streaming, etc., their outcomes are more efficient and accurate. In this invention, we conducted by laying out a big data analytics process for the efficiency of big data. The proposed process a fuzzy soft algorithm to improve possible big data efficiency. This process has a parameter of fuzzy soft set values like volume, velocity, variety, veracity, and value that identified by using a fuzzy soft algorithm.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/06/2021
(21) Application No.202121025499 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR HOT IN-PLACE ROAD MAINTENANCE

(51) International classification	:E01C0023060000, E01C0023090000, E01C0023120000, E01C0023088000, H02G0003180000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)DANDGE, Jyoti Prabhakar
(72)**Name of Inventor :**
1)DANDGE, Aniket Prabhakar

(57) Abstract :
A frugal, cost-effective and time-saving road maintenance system for heating a road pavement is proposed. The system is based on a hot in-place technique. The system may include a hydraulic system. The hydraulic system may in turn include a first hydraulic jack coupled to a burner box and configured to place the box over the pavement. The hydraulic system may also include a second hydraulic jack coupled to the box and configured to level the box to the pavement. The box may be configured to work as a cover. The box may include a rotating plate attached to the second jack and configured to rotate the box. The burner box may also include a sliding trey configured to move the box horizontally. The box may further include infrared burner(s) for heating the pavement. A horizontal/vertical distance between the pavement and the box may be adjusted using one or more components such that optimal radiant heat transfer may be achieved between the infrared burner(s) and the pavement.

No. of Pages : 47 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025560 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention :THE SMART MEDICAL WASTE MANAGEMENT SYSTEM AND PROCESS. •

(51) International classification	:A61L0011000000, B09B0003000000, B65F0001140000, B02C0019000000, A61L0002180000	(71)**Name of Applicant :** **1)Dr Kamalakanta Muduli** Address of Applicant :Associate Professor, Mechanical Engineering Department, Papua New Guinea University of Technology, PMB 411, Lae, Morobe Province, Papua New Guinea Papua New Guinea
(31) Priority Document No	:NA	**2)Dr Aezeden Mohamaed**
(32) Priority Date	:NA	**3)Rashmi Prava Das**
(33) Name of priority country	:NA	**4)Dr. Manoranjan Dash**
(86) International Application No	:NA	(72)**Name of Inventor :**
Filing Date	:NA	**1)Dr Kamalakanta Muduli**
(87) International Publication No	: NA	**2)Dr Aezeden Mohamaed**
(61) Patent of Addition to Application Number	:NA	**3)Rashmi Prava Das**
Filing Date	:NA	**4)Dr. Manoranjan Dash**
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The smart medical waste management system and process comprising the management and sorting of the bio medical waste sprayed from the hospital. The present invention relates smart system operating by Internet connection using and bio medical waste collection by machine and transfer into the bin with full safety and drive of the product. Also the structure comprising An enclosure having a receiver compartment for loading scientific waste to be treated and motor-pushed shredder operative to shred the waste placed inside the receiver compartment also a tank for receiving a decontaminating disinfectant with a conduit for delivering the decontaminating disinfectant to mix with the waste loaded into the receiver compartment for a pump for recirculating the waste and disinfectant mixture via the shredder till the particle size of the decontaminated waste is reduced to a preferred granular consistency and a discharge port for outputting the decontaminated waste having the favored granular consistency.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/06/2021
(21) Application No.202121025563 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR SYNTHESIS OF POLYPROPYLENE BASED BIO COMPOSITE

(51) International classification	:C08L0023060000, C08L0023120000, C08L0033200000, G01N0035000000, C08L0067040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)THAKRE, Ashish Rameshrao
2)BAXI, Rashmi Nitin

(57) Abstract :
ABSTRACT A PROCESS FOR SYNTHESIS OF POLYPROPYLENE BASED ALLOYS AND COMPOSITES The present invention relates to a process for synthesis of polypropylene based alloys and composites. The propose invention provides synthesized bio composite material. In the proposed invention sunn hempbast fiber is selecting as natural filler constituent of the biocomposite material. The bio composite materials are extruding using twin screw extruder machine and the entire test specimen are injection molded. Three different categories of samples are prepared by adding 10%(PS 10),20%(PS 20) and 30%(PS 30) sunnhemp fiber in the blends. Mechanical, rheological, chemical, physical, thermal, structural and morphological experiments of the synthesize blends are carried out. Surface modification due to coupling agent in main constituent material is observed in present invention.

No. of Pages : 25 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025727 A
(19) INDIA
(22) Date of filing of Application :09/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PRODUCTION OF PRODIGIOSIN FROM SERRATIA MARCESCENS USING SOYBEAN MEAL AS PRIME SOURCE OF NUTRITION

(51) International classification	:A23K0010370000, C12R0001430000, H01M0004130000, A61K0031402500, C23C0016020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Nisarg Gohil
3)Gargi Bhattacharjee

(57) Abstract :
Prodigiosin is a bacterial pigment that has manifested multifaceted activities such as antimicrobial, anticancer, antimalarial, antifungal, immunosuppressive, etc. These propitious features elucidate the increasing attention towards targeted overproduction of prodigiosin. However, commercial ventures selling synthetic growth mediums often charge exorbitant rates for their optimized formulations. In this invention, soybean meal, alone and with supplementation of sucrose and/or glycine is used for higher production of prodigiosin compared to complex synthetic commercial preferred media. Optimization of incubation time and concentration of soybean meal, sucrose and glycine needed have yielded prodigiosin production many folds.

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025775 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HIGH PROTEIN NUTRITIONAL COMPOSITION AND METHOD OF PREPARING THE SAME

(51) International classification	:A23L0011000000, A23L0033000000, A61K0036906400, A23L0025000000, C08J0009000000	(71)**Name of Applicant :** **1)RASHMI SINGH** Address of Applicant :WARD NO.52, NEAR MOHIT TRADERS POTIAKALA, NEW ADARSH NAGAR, DURG, 491001, CHHATTISGARH, INDIA Chattisgarh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)RASHMI SINGH**
(33) Name of priority country	:NA	**2)VASU VERMA**
(86) International Application No	:NA	**3)REETA VENUGOPAL**
Filing Date	:NA	**4)ANIKSHA VARODA**
(87) International Publication No	: NA	**5)ARUN KUMAR**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A high protein nutritional composition suitable for human consumption is disclosed. The composition comprises of a plant based protein source comprising of a processed soybean flour and a bengal gram flour in the ratio of 4:1 and an one or more additives. The one or more additives comprises of a clarified butter, sugar, a cardamom powder, coconut powder, cashew nuts and almonds. A method for preparing the high nutritional composition suitable for human consumption comprises of heating the predetermined amount of clarified butter, adding a processed soybean flour and a bengal gram flour in the ratio of 4:1, roasting the processed soybean flour and bengal gram flour at a low flame for a time period of 30mins, cooling the roasted mixture, adding powdered sugar to the cooled mixture, adding one or more additives comprising of Cardamom powder, coconut powder, cashew nuts and almonds to the mixture of the processed soybean flour and bengal gram flour to obtain the final composition of the high protein nutritional composition suitable for human consumption. FIG. 1

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025780 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR CONTROLLING THE INTENSITY OF A LIGHT SOURCE BASED UPON AN INDIVIDUAL'S DISTANCE FROM IT USING PULSE-WIDTH MODULATION

(51) International classification	:G09G0003340000, G09G0003200000, G09G0003000000, A63B0069360000, H02P0027080000	(71)**Name of Applicant :** **1)AHAAN BHANSALI** Address of Applicant :10A, ANAND DARSHAN BUILDING, 13 PEDDER ROAD, MUMBAI-400 026, MAHARASHTRA, INDIA. Maharashtra India **2)VARDHAN SHOREWALA**
(31) Priority Document No	:NA	
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT SYSTEM FOR CONTROLLING THE INTENSITY OF A LIGHT SOURCE BASED UPON AN INDIVIDUAL'S DISTANCE FROM IT USING PULSE-WIDTH MODULATION According to an embodiment of the invention, a lighting control system (200) for controlling the intensity of a Light Emitting Source (202) is disclosed. The disclosed system (200) includes one or more ultrasonic sensor (204) and one or more microprocessor (206). The ultrasonic sensor (204) determines proximity and movement of an object in a predefined area surrounding the light emitting source (202). The microprocessor (206) receives the proximity data from the sensor (204) and controls the intensity of the Light Emitting Source (202) based on the distance of the object from the light emitting source (202). According to an embodiment the microprocessor (206) uses pulse-width modulation technique to modulate the intensity of the light by converting the distance into an appropriate voltage.

No. of Pages : 18 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025824 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : REACH THE UNREACHED- A SINGLE WINDOW SYSTEM FOR HEALTH CARE SCHEMES OF CENTRAL GOVERNMENT AND STATE GOVERNMENT

(51) International classification	:G06Q0050220000, G06Q0010100000, G06Q0040080000, G16H0040200000, G06Q0050300000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Mrs. Sujata Zalkikar Gudi

(57) Abstract :
ABSTRACT REACH THE UNREACHED- A SINGLE WINDOW SYSTEM FOR HEALTH CARE SCHEMES OF CENTRAL GOVERNMENT AND STATE GOVERNMENT The present disclosure relates to a system (100) for managing beneficiaries of health care schemes and the method thereof. The said system (100) comprises a beneficiary database (102), a health care schemes database (104), a hospitals and medical stores database (106), a health care services server (108) to aid the beneficiaries of health care schemes with health care related services. The method (200) for managing beneficiaries of health care schemes comprises the steps of registering (202) the beneficiary, scanning (204) the information about the registered (202) beneficiary for eligibility check under various health care schemes, generating an ID card (206) for the beneficiary to be used at various approved hospitals, updating (208) information about benefits availed in the beneficiary database (102). (Fig. 1 will be the reference figure)

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025827 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IOT-BASED SMART LIGHTING SYSTEM

(51) International classification	:G06K0009000000, H04N0005225000, H05B0045200000, G06K0009200000, H04N0005330000	(71)**Name of Applicant :** **1)Dr. Manish unnithan** Address of Applicant :Office number 2, shreenivas classic ,above union bank, Baner road ,Pune -411045,maharashtra Maharashtra India
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(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)Dr manish unnithan**
(86) International Application No	:NA	**2)Vishwanath menon**
Filing Date	:NA	**3)Harshvardhan unnithan**
(87) International Publication No	: NA	**4)Shaik sadiq rahiman**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT AN IOT-BASED SMART LIGHTING SYSTEM The present disclosure relates to an IoT-based smart lighting system (100). The said system comprises a plurality of intensity control sensor (108) to control the intensity, effect, and colour temperature of light, a high-resolution camera module (110) to capture and monitor real-time image of road and surroundings, an infrared sensor module (112) to detect human movement, a vertical wind turbine module (114) to generate electricity from wind, a data transfer module (116) to transfer the data captured by a high-resolution camera (110) and an infrared sensor (112), cloud or server (118) to store the captured data, an illumination sensor (132) to sense illumination and turn on or off the LED lights (106). Further, the capture data can be visualized through sharing the required security parameters to a desk top, mobile phone, or any screen in real time. The present invention makes the lighting system more smart, efficient and ensures safety. (FIG. 1 will be the reference figure)

No. of Pages : 25 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025884 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART DUSTBIN FOR SOLID WASTE

(51) International classification	:B65F0001140000, B65F0001160000, B65F0001000000, B01L0003000000, G05B0023020000	(71)**Name of Applicant :** **1)Jigar Govindbhai Chavda** Address of Applicant :Environmental Engineering Department, L. D. College of Engineering, 120, Circular Road, University Area, Ahmedabad, Gujarat Gujarat India
(31) Priority Document No	:NA	**2)Parth Rajendra Bhutiya**
(32) Priority Date	:NA	**3)Ankit Dharmraj Yadav**
(33) Name of priority country	:NA	**4)Sahil Dharmendrakumar Patel**
(86) International Application No	:NA	**5)Bina Birenkumar Patel**
Filing Date	:NA	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Jigar Govindbhai Chavda**
(61) Patent of Addition to Application Number	:NA	**2)Parth Rajendra Bhutiya**
Filing Date	:NA	**3)Ankit Dharmraj Yadav**
(62) Divisional to Application Number	:NA	**4)Sahil Dharmendrakumar Patel**
Filing Date	:NA	**5)Bina Birenkumar Patel**

(57) Abstract :
Smart Dustbin for Solid Waste The Smart Dustbin for Solid Waste • relates to providing a better system of segregating the waste and collection. The segregation of the waste at the source of generation using a smart dustbin to segregate waste into different sections (such as wet and dry) using an array of sensors for separation of different components of the waste. A sensor for level detection of the waste in the bin. Also, a message alert system which will send a message when dustbin is full will be used. This way the trips for waste collection can be reduced and waste will be collected only when the dustbin is full. This results in the reduction in labour work. Problem of unhygienic conditions and foul smell can also be eliminated as the bin is closed. Segregation of waste aids in better operation the waste treatment facilities and also reduces the waste load at the landfill site.

No. of Pages : 29 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202121025929 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HOMEOPATHIC COMPOSITION OF THE MEDICINES FOR CURE OF ALZHEIMER'S DISEASE.

(51) International classification	:A61P0025280000, A61N0005060000, A61K0031355000, A61K0033420000, A61K0051040000	(71)**Name of Applicant :** **1)VIJAYKUMAR ANANDRAO MANE** Address of Applicant :198/C-3,E-WARD,NEAR GEETA MANDIR,KAWALA NAKA,KOLHAPUR,416003 Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)VIJAYKUMAR ANANDRAO MANE**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT OF THE INVENTION Alzheimer™s disease is an irreversible, progressive brain disorder that slowly destroys memory and thinking skills, and, eventually, the ability to carry out the simplest tasks. Symptoms of the Alzheimer™s disease mostly appeared in the mid 60™s in most of the peoples. Alzheimer™s disease is currently ranked as the sixth leading cause of death in the United States, but recent estimates indicate that the disorder may rank third, just behind heart disease and cancer, as a cause of death for older people. Alzheimer™s is the most common cause of dementia among older adults. Dementia is the loss of cognitive functioning"thinking, remembering, and reasoning"and behavioral abilities to such an extent that it interferes with a person™s daily life and activities. Dementia ranges in severity from the mildest stage, when it is just beginning to affect a person™s functioning, to the most severe stage, when the person must depend completely on others for basic activities of daily living. The causes of dementia can vary, depending on the types of brain changes that may be taking place. Other dementias include Levy body dementia, front temporal disorders, and vascular dementia. It is common for people to have mixed dementia"a combination of two or more types of dementia. For example, some people have both Alzheimer™s disease and vascular dementia. Alzheimer™s disease is named after Dr. Alois Alzheimer. In 1906, Dr. Alzheimer noticed changes in the brain tissue of a woman who had died of an unusual mental illness. Her symptoms included memory loss, language problems, and unpredictable behavior. After she died, he examined her brain and found many abnormal clumps (now called a myeloid plaques) and tangled bundles of fibers (now called neurofibrillary, or tau, tangles).These plaques and tangles in the brain are still considered some of the main features of Alzheimer™s disease. Another feature is the loss of connections between nerve cells (neurons) in the brain. Neurons transmit messages between different parts of the brain, and from the brain to muscles and organs in the body. Scientists continue to unravel the complex brain changes involved in the onset and progression of Alzheimer™s disease. It seems likely that changes in the brain may begin a decade or more before memory and other cognitive problems appear. During this preclinical stage of Alzheimer™s disease, people seem to be symptom-free, but toxic changes are taking place in the brain. Abnormal deposits of proteins form amyloid plaques and tau tangles throughout the brain. Once-healthy neurons stop functioning, lose connections with other neurons, and die. Many other complex brain changes are thought to play a role in Alzheimer™s, too. The damage initially appears to take place in the hippocampus and the entorhinal cortex, parts of the brain essential in forming memories. As more neurons die, additional parts of the brain are affected and begin to shrink. By the final stage of Alzheimer™s, damage is widespread, and brain tissue has shrunk significantly. Alzheimer™s disease (AD) and other forms of dementia are a growing public health problem among the elderly in developing countries, whose aging population is increasing rapidly. It is estimated that by the year 2020, approximately 70% of the world™s population aged 60 and above will be living in developing countries, with 14.2% in India. Incidence of Alzheimer™s disease in India: A 10 years follow-up study P. S. Mathuranath, Annamma George, Neelima Ranjith, Sunita Justus, M. Suresh Kumar, Ramsekhar Menon, P. Shankara Sarma,1 and Joe Verghese2 In present invention, there is provided a formulation for healing 0f Alzheimer™s, said formulation comprising, along with physiologically acceptable carriers, tinctures and/or homeopathic preparations. The drug used in our new approach for the treatment of Alzheimer's consists of multi-component drugs of Homoeopathic origin.

No. of Pages : 16 No. of Claims : 5

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(21) Application No.202121025988 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR ADAPTIVE NAVIGATION MAPS

(51) International classification	:G01C0021360000, G01C0021200000, G06Q0050000000, G01C0021340000, G05D0001020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Mr. Zeshaan Sheikh
4)Mr.Siddharth Kumar Singh
5)Mr.Sharan Patil
6)Mr.Sumedh Maharaj
(72)**Name of Inventor :**
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2)Mr. Aryan A. Shaikh
3)Mr. Zeshaan Sheikh
4)Mr.Siddharth Kumar Singh
5)Mr.Sharan Patil
6)Mr.Sumedh Maharaj

(57) Abstract :
The present invention generally relates to a system and method for adaptive navigation maps. The method includes calibrating a GPS enabled computing device for constructing a graph or a model graph of a building or campus; setting current location to a main entrance and selecting a destination; calculating shortest route from current location to the destination; rendering the shortest route and thereafter estimating actual position (real time position); and navigating to the destination locating.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202123024547 A
(19) INDIA
(22) Date of filing of Application :02/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : VALVULOPLASTY BALLOON CATHETER

(51) International classification	:A61M0025100000, A61M0029020000, A61B0017220000, A61F0002880000, A61F0002915000	(71)**Name of Applicant :** **1)Meril Life Sciences Pvt. Ltd.** Address of Applicant :Survey No. 135/139 Bilakhia House, Muktanand Marg, Chala, Vapi- 396191, Gujarat, India Gujarat India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)MINOCHA, Dr. Pramod Kumar**
(33) Name of priority country	:NA	**2)KOTHWALA, Deveshkumar Mahendralal**
(86) International Application No	:NA	**3)DAVE, Arpit Pradipkumar**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:	
Filed on	:01/01/1900	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT TITLE OF INVENTION: VALVULOPLASTY BALLOON CATHETER A valvuloplasty balloon catheter (100) is disclosed. The valvuloplasty balloon catheter (100) comprises of an inflatable member (40) having anchor shaped ends and a tubular member (50) mounted over the inflatable member (40). The tubular member (50) comprises of a proximal section (50a), a distal section (50b) and a middle section (50c). The middle section (50c) includes a proximal middle portion (50c1), a distal middle portion (50c2) and an intermediate portion (50c3). The proximal middle portion (50c1) and the distal middle portion (50c2) includes a plurality of closed cells (54). At least one of the proximal section (50a) or the distal section (50b) includes a plurality of first struts (52) being anchor shaped. The plurality of closed cells (54) includes one or more zig-zag elements being placed over the tapered end of the inflatable member (40) thereby allowing uniform and smooth expansion of the tubular member (50). The intermediate portion 50c3 includes a plurality of s-shaped links. FIG. 2c1

No. of Pages : 31 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2020

(21) Application No.202041028136 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VIDEO ASSISTED ARTIFICIAL INSEMINATION (AI) DEVICE AND SYSTEM THEREOF

(51) International classification	:A61D0019020000, A61B0001000000, G06F0016783000, G06T0011200000, G11B0027110000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :A133, Ankur Palm Springs, No 4, CTH Road, Padi, Chennai 600050, Tamil Nadu, India Tamil Nadu India
2)ADIUVO DIAGNOSTICS PRIVATE LIMITED
(72)**Name of Inventor :**
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2)MAROUDAM VEERASAMI
3)SANGEETHA PIDARIPATTI VELUMANI
4)GEETHANJALI RADHAKRISHNAN
5)MEENATCHI UDAYASANKAR
6)JOHN KING

(57) Abstract :
PLEASE FIND ATTACHED HEREWITH

No. of Pages : 30 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041040519 A
(19) INDIA
(22) Date of filing of Application :18/09/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN APPARATUS TO IDENTIFY MICROBIAL INFECTIONS FROM A BODY FLUID OF A PERSON

(51) International classification	:A61B0005000000, A61B0005080000, B41J0003407000, G06F0021570000, A61B0005150000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :PLOT: 119, EMERALD PARK, ANNOJIGUDA, GHATKESAR, RANGA REDDY, TELANGANA - 500088, INDIA Telangana India
(72)**Name of Inventor :**
1)Srinivas Azad Topalle

(57) Abstract :
An apparatus to identify microbial infections (100) from an at least a body fluid of a person is disclosed. The apparatus (100) comprises a device to identify microbial infections (112) from an at least a body fluid of a person. Said device (112) comprises: an at least a cartridge holder; an at least a cartridge (101); a heating module (108); and a control unit (113). The at least one cartridge (101) comprises: an at least a paper; a plurality of electrodes (102); an at least a negative control (103); and an at least a positive control (104). The device (112) communicates with an application on a computing device (111) through a communication module. This apparatus (100) and/or the device (112): are highly sensitive and specific; can be used by anyone; do not require specialized lab equipment; are suitable for point-of-care application; and are compact and portable. Figure to be Included in Abstract is Figure 2

No. of Pages : 29 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041049202 A
(19) INDIA
(22) Date of filing of Application :11/11/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : UN-MODIFIED FULLER™S EARTH NANOCLAY RUBBER NANOCOMPOSITE FOR TYRE AND METHOD THEREOF

(51) International classification	:C08K0003340000, B82Y0030000000, B60C0023040000, B29D0030060000, C08K0009040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :Vellarippatti, Melur Taluk, Madurai Tamil Nadu India
(72)**Name of Inventor :**
1)SANKARAN KUMAR
2)LAKSHMI NARASIMHAN SHRI NANDHINI
3)KADAMBANATHAN THIAGARAJAN
4)VISWANATHAN SIVARAMAKRISHNAN

(57) Abstract :
The present invention relates to the field of tires. The present invention discloses a rubber nanocomposite for motor cycle tyre comprising of rubbers, nanofiller as reinforcing filler. The nanofiller is naturally occurring unmodified Fullers earth which resulted in reduced rolling resistance and high rubber elasticity. The invention further discloses a method of preparation of the rubber nanocomposite and tyre tread comprising the rubber nanocomposite.

No. of Pages : 30 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141014005 A
(19) INDIA
(22) Date of filing of Application :29/03/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTELLIGENT HOUSEHOLD ENERGY-RELATED IOT SYSTEM

(51) International classification	:H04L0029080000, G01F0015060000, G06Q0050060000, G08C0019000000, H04Q0009000000	(71)**Name of Applicant :** **1)Dr. J.Dafni Rose** Address of Applicant :Department of CSE, St. Joseph's Institute of Technology, Old Mahabalipuram Road, Chennai - 600119,Tamil nadu, India Tamil Nadu India
(31) Priority Document No	:NA	**2)Dr.K.Vijayakumar**
(32) Priority Date	:NA	**3)Dr. M.K.Kirubakaran**
(33) Name of priority country	:NA	**4)Dr.Esther Hannah**
(86) International Application No	:PCT//	**5)Dr.M.Nithya**
Filing Date	:01/01/1900	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Dr. J.Dafni Rose**
(61) Patent of Addition to Application Number	:NA	**2)Dr.K.Vijayakumar**
Filing Date	:NA	**3)Dr. M.K.Kirubakaran**
(62) Divisional to Application Number	:NA	**4)Dr.Esther Hannah**
Filing Date	:NA	**5)Dr.M.Nithya**

(57) Abstract :
An intelligent household energy-related Internet of Things (IoT) system for an intelligent city is disclosed. The system (100) includes an object platform at least comprising an energy meter, wherein the energy meter accesses an intelligent Internet of Things gateway; a communication platform respectively connected to the object platform and a management platform by means of a 10 network; the management platform respectively connected to the communication platform and a service platform, wherein the management platform at least comprises an operator server; the service platform respectively connected to the management platform and a user platform, and at least comprising an operator server; and the user platform accessing the service platform and at least comprising a user terminal. One-to-one, many-to-one and many-to-many connection 15 methods can be achieved between various servers, an intelligent Internet of Things gateway, a user and an energy meter in the Internet of Things system. FIG. 1

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141026712 A
(19) INDIA
(22) Date of filing of Application :16/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : HYDRO-SQUEEZE PRESSURE FILTERING FOR THE EFFICIENT BENEFICIATION OF COAL MATERIAL

(51) International classification	:C02F0001280000, B22D0017000000, C02F0103340000, B01D0025120000, B01D0025210000	(71)**Name of Applicant :** **1)National Institute of Technology Karnataka** Address of Applicant :National Institute of Technology Karnataka Srinivasnagar PO, Surathkal, Mangalore-575025, Karnataka, India Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Harish Hanumanthappa**
(33) Name of priority country	:NA	**2)Harsha Vardhan**
(86) International Application No	:NA	**3)Govinda Raj Mandela**
Filing Date	:NA	**4)Bharath Kumar Shanmugam**
(87) International Publication No	: NA	**5)Mudhunuru Varma Raju**
(61) Patent of Addition to Application Number	:NA	**6)Harish Kumar N S**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Title: Hydro-Squeeze Pressure Filtering For the Efficient Beneficiation of Coal Material ABSTRACT The present invention involves the said process consists of mixing of 20-40 wt% of crushed coal material with 80-60 wt% water to form a semi-solid slurry; introduction of the slurry inside the pressure filtering chamber where a filter plate is moved upwards to squeeze the slurry to pass through the hole with internal grooving; the coal material slurry in the pressure filtering chamber attains compressive hydraulic force which squeezes the slurry through filter plate. The semi-solid coal material slurry is squeezed through the filtering plate hole with internal grooving, which breaks the coal particles. The separated desired-sized product slurry passed as output product is passed through collection valve. The oversized material was obtained from the cylindrical chamber by unbolting the top surface of the chamber.

No. of Pages : 18 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027441 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED TIRE REPAIRING DEVICE

(51) International classification	:G01M0017020000, B29L0030000000, B29C0073100000, G01M0001160000, B24B0005360000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Karthik**
(33) Name of priority country	:NA	**2)Srikrishna Baskar Rao**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
An automated tire repairing device, comprising a platform 1 configured with a sliding panel 2 that extends/retracts based on a damaged tire™s 3 size as detected by an image capturing module 4, a clamping unit 5 supported on a rack 6 for holding the tire 3, wherein multiple rollers 7 rotates the tire 3 for the module 4 to detect the damage, an ultrasonic sensor for determining the damage by evaluating thickness of the tire 3, wherein a microcontroller actuates a rubber gun 8 to dispense molten rubber on the damage portion, wherein the rubber is stored in a chamber inbuilt with a heating unit that heats the rubber into a molten form, an rubber grinder 10 for grinding excess gum dispensed on the tire 3 for providing uniformity to the tire™s 3 surface, wherein a heat gun 12 produces heat on the dispensed gum for strengthening the damaged portion.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027442 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTIPURPOSE BEDDING DEVICE

(51) International classification	:A61F0007000000, A47C0021040000, A61B0005048800, A47C0029000000, A61F0007120000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Pranil Vijay**
(33) Name of priority country	:NA	**2)Pramod R**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A multipurpose bedding device, comprising a body 1 installed with a material detection sensor 2 that determines hardness of the surface, a compressor 3 for inserting compressed air to inflate the body 1, wherein insertion of amount of air is based on the detected level of hardness, a rotatable artificial intelligence (AI) enabled image capturing module 5 for detecting presence of mosquitoes in proximity to user while resting, a pair of pneumatically actuated telescopic rods 6 is configured with a mosquito net 7, wherein rods 6 unfold the net 7 to encase the user to avoid mosquitoes, multiple thermoelectric Peltier units 8 to provide cooling to the body 1 in case image capturing module 5 detects sweating of the user while resting on the body 1 and a heater 9 arranged with the body 1 for heating up inserted air to avoid shivering of user due to excessive cold atmosphere.

No. of Pages : 17 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027443 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC GLASS RESTORATION DEVICE

(51) International classification	:F21V0023040000, F16M0011200000, A61M0015060000, G06K0019060000, G08B0005000000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Shilpa Das**
(33) Name of priority country	:NA	**2)Gadug Sudhamsu**
(86) International Application No	:NA	**3)Kiran K S**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to an automatic glass restoration device comprising, a hollow cylindrical body 3 having a first 6 and second end 5, wherein the first end 6 incorporates an arm 7 that holds on to a workpiece in a stable position, a camera unit 2 installed at second end 5 of the body that takes images of the work piece and analyzess condition of the work piece to be send to a microcontroller, a display unit 4 mounted over the body 3 that based upon the condition, provides various design options for the work piece that are to be selected by a user, a ring 11 installed with the body 3 via a rack 1 allowing the ring 11 to move across the the body 3, multiple tools mapped over the ring 11 that actuate in a sequential manner to restore the workpiece as desired by user.

No. of Pages : 14 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027444 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : RADISH VEGETABLE PACKAGING SYSTEM

(51) International classification	:E04F0011180000, B65B0043520000, B26D0003280000, A61K0031454000, A23B0007015000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Amar Shankar

(57) Abstract :
The present invention relates to a radish vegetable packaging system including a storage chamber 1 stored with radish vegetables, equipped with a motorized slide-able lid 2, wherein a sloping pathway 3 having multiple vibrating units connected with the chamber 1, an Artificial Intelligence (AI) camera module 4 installed over the pathway 3, two motorized flaps 5 installed over the pathway 3, two vertical railings 6 installed at one end of the pathway 3, wherein a rod 7 is fitted in between the railings, wherein two blade units are arranged on a dedicated railing, a vacuum chamber 14 equipped with a grinding blade, arranged in a way such that the chamber 14 receive cut pieces, a cleaning chamber 8 positioned in proximity to the pathway 3, wherein an extendable piston unit is installed within the unit that push the vegetables into a drying unit 9, and a packaging chamber 10.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027445 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED GRAIN DRYING DEVICE

(51) International classification	:F25D0023120000, A23B0009080000, A61B0005000000, B05C0011100000, D06F0039020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Dr. Humeera Tazeen
2)Dr. Namitha R

(57) Abstract :
The present invention relates to an automated grain drying device comprising a portable body 1 having a first, second and third section, multiple omnidirectional wheels 2 attached to first section for moving the body, multiple chambers 3a, 3b configured in the second and third section for storing moist grains provided by the user through an inlet 10 arranged in the third section, a fabric dispenser 14 installed at the first section for providing fabric sheet laid down over a ground surface, a motorized pump 7 attached with the chamber 3a for extracting and emitting moist grains from the chamber towards the sheet, multiple sensors integrated within sheet for detecting amount of moisture remaining in grains and a suction unit 8 attached in the first section and associated with the chambers 3b for storing grains in different chambers based on dryness level of the grains thereby preventing risk of grain spoilage.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027446 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART BOTTLE

(51) International classification	:A45D0034040000, H04L0029060000, B65D0001020000, A24F0001300000, B60H0001000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(72)**Name of Inventor :**
1)Narayana Swamy Ramaiah
2)Devi Radika

(57) Abstract :
A smart bottle comprising, a body 1 having a neck 2 and base 3, the neck 2 is fabricated with plurality of grooves 5 for allowing passage of a liquid within the body 1, a cap 4 rotates over the grooves 5 for performing multiple functions in a user defined manner, a finger print scanner 6 for authenticating a user, wherein upon successful authentication an electromagnetic unit is activated to open the cap 4, plurality of sections 7, 8, 9 in combination with a primary, secondary, and tertiary electronically controlled valves 10, 11, 12, the first section 7 for storing the liquid, a filtration membrane 13 for filtering the liquid stored within first section 7, the second section 8 for storing the filtered liquid, a peltier unit for regulating temperature of the filtered liquid, and a conduit 14 coupled with a pop-up unit for dispensing the temperature regulated liquid.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027447 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVICE FOR SORTING AND COLLECTING GEMSTONES

(51) International classification	:G01N0021870000, A44C0017040000, B07C0005340000, B07C0005360000, B07B0013040000	(71)**Name of Applicant :** **1)Jain (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Abhijeeth Nagaraj**
(33) Name of priority country	:NA	**2)Baisakhi Debnath**
(86) International Application No	:NA	**3)Abhishek Venkteshwar**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A device for sorting and collecting gemstones, comprising, a housing 1 configured with a first chamber 2 for accommodating plurality of gemstones, a second chamber 3 assembled with plurality of motorized slidable plates 4 fabricated with multiple specific sized slots 5 for collecting the gemstones specific to each of the slot 5, a display panel 6 for providing an access to a user to input commands regarding selection of the specific sizes gemstones to be sorted, a pipe 7 for transferring the gemstones to each of the specific sized slots 5, a vibrating unit 11 for vibrating the plates 4 to accommodate the gemstones within the specific slot 5, a sound detection sensor for detecting noise level caused during vibrations of the plates 4, an iris unit 12 for expelling gemstones other than the selected gemstones in order to sort the gemstones, containers 10 for collecting the sorted gemstones.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027448 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART SWEET SLICING DEVICE

(51) International classification	:A61G0005100000, B65G0023080000, B26D0003280000, B41J0013100000, G09F0007220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Sahana Shetty

(57) Abstract :
The present invention relates to a smart sweet slicing device includes a frame 1 supported by multiple legs 2, wherein a first tray 3 is fitted over first portion of the frame 1 via two rotatable rods, wherein a dryer unit is installed on the frame, an Artificial Intelligence (AI) camera module 4 fitted over the frame 1, a motorized roller 5 fitted at one side of the frame 1, wherein two clamper units 6 are installed over sliding tracks 7, an extendable blade unit 8 arranged within a housing that is fixed over the frame 1, wherein the unit 8 is supported by a motorized ball joint which provides free movement to the unit 8 to spread and slice the sweets evenly into pre-fed designs/shapes set by a user over a display panel 9, and a second tray 10 positioned beneath the first tray 3.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027449 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NEEDLE THREADING DEVICE

(51) International classification	:D05B0087020000, G01D0013260000, D05B0087000000, G01N0035000000, D05C0011160000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)Beemkumar N
2)Sandeep V

(57) Abstract :
The present invention relates to a needle threading device comprising, a body 1 having a first and second portion 2, 3, a motorized disc 4 attached at first portion 2 to hold multiple reels 5, a pair of roller 6 attached at first portion 2 rotates to provide reciprocating motion to a needle 13, a proximity sensor 7 to detect alignment of needle™s eye in front of a hole fabricated within body 1, a hook 8 attached at second portion 3 to slide forward for passing through needle™s eye and hole, a display unit 10 connected with body 1 takes commands from user regarding required color of reel 5, a robotic arm 11 attached with body 1 that is actuated via microcontroller to pick thread of reel 5 required by user and wrap it over hook 8 which slides back through needle™s eye as means of threading needle 13.

No. of Pages : 13 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027450 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC STOVE GRATE MAINTENANCE DEVICE

(51) International classification	:B25J0005000000, A46B0013020000, B60B0019000000, B64F0005400000, F16L0055180000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)R Sukumar**
(33) Name of priority country	:NA	**2)S Ravi Kumar**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to an automatic stove grate maintenance device, comprises a rectangular body 1 divided into a first and second portion, an AI (Artificial Intelligence) based imaging unit 2 captures image to detect size shape, size, position of damage/crack on stove grate, two telescopic rods 3 having a pair of motorized omnidirectional wheels 4 expand or retract according to size of stove, omnidirectional wheels 4 helps in aligning body 1 with stove, two telescopic grippers 5 attached with a sliding rack for lifting and flipping of grate for cleaning, plurality of sensors associated with a microcontroller to determine dirt, rust on the surface of grate, a lead screw assembly 6 associated with a cleaning unit includes three wheels for cleaning and polishing of grate, a repairing unit includes a radiation sensitive patch dispenser 12 to repair damaged surface of grate.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027451 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SHIP HULL MAINTENENCE DEVICE

(51) International classification	:B63C0005000000, B63B0071000000, B05B0013000000, B24C0003060000, B63B0059100000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Pavan P S**
(33) Name of priority country	:NA	**2)Dimple Bahri**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to a ship hull maintenance device, comprising a body 1 attached to railing of a ship via hook 2 for allowing movement of the body 1 along the ship™s frame, wherein a motorized roller 3 wrapped with a rope for providing vertical movement of the body, multiple omnidirectional wheels 4 attached to the hook that rotate to provide horizontal movement to the body, an image capturing module 5 for determining paint condition and presence of algae on the ship™s frame, a rust detection senor 6 for sensing presence of rust, a control unit 7 that operates the device on at least two modes based on the ship™s position, a nozzle 9 attached to multiple compartments 10 for dispensing multiple solutions on frame of the ship, an air sprayer 11 working in synchronization with a water jet 12, actuated in order to remove damaged paint and algae.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027452 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MODULAR SURFING DEVICE

(51) International classification	:A61B0005020500, A61B0005024000, G16H0050200000, A61B0005000000, A63C0017140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)JAIN (Deemed-to-be University)
Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(72)**Name of Inventor :**
1)Thangadurai N
2)Vinod Moger

(57) Abstract :
A modular surfing device comprising of a deck 1 attached with device having first 2 and second 3 end, image capturing unit 6 attached on first 2 to determine facial expression, height and foot size of user, a primary sensing module attached with deck 1 to determine speed of deck 1, direction of wind, sliding platform 7 attached over deck 1 having multiple plates to alter deck 1 size according to user™s feet, a secondary sensing module attached with handle 4 grabbed by user to determine physical and health parameters of user, a propeller 8 attached at second 3 end powered by motor which provides thrust to device to glide over water surface, speed of motor is regulated by microcontroller, pair of supporting bar associated with gripper gets actuated when feet of user is shaking and in case along with this, health vitals are abnormal then gripper is also actuated.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027453 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED RIM MAINTENANCE DEVICE

(51) International classification	:A47L0011400000, G06K0007000000, G06F0003048800, G01S0007521000, B25J0011000000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Harish Naik**
(33) Name of priority country	:NA	**2)Ramachandran T**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to an automated rim maintenance device comprises of a platform 1 comprises of first and second section having at least two C- type clamping units 2 to hold rim firmly, a display unit 7 attached in left 2 platform 1 to facilitate user to select one or more options regarding polishing and maintenance of rim, an AI based imaging unit 8 on right 3 section to determine dimensions of rim and location of deformities, material detection and ultrasonic sensor attached within clamping unit 2 to determine type of alloy and deformities on rim, a pneumatic pusher attached on L-shaped assembly 9 present on right 3 section to provide pressure on internal surface of rim so as to repair bend(s), multiple nozzle associated with clamping unit 2s to spray surface maintenance solutions for eliminating deformities on rim detected via ultrasonic sensor as desired by user.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027454 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED MANHOLE COVERING DEVICE

(51) International classification	:E02D0029140000, E03F0005020000, G11B0033140000, G08B0013140000, E02D0029120000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Sunil M P**
(33) Name of priority country	:NA	**2)Vinay Kumar S B**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to an automated manhole covering device comprising a disk 1 attached over surface to cover manhole divided into first 2 and second 3 portion, weight sensor attached on first 2 portion to detect presence of an object and initiate alarm, pair of retractable motorized flaps 4 attached on outer periphery of disk 1 to tightly fit on manhole once in extended position and if weight is below threshold, it retracts to create a gap and loosen out, multiple telescopic rods 5 attached on lower 3 portion of disk 1 to lift disk 1 above manhole to slide disk 1 out from manhole, projection unit 7 connected with microcontroller to project a warning signal to nearby user of open manhole, image capturing unit 8 attached on upper 2 portion of disk 1 to direct movement of wheels 6 with disk 1 towards opening and recover the manhole.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027455 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED FODDER PREPARATION DEVICE

(51) International classification	:A23N0017000000, A01F0029000000, A23N0017020000, A23K0010380000, A47J0044000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(72)**Name of Inventor :**
1)Amar Shankar
2)Adarsha H

(57) Abstract :
The present invention relates to an automated fodder preparation device comprising, a portable body having a proximal and distal portion, plurality of chambers 1 in which different types of agricultural byproducts are manually inserted through an inlet, an AI (Artificial Intelligence) based imaging unit for visualizing types of animals residing in a shelter, plurality of motorized rollers 2 rotate in a synchronized manner to direct movement of byproducts towards the outlet, a set of motorized flaps 3 collect segregated strands of the byproduct in a collective bunch form, the bunch moves along the belt to reach distal portion, a set of secondary tool 6 mounted on sliders for chopping bunch of byproducts, a suction unit attached to the belt for collecting prepared fodder.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027456 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC WOOD CUTTING AND FABRICATING DEVICE

(51) International classification	:B29C0069000000, B26D0003000000, A21C0015000000, B27L0007000000, B28B0011120000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Amar Shankar**
(33) Name of priority country	:NA	**2)Adarsha H**
(86) International Application No	:NA	**3)Dushyanth Veerendra Babu R**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
An automatic wood cutting and fabricating device, comprising a body 1 segregated into a first, second and third portion, wherein the first portion is equipped with an image capturing unit 3 that determine its dimensions, a primary hollow roller 4 employed with telescopic blades operated by a microcontroller for retracting or extending of the blades in order to grind and cut the block into desired shape, multiple secondary rollers 5 that adjusts internal distance between each other according to the dimension to alter shape and form in cylindrical body, a robotic arm 6 that grabs the moulded block to align the block in parallel to a laser beam to measure length of the block, a reciprocating blade 8 that cuts the blocks into desired length, a conveyor belt 9 that carries the sliced blocks into a tray 11, multiple nozzles 12 for discharging desired colour paint over the block.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027457 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ANIMAL FEEDING DEVICE

(51) International classification	:A61K0009000000, A01K0005020000, A01K0009000000, G16H0020130000, B65D0047240000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Vishal Patil
2)Dr. K S Kiran

(57) Abstract :
The present invention relates to an animal feeding device, comprising a body 1 having a first and second section for providing liquid and medical supply to an animal, wherein the first section includes multiple chambers 2 for storing different liquid food and medicines, an image capturing module 3 for determining type of animal approaching, wherein a microcontroller generates a command to actuate a retractable tray 4, multiple nozzles 5 for dispensing stored liquid and medicines onto the retracted tray 4, wherein one of the nozzles 5 release cleaning solution to sterilize the tray 4, handles 6 attached with a gimbal for a user to grip while feeding the animal, wherein the gimbal provides stability to prevent spillage of the liquid, a computing unit linked to the microcontroller, wherein the microcontroller uses machine learning protocol to track and record liquid drinking timings and conditions in order to timely feed the animal.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027458 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : TODDLER WALK TRAINING DEVICE

(51) International classification	:A61B0005000000, A61H0003000000, B62B0001120000, A46B0009040000, A47D0013040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)Mohammed Zabeeulla
2)Mamtha G N

(57) Abstract :
The present invention relates to a toddler walk training device, comprising a portable body 1 configured with telescopic handle 2 that allow user to hold and maneuver the body 1 at any location, adjustable carrier 3 to provide support to toddler's body 1 in upright posture, AI (artificial intelligence) based imaging unit 4 installed in carrier 3 that detects height of toddler and/or user, at least two telescopic supporters 5 attached to carrier 3 to support legs of the toddler while walking, at least two telescopic grippers 6 attached at ends of supporters 5 that hold each feet of the toddler and expand/contract according to distance between feet and supporters 5 for training the toddler to walk, optical sensor 7 integrated in the handle 2 to determine vital parameters of the toddler, and telescopic plate 8 attached to handle 2, wherein plate 8 is actuated towards the toddler™s lower back to provide support for comfortable seating during walk training.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027459 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTILEVEL FACE SAFETY DEVICE

(51) International classification	:A61F0009060000, G02B0027010000, B23K0009100000, G02C0007100000, H04N0005232000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)S Ravikumar
2)Vivek V

(57) Abstract :
The present invention relates to a multilevel face safety device comprising, a wearable frame 1 having two temple 2 tips worn by a user, an AI (Artificial Intelligence) based thermal imaging unit 3 detects the welding amperage and arc radiations according to welding type, plurality of sensors detects the intensity of arc radiations, an auto-darkening filter based lens undergoes tint transition from shade five to shade thirteen aligning with welding-glass shade scale, plurality of lens slides along rack and unfold via a motorized hinge to align the lens in front of the user™s eyes, a foldable cover 8 attached with a headband and a temple, two clips hold the cover to unfold the cover and provide protection film during welding process.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027460 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED MALLEABLE SHEET BENDING AND MAINTENANCE DEVICE

(51) International classification	:B21D0005040000, B05D0003120000, A46B0013020000, G01B0011060000, G01N0019080000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Deepak J
2)Ramkumar N P

(57) Abstract :
The present invention relates to an automated malleable sheet bending and maintenance device, includes, a handheld body having a holder 3 aligned at periphery of a material™s corner/edge to bend to eliminate sharp edges, an artificial intelligence (AI) based imaging unit 4 for visualizing dimensions and presence of rust on sheet that needs to be bend, a sensor for determining thickness of sheet, at least two telescopic rods 5 attached with a slider, move along slider to get aligned with sheet to provide support, a motorized hinge folds the second section 2 to bend the sheet by applying torque, a maintenance unit includes a sanding wheel 6 for removing rust present on the sheet a motorized buffing brush 7 polishes and paint the sheet a welding module dispenses the melted metal as filler material to mend sharp edges of the sheet.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027461 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED SHELL CLEANING DEVICE

(51) International classification	:B08B0003040000, A47L0011400000, A01K0005010000, C11D0003200000, E03D0005010000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Hariprasad S A
2)Dr. Gopalakrishna K

(57) Abstract :
The present invention relates to an automated shell cleaning device comprising, a housing having a first, second and third portion, multiple sea shells are poured in a primary chamber 2, plurality of hinge actuate when chamber is in a tilted orientation to dispose shells towards an iris opening 3, a bowl 4 coupled with a telescopic rod 5 actuate for receiving shells for cleaning, a water conservation module coupled with bowl 4 and regulated by a microcontroller, a container connected to the bowl 4 through a pipe for providing cleaning solution, a level sensor for the level of cleaning solution filled in bowl 4, a suction for transferring used water from bowl 4 to prevent water wastage, a telescopic clamper 7 for picking up shells from the bowl, a motorized brush 10 for scrubbing dirt deposited inside shells and storing clean shells in secondary chamber 11.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027462 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTELLIGENT BOARD GAME DEVICE

(51) International classification	:A63F0003000000, H04N0005225000, A63F0009080000, A63F0009060000, A63F0009020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Dr. Kuldeep Sharma
2)Deepa T P

(57) Abstract :
The present invention relates to an intelligent board game device includes a frame 1 characterized by a finishing stage 2, multiple extendable arms 3 arranged within the frame 1, wherein each arm is having an arm 3 consist of three columns 4 and six rows of squares of which fabricated with electromagnetic base, wherein each arm is coupled with a slid able plate on which a home square 6 is formed, an Artificial Intelligence (AI) camera module 8 configured with a microcontroller to capture live stream of the game, a display panel 7 linked to the frame 1 that is actuated in case the AI camera module 8 detects that a player is missing and the playing pieces of that player are left unattended, wherein the panel randomly displays dice roll 5 readings for unattended positions of the pieces 9 and the microcontroller deactivates the electromagnetic base.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021

(21) Application No.202141027463 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED EXERCISE ASSISTANCE DEVICE

(51) International classification	:G06T0019000000, F16M0011100000, A61B0005000000, F16M0011180000, A61G0005040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Arunkumar D T
2)Sunitha B K

(57) Abstract :
The present invention relates to an automated exercise assistance device comprises of a potable body 1 attached with telescopic stand 2 divided into first 3 and second 4 portion in which first 3 portion provides base to stably position stand 2, AI based imaging unit attached on stand 2 to determine user™s height, a display unit 5 associated on stand 2 to facilitate user to enter their physiological problems and personal information to form database correlated with essential exercise, linear platform 6 associated with stand 2 via two motorized hubs from top 4 portion to tilt platform 6 axially, multiple sensors attached in a fastener 9 to determine real time parameters and body weight distribution of user while performing inversion on the basis of which tilt angle, rotation speed is adjusted via microcontroller and provides information for correct body posture via display unit 5.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027464 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED BEARING REMOVING DEVICE

(51) International classification	:F03D0080700000, B25B0027060000, G01N0027900000, B08B0003020000, F16C0033660000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Ranganathaswamy M K

(57) Abstract :
An automated bearing removing device, comprising a handheld body 1 divided into first 2 and second 3 section, a central shaft 4 attached in first 2 section associated with suction cup 5 for stable positioning of body 1, an ultrasonic sensor attached with shaft 4 to determine length of rod and diameter of a bearing to be removed, multiple supporting arms 6,7 coupled with a motorized ring 9 attached with shaft 4 for gripping outer periphery of bearing, a pneumatic arrangement associated with handle present at bottom 3 section to pull bearing out of rod and therefore assists in detachment of bearing, a nozzle interlinked with oil sensor to spray lubricant for frictionless removal of bearing, at least two probes integrated with arms for detecting cracks in rod or bearing and a safety net 10 attached to second section for protecting user from injury caused by breaking of bearing.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027465 A
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(54) Title of the invention : BILLIARD CUE TIP RESTORATION DEVICE

(51) International classification	:A63D0015080000, B05C0017005000, A63D0015140000, A63D0015100000, A63D0015120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Dr. Rajapraveen Kumar N
2)Gadug Sudhamsu

(57) Abstract :
The present invention relates to a billiard cue tip restoration device includes an enclosure 1 having an opening for placing a cue stick 2 inside the enclosure 1, wherein two motorized iris rings 3 are coupled with inner periphery of the enclosure 1 via telescopic rods 4, an Artificial Intelligence (AI) camera module 6 mounted over inner periphery of the enclosure 1 to transmit fetched information in real time to a microcontroller, a telescopic blade unit 7 fitted over the enclosure 1 for cutting old cue tip, a chamber 8 employed with lock spring mechanism to dispense new tip on a tray which is connected with the chamber 8 to receive cue tip(s) from the chamber 8, and multiple restoration tools i.e. a sandpaper implement 9, a glue gun 10, a suction unit 11, and a sharpening unit 12 arranged over a slider to apply new tip over the stick.

No. of Pages : 13 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027466 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ADAPTIVE CELEBRATION ASSISTANCE DEVICE

(51) International classification	:H04R0001100000, H04N0001000000, H04N0009310000, A63F0013900000, B62J0045200000	(71)**Name of Applicant :** **1)Jain (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Dr Narayana Swamy Ramaiah**
(33) Name of priority country	:NA	**2)Shreenidhi H. S.**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to an adaptive celebration assistance device, comprising a base 1 embedded with multiple candles 2 for celebration of various occasions, a microcontroller coupled with the user™s computing unit via a communication module that fetches data regarding corresponding dates, names and image of the user™s involved in the occasions from the computing unit, multiple arc lighters 3 installed to light up the candles 2 automatically, a display unit 4 that project images of the user and name in correspondence to the occasion, a speaker 5 that fetches and produces music related to the occasion via the microcontroller, wherein the microcontroller regulates volume of the music on basis of ambient sound detected by a microphone 6 in order to make the music audible to the users, an image capturing unit 7 for monitoring type of occasion, the microcontroller commands the speaker 5 to actuate or deactivate accordingly.

No. of Pages : 13 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027467 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PRINTER PLATFORM CLEANING DEVICE

(51) International classification	:B33Y0030000000, B29C0064350000, B08B0001000000, B08B0003100000, H01L0021020000	(71)**Name of Applicant :** **1)JAIN (Deemed-to-be University)** Address of Applicant :Jain Global Campus, Jakkasandra Post, Kanakapura Road, Kanakapura Taluk, Ramnagar District, Karnataka Bangalore562112, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Dr. Devaraj Verma**
(33) Name of priority country	:NA	**2)Rajani Shree M**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to a printer platform cleaning device, comprising a portable frame 1 mounted on a printer platform™s edges 2, wherein the frame 1 is configured with multiple suction cups 3 manually placed by a user, atleast two lead screw assembly 4 to attain proximity with different locations on the platform™s surface 2, a rotatable unit 5 attached to the assembly 4 that facilitates in moving multiple plates 7, 9, 12, 13, 15 along the surface, wherein the unit 5 comprises: a telescopic blade 6 for removing polymeric remnants present on the surface, a motorized brush 8 for cleaning polymeric remnants removed by the blade 6, plurality of nozzles 10 coupled with a sponge tool 11 to dispense cleaning solution over the platform 2 and the tool 11 wipes grime cleared by the solutions, a drying unit 14 for drying off the platform 2 after completion of cleaning.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027468 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED PIPE THREADING DEVICE

(51) International classification	:E21B0017200000, F16L0055180000, B23B0005160000, E21B0021100000, E21B0017000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Manu S E

(57) Abstract :
The present invention relates to an automated pipe threading device, comprising a body 1 having an opening for manually entering one end of a pipe, multiple sensors 3, 4 for detecting material, thickness and diameter of the pipe, at least two grippers 5 equipped with multiple omnidirectional wheels 6, wherein the grippers are aligned at outer periphery of the pipe, a laser module 7 that emits high power laser radiations towards the pipe for providing a uniform edge and/or cut old thread associated with the pipe, multiple dies 8 arranged in a circular motorized disc 9 that rotates to expose one of the dies for engraving threads at outer periphery of the pipe, a cutting tool 10 attached to a telescopic L-shaped rod 11 that enters the pipe to engrave threads at inner periphery of the edge based on user™s requirement.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/06/2021
(21) Application No.202141027469 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART DRILLING JIG DEVICE

(51) International classification	:B23B0047280000, A61B0017160000, G09F0009000000, B27M0003180000, A61C0003030000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention relates to a smart drilling jig device includes a body 1 a body 1 connected with multiple suction cups 2 via telescopic rods 3, a display panel assembled on the body, operated by a user to input dimensions/size of slot(s) and position of slots to be formed over the door, a pair of motorized lead screws 4 fitted over the body 1 to provide reciprocating motion to an assembly 5 that is detachably mounted over the screws 4, wherein the assembly 5 is adapted to hold a motorized shaft 7, a cutting tool 6 coupled with the shaft 7 that translates multi-directionally by virtue of telescopic rods and lead screws based on the location and size of slot, and an Artificial Intelligence (AI) camera module 9 fetches the location and size information from the display panel 8.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027470 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AI FOR MATERIAL SELECTION IN DESIGNING SUITABLE CMOS- COMPATIBLE NANOELECTRONICS APPLICATIONS

(51) International classification	:G06N0003040000, G06N0003080000, G06N0020000000, G06F0030000000, G06F0030200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Nanoelectronics is an interdisciplinary division that alludes to the utilization of nanotechnology in electronic components. The selection of the most suitable material to design CMOS compatible for nanoelectronics applications. Materials selection to the designers is an unpredictable assignment or a conflict task. It regularly requires design objective and functional requirements. This invention perspective is to identify the key requirement such as design objective, functional requirements and parameters. The opportunities to the material standards prioritize to select the optimal material using the AI platform. Recently there has been a significant trend in the application of artificial intelligence, which includes Machine learning (ML) and deep learning methods in all diverse fields like material science, physics, chemistry and Biology. This invention proposed that an AI-based platform would help to select the optimal materials for design CMOS compatible for nanoelectronics application. Manual selection requires a lot of experience in material handling and requires extensive research done in nanomaterials. Here we developed a solution driving the analysis using deep learning neural network method. It is a mathematical algorithm based on a model, Convolution Neural Network is one of the possible outputs with the collection of data, process. The driving analysis will demonstrate the potential way of material selection as a result of being accessible and comprehensible to designers and engineers.

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(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027509 A
(19) INDIA
(22) Date of filing of Application :19/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM FOR PREDICTION AND ALERT OF LOCAL RAINFALL FOR TRIBAL AREAS USING AI AND IoT

(51) International classification	:H04L0029080000, G01D0021020000, G01W0001020000, H04W0004029000, G01W0001000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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7)G ASHWINI

(57) Abstract :
The present system is a leading solution for weather monitoring that incorporates IoT, making the real time data easily available on a user friendly interface which the consumer can access through a thin client like a web browser or a mobile application. Thus making it convenient alternative for the user to directly check the figures and weather conditions of its area online beforehand without the need of a weather forecasting agency. The system also holds an attractive feature of push notifications on the client™s mobile in case the weather conditions worsens, which can alert the consumer to take necessary preventive measures in time. The system makes use of the cutting-edge technology Internet of Things (IoT) which aids to connect the embedded system to a network and also to the devices for their operation.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/06/2021

(21) Application No.202141027587 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC INTELLIGENT DETECTION OF CANCER USING MACHINE LEARNING

(51) International classification	:G06N0003040000, G06N0003080000, G06T0007000000, G06K0009000000, G06K0009620000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Abstract AUTOMATIC INTELLIGENT DETECTION OF CANCER USING MACHINE LEARNING One in eight females globally is affected by breast cancer. The cancer of breast tissue cells is detected. Modern processing approaches for medical pictures deal with microscopic histopathological images and then analyze them using algorithms and procedures. To process medical imaging and pathology tools, machine learning techniques are increasingly being utilized. Manual cancer cell identification has been tired and includes human mistake, and thus computer-assisted methods are used to get better outcomes than manual pathologic detection systems. In deep learning, this is usually done via the extraction and classification of features using a convolutional neural network (CNN). The area of profound learning is widely used in medical imaging since previous knowledge in this subject is not required.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027613 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : FAULT DETECTION IN UNDERGROUND OPTICAL FIBER USING WI-FI

(51) International classification	:H01S0003067000, G01M0011000000, G02B0006020000, H02J0009000000, G02B0006440000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Ashwinikumari P
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2)Divya B V
3)Ashwinikumari P

(57) Abstract :
The field of fiber optics communications has exploded over the past two decades. Fiber is an integral part of modern day communication infrastructure and can be found along roads, in buildings, hospitals and machinery. The fiber itself is a strand of silica based glass, its dimensions similar to those of a human hair, surrounded by a transparent cladding. Light can be transmitted along the fiber over great distances at very high data rates providing an ideal medium for transport of information. In the recent years, fiber optic communication plays a vital role in fiber optic based development as well as in future. Locating fiber fault within the network becomes more important due to the growing demand for consistent service distribution. Thus there are so many methods coming up to find the exact location of fault in the fiber optic cable. From the fiber we can monitor many number of parameters includes temperature, current, transmitted power, Received power, Power supply. Thus this project proposes an idea on to finding the location of fault occurrence in the fiber and also monitoring the Received power of fiber optic cable. The idea behind this project is to monitor the received power supply in optical fiber using a Microcontroller. Laser output power monitoring circuit is designed using ISIS simulator to monitor the received power supply in the optical fiber. If there is any abrupt change in power of optical line, an automatic message will be transmitted to the monitoring person regarding the fault in fiber via Wi-Fi.

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027629 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PYRIMIDINE BENZAMIDE DERIVATIVES AS ANTICANCER AGENTS

(51) International classification	:C07D0239420000, C07D0401120000, C07D0401140000, A61K0031496500, C07D0401040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Abbas Nahid
3)Dhiwar Prasad Sanjay
4)Ghara Abhishek
5)Singh Ekta

(57) Abstract :
The invention relates to novel Pyrimidine benzamide derivatives (Formula I) as anticancer agents, further synthesis, and biological investigation thereof. The preparation method of Pyrimidine benzamide derivatives is also disclosed. Further, the Pyrimidine benzamide derivatives have anticancer activity.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027630 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SMART AND INTELLIGENT DEVICE FOR MONITORING THE CONDUCT OF COMPUTER BASED ASSESSMENTS

(51) International classification	:H04N0007140000, G09B0007020000, G06K0009000000, H04N0007180000, H04L0029060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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7)Dr.G.Anitha

(57) Abstract :
Abstract: An Intelligent computer vision based device and deep learning algorithm provides security and reliability to Computer based test examinations (CBT). Many examinations are paper based exams even though the Computer based Test has number of advantages. The primary factors are reliability and security of computer based examinations. This limitations can be removed with the help of specially designed spectacles which are having inbuilt camera and microphone. The spectacles are attached to the application programme which is installed in the computer / Mobile phone. After installation, Spectacles are connected with application. The camera placed at the spectacles authenticates the user to login to the examination page. The Intelligent camera and microphones are sent real-time video and audio to the application programme. If any suspicious video/ sound detected then the application programme temporarily locks the computer screen and automatically send the video/ audio clipping to the authorities. Based on the clippings information authority can allow or suspend the Computer based examination to the candidate.

No. of Pages : 8 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027631 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ERGO POSITIONING PILLOW FOR VERSATILE USAGE BASED ON CONTROLLED AIR SYSTEM

(51) International classification	:A47G0009100000, A63B0021008000, A61G0013120000, A61B0005024000, A61G0005100000	(71)**Name of Applicant :** **1)Dr. Lohith Basavaraju** Address of Applicant :N o. 1404 D block ETA Gardens Magadi Road, Bangalore, Karnataka, India 560023. Karnataka India
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(32) Priority Date	:NA	(72)**Name of Inventor :**
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Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT An ergo positioning pillow for versatile usage based on controlled air system comprises and works in the-way it is described. A micro beads (1) provides the ideal contour of the head according to the posture of the user as well as softness, and an inflatable belly (2) contains the space for insufflation of air to attain the ideal height for the head. A cuff (3) with air release valve which is operated by hand for the inflation and deflation of air mechanically and a tube (4) is connected between the cuff (3) and the inflatable belly (2) providing the proper supply of air without pressure loss in the air. A stopper (5) is attached to avoid the accidental flow of air into the pillow herein additionally, a foot assisted inflating (6) for those who unable to operate the cuff (3).

No. of Pages : 10 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027632 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : EXTRACTION METHOD OF TYPHA ANGUSTIFOLIA FIBER

(51) International classification	:A61K0036880000, B29C0070320000, B32B0005240000, D04H0003160000, B29K0101100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
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(57) Abstract :
Abstract:- An Extraction method of Typha Angustifolia Fiber, said method involves the process of remove the complete fiber from the plant and then cleaning it as well as wetting and drying it, therein, fibrous portion in the middle length of the TA plant is retained while the top and bottom portion of the fibers are trimmed off. Collected fibers were sun dried again for 5 hours and are used for the manufacturing of TA fiber reinforced polymer composite material.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/06/2021
(21) Application No.202141027634 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HYBRID ENERGY SYSTEM WITH OPTIMIZATION TO DRAW MORE ENERGY

(51) International classification	:F03B0017020000, A61B0017290000, F03G0007000000, F03G0007100000, G01B0003000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT A hybrid energy system with optimization to draw more energy a mechanical unit (1) further comprises of spring, connecting rod with rack arrangement at both the edges, initially the spring is kept in compressed state and a smoke generator (2) is placed inside which simulated to produce the smoke thereby the compressed spring tend to expand therein the smoke is raise in pressure, this initiates the movement in the spring due to low pressure at initial stage and high pressure creates force over a mechanical unit (1), a rack and pinion unit (3) getting rotation force thereby a connecting unit (4) and which in turn a generator (5) producing green energy. The rack and pinion unit (3) getting rotation force thereby the flying object (4) is connected from the rack through the connecting unit (5) and therein the spring unit is connected which procedures the mechanical movement which is also producing green energy.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027636 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MXENE SPINEL FERRITE HETEROJUNCTION PHOTOELECTRODES FOR ASTRAL HYDROGEN PRODUCTION

(51) International classification	:B01J0035000000, B01J0037020000, B82Y0030000000, B01J0035020000, B01J0027220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
An Mxene spinel ferrite heterojunction photoelectrodes for solar hydrogen production focuses on adopting the properties of Mxene (conductivity, high mobility, large surface area and layered structure) into a value addition to the photo-catalytic property of spinel ferrites nanostructures which are used for the purpose of providing solution for recombination of electron and hole pairs. In general, the recombination process being eliminated to greater extend due to the high electrical conductivity and large surface area of Mxene. This greatly enhances the photo-catalysis process without affecting the stability of the photo-catalyst. The optical and electrical properties of this nano-composite material is useful in extending their various photo-catalytic applications.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/06/2021
(21) Application No.202141027791 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INFLUENCE OF WELDING SPEED ON TENSILE STRENGTH OF WELDED JOINT IN TIG WELDING PROCESS

(51) International classification :B23K0009230000, G01N0003080000, B23K0103080000, B23K0103100000, B23K0026242000
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :
Abstract Tungsten Inert Gas welding is one of the widely used techniques for joining ferrous and non ferrous metals. TIG welding process offers several advantages like joining of unlike metals, low heat effected zone, absence of slag etc compared to MIG welding. The accuracy and quality of welded joints largely depends upon type of power supply (DCSP or DCRP or ACHF), welding speed, type of inert gas used for shielding. It deals with the investigation of effect of welding speed on the tensile strength of the welded joint. Experiments are conducted on specimens of single v butt joint having different bevel angle and bevel heights. The material selected for preparing the test specimen is Aluminum AA6351 Alloy. The strength of the welded joint is tested by a universal tensile testing machine and the results are evaluated.

No. of Pages : 14 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/06/2021
(21) Application No.202141027836 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IOT BASED SYSTEM FOR DETECTION OF BRAIN CANCER IN THE HUMAN BODY

(51) International classification	:G06K0009620000, H04L0029080000, A61B0005050000, A61B0005000000, G06T0007000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT AN IOT BASED SYSTEM FOR DETECTION OF BRAIN CANCER IN THE HUMAN BODY The brain has billions of cells and is one of the most complicated organs in the human body. An unregulated, abnormal cell development causes a brain tumor that interferes with normal activity and kills healthy tissue. The significance of brain processes made it essential for medical activity not to be quantified accurately. Computer vision is currently highly essential in the field of medicine, as it allows professionals to diagnose exactly and make the appropriate decisions before surgery. This invention has used Internet of Things technology (IoT) to help the brain medical expert recognize the necessity to perform operations on pictures of magnetic resonance imaging (MRI). Adaboost classifier is utilized for brain tumor detection and morphological picture segmentation of MRIs. The Adaboost Classifier on the IoT Thingspeak platform helps brain specialists diagnose MRI pictures received online.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027839 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SPACE ENSURING DRONES BASED IOT SYSTEM USING MACHINE LEARNING INTERFACES

(51) International classification	:G06N0020000000, B64C0039020000, H04L0029080000, A01K0029000000, G06Q0010060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT A SPACE ENSURING DRONES BASED IOT SYSTEM USING MACHINE LEARNING INTERFACES [031] The present invention discloses a space ensuring drones based IoT system using Machine Learning interfaces. The present invention includes a drone mounted with a plurality of sensors for quantifying and inspection of the predetermined conditions in a predefined place; a processing unit provided with a machine learning interface for processing the received input from the plurality of sensors; a user device with a display unit and the alarming unit to be activated while any panic situation is measured and evaluated by the processing unit in conjunction with the plurality of sensors. Accompanied Drawing [FIG. 1]

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027844 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTELLIGENT MEDICAL TECHNOLOGY PLATFORM AND METHODS OF PROVIDING AFFORDABLE AND ACCESSIBLE HEALTHCARE

(51) International classification	:A61B0005000000, A61B0005053000, G16H0050200000, A61B0005103000, A61B0005020500
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention herein relates to an intelligent medical technology platform constituted with a plurality of physiological sensory devices, a computational system built-in wireless interfaces, and a cloud-supported data analytics module to pursue various functionalities, more particularly prevention of injuries, monitoring the progression of neuromuscular and physiological conditions, and supporting interventions for quantifying treatment efficacy, in real-time efficiently, comprising a wearable module [100], an intelligent hybrid computing module [200] and a front-end module [300]. Said intelligent medical technology platform made as either customized or off-the shelf device monitoring various physiological parameters like foot pressure, foot temperature, atmospheric pressure, ambient temperature, relative humidity, cardio-vascular data, motion analysis, skin impedance, objective sensory testing and many more similar parameters to diagnose and also to reduce further complications due from neurological disorders, including neuropathy, Parkinson™s, and Huntington's and similar conditions. FIGURE 2.

No. of Pages : 30 No. of Claims : 19

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/06/2021
(21) Application No.202141027846 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BOEHMITE NANOLUBRICANTS.

(51) International classification	:C10M0169040000, C10M0171060000, B82Y0030000000, C10M0125220000, C10M0107020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT The embodiment of the present invention relates to nano-additive for the formulation of nanolubricant consisting of a flowable mineral or synthetic base oil and dispersed Boehmite nanoparticles along with a dispersant. The Boehmite nanoparticles facilitate the formation of strong solid tribofilm on lubricated rubbing surfaces under tribostress resulting primarily in improved antifriction, antiwear, and load-bearing capability of base stock.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027848 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTI PURPOSE KITCHEN APPLIANCE FOR PERFORMING VARIOUS OPERATIONS REQUIRED FOR INDIAN / ASIAN COOKING REQUIREMENTS

(51) International classification	:A47J0019020000, A47J0043070000, A47J0043080000, A47J0043046000, A47J0043040000	(71)**Name of Applicant :** **1)N.GOVINDARAJAN** Address of Applicant :D.No.1, SHARP NAGAR, NEHRU NAGAR WEST, KALAPATTI, COIMBATORE - 48 Tamil Nadu India
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(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A table top wet grinder having an Electronic Controller positioned at the bottom assembly of a base unit characterized in that the Electronic Controller is adapted for operation of Wet grinder functions, Centrifugal Juicer functions. Cold press Juicer functions Food Processor functions (Atta kneading, Grating, Slicing, Coconut scrapping, Vegetable chopping). Mixer grinding & Blender Juicing functions by controlling RPM of the motor with constant output power. The Electronic Controlled motor used in the Table Top Wet grinder can be one of Single phase AC motor. The table top wet grinder as claimed in claim wherein the Electronic Controller is configured to motor such that the main drive shaft is interconnected to the motor coupler element directly with the shaft or by Belt and gear drive transmissions, to operate the specified attachments. In Wet grinder attachment a wet grinding drum set can be coupled onto the motor coupler for performing operation.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/06/2021
(21) Application No.202141027861 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A DEVICE TO FABRICATE ALUMINIUM ALLOY-6061 USING TIG WELDING

(51) International classification	:B23K0009167000, B23K0009290000, B23K0009160000, B23K0035380000, B23K0009320000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
TITLE: A device to fabricate aluminium alloy-6061 using TIG welding The present invention is a device to fabricate aluminium alloy-6061 using TIG welding, wherein the TIG welding consists of power source, a shielding gas (2) and a TIG hand piece. The power is fed out of the power source, down the TIG hand piece and is delivered to a tungsten electrode (5) which is fitted into the hand piece. An electric arc is then created between the tungsten electrode and the work piece. The tungsten and the welding zone is protected from the surrounding air by a gas shield (inert gas). The electric arc can produce temperatures of up to 19,400°C and this heat can be very focused local heat. The weld pool can be used to join the base metal with or without filler material (3). The TIG process is a highly controllable process that leaves a clean weld which usually needs little or no finishing. TIG welding can be used for both manual and automatic operations.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027862 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ROOM TEMPERATURE CURABLE, LOW OUT-GASSING EPOXY RESIN COMPOSITION AND A PROCESS FOR PREPARING THE SAME

(51) International classification	:C08L0063000000, C08G0059500000, C09J0163000000, C09K0003100000, C08G0059180000	(71)**Name of Applicant :** **1)Indian Space Research Organisation** Address of Applicant :Department of Space, Antariksh Bhavan, New BEL Road, Bengaluru, Karnataka, India 560094 Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
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(86) International Application No	:NA	**3)Pravin Ratnam**
Filing Date	:NA	**4)Dona Mathew**
(87) International Publication No	: NA	**5)Mercy Thelakkattu Devassy**
(61) Patent of Addition to Application Number	:NA	**6)Bibin John**
Filing Date	:NA	**7)Sumol Veliyil Gopinadh**
(62) Divisional to Application Number	:NA	**8)Ramesh Govindan**
Filing Date	:NA	**9)Chandramouli Subramanian**

(57) Abstract :
ABSTRACT ROOM TEMPERATURE CURABLE, LOW OUT-GASSING EPOXY RESIN COMPOSITION AND A PROCESS FOR PREPARING THE SAME The present invention discloses a epoxy resin composition. The epoxy resin composition, includes a bisphenol A type difunctional epoxy resin with two terminal epoxy groups, an epoxy core shell rubber additive, one or more amine hardener/ mixture of a plurality of amine hardeners bearing two terminal amino groups in a polyether backbone, and a cure accelerator.The formulation possesses low viscosity and sufficient pot life and the cured system exhibits good mechanical and thermal properties and high interfacial properties at ambient, high and low temperature environments. In particular, the present invention provides a resin formulation which, after curing exhibits low out-gassing of volatile organic chemicals, hence can be categorised into space qualified materials. The present invention also contributes as a terminal coating/sealing material for lithium ion batteries. In this perspective, the epoxy resin composition of the present invention is useful as an adhesive and also a sealant.

No. of Pages : 28 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027874 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED CONTACTLESS VITALS MEASURING DEVICE

(51) International classification	:A61B0005000000, A61B0005020500, A61B0005024000, A61B0005021000, G06N0020000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT IoT BASED CONTACTLESS VITALS MEASURING DEVICE An IoT based vitals measuring system (100), the system (100) comprising: contactless vitals measuring device (102) configured to sense vitals of a biological specimen along with environmental parameters, wherein the biological specimen is one of, a human being, an animal, or a combination thereof; a data center (104) configured to process and store the data associated with the IoT based vitals measuring system (100), the data center (104) comprises: a processor (108) trained using a machine learning algorithm to determine the illness as well as generate timely firmware updates based on continuous learning of the new illness.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027891 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SEMI-PLUGIN BATTERY MANAGEMENT SYSTEM POWERED BY DUAL RENEWABLE ENERGY FOR QUADRIC 4 - SEATER (VWC) EV

(51) International classification :F03D0009000000, F03D0080000000, H02S0010120000, F03D0013200000, H02J0003380000
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number:NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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12)Mr. G. B. Sathishkumar

(57) Abstract :
Abstract Semi-Plugin Battery Management System powered by Dual renewable energy for Quadric 4 - Seater (VWC) EV The present invention of a hybrid turbine device with a blade and a shelf produces wind impulses and a wind capture. The blade and shelf connections are between the top and bottom of the platform. The blade is helically removed for the production of torque around an axis. A drive shaft is connected with and designed to accept the torque produced. One or more photovoltaic cells communicate with the torque blade unit for solar or combined photovoltaic energy production. A method that integrates and combines PV generator cells with a semi-plugin charging the power train in dynamic mode into the wind pick-up blade assembly with the correct PV assembly with L category vehicle.

No. of Pages : 27 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027908 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ISLANDING DETECTION FOR INVERTER BASED DISTRIBUTED GENERATION WITH LOW FREQUENCY CURRENT HARMONIC INJECTION THROUGH Q CONTROLLER ANDROCOF ANALYSIS

(51) International classification	:H02J0003380000, H02J0003140000, H02J0003010000, H02S0050000000, G01R0023020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Abstract Nowadays renewable energy sources are used by most of the distributed generations. Because of their blessings like clean nature, pollution free, cost free the utilization of them are increasing in life style. The key drawback of such renewable distributed generation is associated with unintentional islanding development. Islanding will causes in the distributed generation due to unintentional opening of main grid. Islanding will causes dangerous conditions to equipments and apparatus connected with it. Thus, it is needed that as per IEEE 1547 and UL 1741 standards within 2 seconds we have to detect the islanding. In a new hybrid islanding detection method is presented with low frequency current harmonic injection and over/ under frequency relay for inverter based distributed generation. A low frequency current harmonic is injected into the system through the q controller of the grid side controller. The injected low frequency current component causes the system frequency to deviate during islanding. It evaluates the performance of this hybrid ROCOF relay when load and generation are matched and successfully detecting the islanding and also clearly differentiates between islanding and non islanding events for mixed types of RDGs connected to the grid. The test system results, are carried out in MAT LAB/Simulink environment shows the strength of this method.

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141027960 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SAKSHAM : MEDICAL CANE FOR ELDERLY PEOPLE

(51) International classification	:A61J0007040000, A61B0005024000, G16H0050300000, A61B0005110000, A61B0005040200	(71)**Name of Applicant :**
(31) Priority Document No	:NA	**1)Dr. Shaik Rasool**
(32) Priority Date	:NA	Address of Applicant :H. NO 10-3-66/51/B, M A RESIDENCY, HUMAYUN NAGAR, MEHDIPATNAM, HYDERABAD, TELANGANA. 500028 Telangana India
(33) Name of priority country	:NA	**2)Dr. Uma N. Dulhare**
(86) International Application No	:NA	**3)Dr. Akhil Khare**
Filing Date	:NA	**4)Tejaswi Puligilla**
(87) International Publication No	: NA	**5)Dr Pallavi Khare**
(61) Patent of Addition to Application Number	:NA	(72)**Name of Inventor :**
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(62) Divisional to Application Number	:NA	**2)Dr. Uma N. Dulhare**
Filing Date	:NA	**3)Dr. Akhil Khare**
		4)Tejaswi Puligilla
		5)Dr Pallavi Khare

(57) Abstract :
In this era, peoples are busy with day to day life activities and also there is lot of pressure in aspect of care for the older people who suffer from chronic functional disabilities and mental health problems. As medical facility & human resources are limited, it is difficult to manage the patient & also people of any age that have serious underlying medical conditions. The proposed Saksham • system is being encouraged to reduce social contacts and monitoring. It includes medical container, button, buzzer, reed sensor, LCD, LED & system application module to connect communication device. It is an IOT based solution that can be programmed & controlled using mobile application. The system can be customized and setup as per the requirements of the end user. It reminds the patient thru alerts to take the medicine as per dose, perform physical activity & food intake at scheduled time. In case the patient doesn™t respond to the alerts then the proposed system sends an alert message to the care taker. It™s enable care taker to monitor the patient remotely without disturbing his/her own work.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028010 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD FOR DETECTION OF DIABETIC RETINOPATHY USING AN INTERFERENCE SYSTEM

(51) International classification	:A61F0009008000, A61B0003000000, A61B0003120000, G06N0003040000, G06K0009620000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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5)B.R.Tapas Bapu, Professor/ECE, S. A. Engineering College, Chennai
6)SK Hasane Ahammad, Assistant Professor/ECE, Koneru Lakshmaiah Education Foundation, Guntur
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7)N.Renee Segrid Reddiar, Assistant Professor/ECE, Francis Xavier Engineering College, Tirunelveli.

(57) Abstract :
The invention is about a novel method developed to investigate diabetic retinopathy issues in individuals using the retinal images. For this the input images(101) are initially preprocessed and filtered(102) to remove the unwanted noise. Then the retinal images are segmented(103) based on the optic disc and the blood vessels. The unique features are extracted through which classification of the images are ensured. The images are trained using Artificial Neural Network(ANN) and Artificial Neuro Fuzzy Interference System (ANFIS). The images are classified as mild, moderate and severe(106) based on the percentage of affected regions. The results are compared and validated for sensitivity, selectivity and accuracy(107). Present techniques of enhanced laser photocoagulation and Vitrectomy techniques fails in preserving the visual failure of Diabetic Retinopathy affected individuals. The proposed technique saves people worldwide who are at danger for developing vision loss due to diabetes, in a user friendly manner.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028023 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ALERT SYSTEM FOR HOUSE KEEPING TO TRACK HYGIENE IN TOILETS USING WRISTBAND IOT

(51) International classification	:G06Q0010060000, B60S0001560000, C09D0005140000, C11D0003400000, G08B0021240000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)M.D BOOMIJA
5)Dr. S NALINI

(57) Abstract :
Dreadful diseases arise from various bacteria and viruses. This is due to unhygienic environment around us. Major diseases arise if washrooms are not maintained properly. When coming to public buildings this become a very major issue. In spite of many housekeeping facility still it™s difficult to maintain washrooms properly. So an alert cum feedback system is developed which helps the housekeepers get an alert when the washroom is not clean. . The status of the washroom is updated by using sensor. The cleaning process of an individual is noted through the wrist band incorporated with RFID tag which registers the employee id. Once an alert is received the cleaners immediately clean the respective washroom which is registered back in database. Also through feedback system the public users can revert back the issues of washroom. This helps to maintain hygiene which keeps us away from severe impacts

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028026 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AUTOMATED EMERGENCY VEHICLE MANAGEMENT SYSTEM DURING ROAD ACCIDENTS USING IOT

(51) International classification	:H04L0029080000, H04W0004029000, G08G0001096500, G06Q0050300000, G08B0025000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)Dr. S. PATHUR NISHA
5)Dr. BEAULAH DAVID
6)Prof. N.S. SIVAKUMAR
7)N. NAGARAJAN
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3)Dr. G. SURESHKANNAN
4)Dr. S. PATHUR NISHA
5)Dr. BEAULAH DAVID
6)Prof. N.S. SIVAKUMAR
7)N. NAGARAJAN

(57) Abstract :
ABSTRACT OF THE INVENTION An IoT based Automatic emergency vehicle management system involves two different phases namely accident detection and accident reporting. Each and every action will be monitored and controlled by centralized IoT cloud server through which only all type of communication is established between all interconnected devices. The road accident sensor enabled vehicle keeps on sensing whether vehicle met with accident or not and if it happens so it will be communicated to the respective IoT enabled cloud server. The information such as current location of the vehicle, accident and passenger details will be notified to the server. The server will predict the nearby ambulance driver availability and hospital based on the measurement of shortest distance between current location of the accident zone and nearby ambulance availability. Once the driver receives request, he has to acknowledge the request and accept it and in the meanwhile same information is conveyed to the respective nearby hospital in order to take necessary action in prior. In this way, an automated emergency vehicle management system during road accidents using IoT enables the hospital officials and ambulance service provider react immediately to reach the spot without any delay.

No. of Pages : 11 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028130 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD TO OPTIMIZE THE PERFORMANCE OF A WIDE BAND GAP SEMICONDUCTOR DEVICE AND ITS FABRICATION TECHNIQUE

(51) International classification	:H01L0029778000, H01L0029660000, H01L0029200000, H01L0029423000, H01L0029205000	(71)**Name of Applicant :** **1)Indian Space Research Organisation** Address of Applicant :Department of Space, Antariksh Bhavan, New BEL Road, Bangalore- 560094, India Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)DHAYALAN, Sathish kumar**
(33) Name of priority country	:NA	**2)SHARMA, Anil**
(86) International Application No	:NA	**3)HOODA, Manish kumar**
Filing Date	:NA	**4)SINGH, Surinder**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present disclosure relate to a method to optimize electrical characteristics and breakdown voltage of III-N based wide bandgap High Electron Mobility Transistor (HEMT) devices. Specifically, it relates to epitaxial growth of a thin layer of III-N cap on another III-N barrier layer used in a HEMT device, such that the grown III-N cap layer is not in immediate contact with the gate terminal in the drain access region. The present disclosure also provides a process route to realize such device in an enhancement mode.

No. of Pages : 26 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028137 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ELECTRICAL INTERCONNECTION DESIGN AS VERTICAL CONNECTION WITH PRINTED CIRCUIT BOARD

(51) International classification	:H05K0003420000, H01L0023000000, H05K0003320000, H01R0012720000, H05K0001110000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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6)Arup Roy Chowdhury
7)Pradeep Soni
8)Ramesh Bijal Bhai Bhatia

(57) Abstract :
Abstract An electrical interconnection design as vertical connection with printed circuit board (101) on surface electrical connection patterns comprises of a printed circuit board cut-out (102), device pads (103), exposed camera pads (104), and vertical half cut plated through holes barrels (206) with printed circuit board. The vertical electrical connection realized with exposing the half cut plated through holes barrel (206) on the edge of the printed circuit board (101) to provide the electrical interconnection. The vertical half cut plated through holes barrel (206) are add-on board and works as converter.

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028138 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTONOMOUS FREQUENCY JUMP DETECTION AND CORRECTION FOR ON-BOARD NAVIGATION PAYLOAD

(51) International classification	:G06F0001030000, G01S0019020000, G01C0021240000, G05D0001000000, G04C0013020000	(71)**Name of Applicant :** **1)Indian Space Research Organisation** Address of Applicant :Department of Space, Antariksh Bhavan, New BEL Road, Bangalore 560094, India Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)AKSHAY KHARE**
(33) Name of priority country	:NA	**2)T.V.S. RAM**
(86) International Application No	:NA	**3)SANJAY D. MEHTA**
Filing Date	:NA	**4)RAJAT ARORA**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A method for autonomous frequency jump detection and correction for on-board navigation payload in which the method for autonomous frequency jump detection in master clock comprising the steps of continuous monitoring of navigation payload™s master clock for a frequency jump and asserting the flag for jump detection and send the frequency jump size to the ground control station. The method for autonomous correction of frequency jump comprises the steps of: jump detection and jump size estimation using continuously monitoring of master clock with respect to two reference clocks using phase meters (604); estimation of frequency tuning word using estimated jump size; using the new frequency tuning word for correcting the payload clock using direct digital synthesizer; and enabling frequency tuning word to be configured from satellite ground control in case of non-autonomous mission requirement.

No. of Pages : 27 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028205 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LOW-COST SMART E-VEHICLE CHARGING STATION WITH BATTERY SWAPPINGTECHNOLOGY

(51) International classification	:B60L0053800000, B60S0005060000, B60K0001040000, G06Q0040040000, H01M0002020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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7)Mr.D.Saravanan
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10)Dr. M. Murali
11)Dr.D.Stalin David

(57) Abstract :
In the modern world, the intelligent character of a battery swap station infrastructure has been concentrated on by innovation organizations, which can offer a standardized foundation for effectively deploying the vast floor of hybrid and electric cars. In the 5 existing petrol-burning plants, the swap battery station will calibrate its electric vehicle use subsystem by substituting, replacing or replacing a couple of minutes of the battery portion or completely loaded battery. The Battery Swaps technique was created as a potential solution for the traditional EV recharge station strategy since it provides a broader experience for individual gamers. This concept is about integrating 10 the battery exchange station with the infrastructure, technology, charging and the battery exchange station's critical issues.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/06/2021
(21) Application No.202141028209 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR PREPARATION OF MIRABEGRON INTERMEDIATE

(51) International classification	:A61K0031426000, C07D0277400000, A61K0047120000, C07C0231120000, C07D0239940000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)RAVI KAVURU
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(57) Abstract :
The present invention relates to the process for the preparation of Mirabegron compound of Formula-1, which involves the reduction formula-II or salts using hydrazine hydrate, ferric halide and an activated carbon in presence of alcoholic solvent at a particular temperature to give compound of formula-II or salt; Subsequently coupled with 2-(2-aminothiazol-4-yl) acetic acid or its salt to get Mirabegron compound of formula-I or salts thereof.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028238 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ARRANGEMENT FOR ELECTROMAGNETIC PROPULSION IN A VEHICLE AND A METHOD TO OPERATE THE SAME

(51) International classification	:F01L0009040000, B60L0053140000, B26D0007060000, B62B0005040000, B60T0008340000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)MANNAVA ROHITH SRI SAI

(57) Abstract :
An arrangement for electromagnetic propulsion in a vehicle is provided. The arrangement includes a pair of electromagnets comprising a primary electromagnet, a secondary electromagnet, and configured to provide a thrust for the vehicle; a conductive frame placed between the pair of electromagnets; at least one front main wheel; at least one front sub wheel; at least one rear axil including at least one rear main wheel and at least one rear sub wheel, wherein the rear axil is operatively coupled to the at least one front main wheel via at least one sub rod; at least one pair of tires operatively coupled to the at least one rear axil; an electric motor operatively coupled to the at least one rear axil, and configured to enable the functioning of the arrangement. FIG. 1

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028244 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM TO POWER AN AC SOURCE TO A THREE-PHASE LOAD

(51) International classification	:H02J0003380000, H02M0007490000, H02P0027080000, H02J0003260000, H02M0007493000	(71)**Name of Applicant :** **1)JAYANAND BALAKRISHNAN** Address of Applicant :KALATHIL, MPK NAGAR, VIYYUR, THRISSUR, 680010, KERALA, INDIA Kerala India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)JAYANAND BALAKRISHNAN**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A system to power at least one alternating current (AC) source to a three-phase load is provided. The system includes a three-phase load, a DC power source configured to supply power to the system, one or more converters configured to generate direct current (DC) power of a pre-defined range, one or more single phase H-bridge inverters configured to convert generated DC power to equivalent AC power, at least one open-ended cable configured to supply output power of each of the one or more converters and one or more single phase H-bridge inverter to the corresponding at least one three-phase load. FIG. 1

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/06/2021

(21) Application No.202141028270 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ELECTRONICALLY ENABLED AND E-AWARD DEVICE FOR PHYSICAL ACTIVITY GOAL CHALLENGES FOR IT PROFESSIONALS TO STRENGTHEN MUSCLES AND BONES

(51) International classification	:A61B0005000000, A61B0005110000, G16H0050300000, A61B0005020000, G16H0020300000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
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(57) Abstract :
Roughly 133 million Americans presently hurt from at least one chronic health condition. This number is predictable to rise to roughly 165 million by the year 2022. This worsening in health can be credited basically to a inactive lifestyle with little to no physical activity. For example, lack of appropriate physical activity can raise the risk of emerging diabetes, hypertension, colon cancer, depression and anxiety, obesity, and weak muscles and bones. In addition, current studies have originated that protracted period of inactivity (e.g., sitting at a desk), can lead to serious health risks, such as an increased risk of a heart attack. In this invention, an electronic storage medium is to store one or many programs including instructions, which can be performed one or many processors in an electronic device by receiving physical activity challenges using an activity sensor to acquire activity data of user to complete the activity and to reward the same while in the released state.

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/06/2021
(21) Application No.202141028302 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VENTILATION AND AIR CONDITIONING UNIT: AN IOT BASED APPROACH IN COVID-19

(51) International classification	:G06Q0050220000, A61M0016000000, A61K0031407000, H04L0029080000, F02F0007000000
(31) Priority Document No	:NA
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(33) Name of priority country	:NA
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(57) Abstract :
ABSTRACT Ventilation and Air Conditioning Unit: An IoT Based Approach in COVID-19 This innovation identified with to consolidate the methodology of a computerized sack valve cover ventilation gadget with a reasonable checking highlight dependent on Internet of Things (IoT) innovation. Reasonable IoT innovation can uphold the activity in crisis emergency clinics, as the arrangement scarcely requires any nearby framework like Wi-Fi switches, Ethernet links, or fixed force supplies. The worldwide COVID-19 has prompted a developing interest of clinical ventilators. This development propose arrangement of minimal expense ventilators with a remote checking framework. This development give dependable ventilators to nations with helpless medical care frameworks, which are not ready for the COVID-19 flare-up. In this development Microcontroller Sends checking information by means of Wi-Fi to observing gadget (either cell phone or PC) Receives orders from checking gadget at that point Controls ventilator (engine control, sensor correspondence). In this work Monitoring Device which Serves as Wi-Fi passage and Multiple ventilators interface with one checking gadget which Provides observing capacities (for example engine activities, respiratory rate, settings) and furthermore Provides simple patient administration (for example task of gadgets to patients). This expense effective ventilator gadgets with coordinated observing of various patients would save lives in locales with low-asset clinics and helpless clinical frameworks and would prompt an immense responsibility decrease for the medical caretakers when COVID-19 diseases rise.

No. of Pages : 18 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028303 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PERSONALITY PREDICTION USING DJANGO AND MACHINE LEARNING

(51) International classification	:G06F0016951000, G16H0010200000, G06Q0020360000, A61B0005160000, G06Q0050000000
(31) Priority Document No	:NA
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(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)M Prabhakar
4)Ashwinkumar U Motagi

(57) Abstract :
Personality can be defined as a set of characteristics which makes a person unique. The study of personality is of central importance in psychology. There are various conventional ways of assessing one™s personality which either costs too much of manual efforts or cannot be done in real time. To solve these problems, this research aims to measure the Big-Five personality from a set of questions. The user is asked to answer a set of few questions and according to the questions answered by the user the personality of the user is predicted using logistic regression model.

No. of Pages : 7 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028306 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : NON DESTRUCTIVE TECHNIQUE FOR THE DETECTION OF ARTIFICIALLY RIPENED MANGO USING MACHINE LEARNING

(51) International classification	:G01N0021359000, G01N0021357700, G01N0021310000, G01J0003020000, G01N0021250000	(71)**Name of Applicant :**
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(86) International Application No	:NA	**3)Dr. Shajimon K John**
Filing Date	:NA	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Er. Ajith Ravindran**
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(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
This invention is a novel technique for the detection of artificially ripened mango (ripened using harmful chemicals) using a VIS-NIR Spectrometer Technique using Machine Learning technique in 400-800 nm range of the light spectrum. The setup consists of STS-VIS-L-50-400 spectrometer equipped with two way cuvette holders, Optical Fiber cable and a Tungsten Halogen source to provide a spectral range of 360 nm to 2000 nm. This setup is used to capture the required spectral data from the input. In this approach, different chemical compositions are classified with the help of spectral signatures supported with a spectral library. The spectral library is developed using this set up with different types of inputs (Mango). The system employs ultraviolet and visible spectrometer coupled with chemometrics techniques. This is a non destructive technique removes the wastage of input. This setup also not requires costly laboratory setup and employing trained human resources. A common man can simply use this equipment without any prior knowledge. This also results in accurate segmentation and classification of the sample. These advantages make the system user friendly and can be implemented at any farm product collection point or selling point. can be made possible. The results from this work have permitted to conclude that the developed system can monitor and determine artificially ripened mango (using harmful chemicals) with a prediction accuracy of 87.5%.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028324 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SIX LAYER N95 FACEMASK FOR PROTECTION AGAINST PARTICULATES AND MICROBES

(51) International classification	:A41D0013110000, A62B0023020000, A62B0018100000, A62B0017040000, B65D0081050000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Devika S Kumar

(57) Abstract :
The present invention describes about the six-layer N95 facemask for protection against particulates and microbes. The proposed mask on the upper inner aspect an additional beading with polypropylene material on the gap between the groove and the face side will provide tight fitting. The design of the mask provides for an airtight fit, but sufficient freedom for the movement of air through the filter without producing significant resistance or re-breathing of exhaled air. The use of spun bond polypropylene and will give a liquid repellant covering on both sides whereas the charged cotton on the inner side of the inner layer will absorb all the humidity and microorganisms from the person wearing it. Further, the layering of chitin derived nano composite A and the Activated charcoal will also adsorb the microorganisms and particulate matters.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028325 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : POWER MONITORING AND CONTROL SYSTEM (PMCS) INBUILT WITH THE SMARTPHONE ARCHITECTURE FOR POWER OPTIMIZATION

(51) International classification	:H04W0052020000, G06F0001320300, H04W0004029000, G06F0009500000, G06F0001320000	(71)**Name of Applicant :**
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(86) International Application No	:NA	**3)Dr.K.Rajakumari**
Filing Date	:NA	**4)Binu Dennis**
(87) International Publication No	: NA	**5)Rajakumar B. R.**
(61) Patent of Addition to Application Number	:NA	(72)**Name of Inventor :**
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(62) Divisional to Application Number	:NA	**2)Dr.R.Aruna**
Filing Date	:NA	**3)Dr.K.Rajakumari**
		4)Binu Dennis
		5)Rajakumar B. R.

(57) Abstract :
The present invention discloses a power monitoring and control system (PMCS) inbuilt with the smartphone architecture for power consumption, including the PMCS, battery monitoring unit, display monitoring unit, network state monitoring unit, sensor monitoring unit, application monitoring unit, user interface unit, device interface unit, and power optimization engine. The main purpose of this present invention is to reduce the power consumption in the Smartphone using power optimization engine. The monitoring units are considered as the input device connected to the PMCS and Smartphone's motherboard. The monitoring units are used to monitoring the battery level and automatically respond to the user interface when the battery level is low. The power optimization engine automatically changes the colour intensity to the black and white display when the battery level is lower than 20%. [To be published with Figure.1]

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028336 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DESIGN AND DEVELOPMENT OF KEVLAR FABRIC BASED EPOXY COMPOSITES REINFORCED WITH HYBRID METAL OXIDE FILLERS AND SAW DUST FOR BATTERY STRUCTURE APPLICATION •

(51) International classification	:B29K0063000000, B29K0105120000, H01M0002100000, H01M0010040000, B29C0070020000	(71)**Name of Applicant :** **1)Ms. Nivedha B** Address of Applicant :Department of Physics, National Institute of Technology Tiruchirappalli 620015, Tamil Nadu, India Tamil Nadu India
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(32) Priority Date	:NA	**3)Dr. G Hemath Kumar**
(33) Name of priority country	:NA	(72)**Name of Inventor :**
(86) International Application No	:NA	**1)Ms. Nivedha B**
Filing Date	:NA	**2)Dr. H. Mohit**
(87) International Publication No	: NA	**3)Dr. M. Ashok**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT DESIGN AND DEVELOPMENT OF KEVLAR FABRIC BASED EPOXY COMPOSITES REINFORCED WITH HYBRID METAL OXIDE FILLERS AND SAW DUST FOR BATTERY STRUCTURE APPLICATION • The invention relates to the composite battery structure designed, developed and fabricated by reinforcing 1 wt.% of CoNiO2 nanoparticles (6) and 5 wt.% of waste saw dust filler (7) was poured into the resin solution and ultrasonication (8) carried out for the homogeneous distribution of filler particles within the carbon epoxy matrix (resin and hardener in the ratio of 67:33), the said resin mixture of CoNiO2 and waste saw dust filler (9) was poured on the Kevlar fabric (10) using open mold hand layup method (11), then kept for curing at 70 °C (12) for 24 hours and fabricated specimen (13) has been removed from heating furnace. The composite battery structure have lightweight, higher mechanical strength, durability, and lower fabrication cost. The composite battery structure is structurally, and thermally stable with higher life cycle. FIG. 1, and FIG. 2

No. of Pages : 15 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028360 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
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(54) Title of the invention : SMART PROTECTIVE PERSONAL EQUIPMENT (PPE KIT) FOR HEALTHCARE WORKERS DURING COVID-19 PANDEMIC

(51) International classification	:G16H0050200000, A61B0005000000, G08B0021020000, G08B0021120000, G16H0050300000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The Smart Personal Protective Equipment (PPE Kit) for Healthcare Workers during COVID-19 Pandemic (SPPE) helps the doctors/nurses to make use of the SPPE to wear the PPE kit safely and efficiently as well as dispense the PPE kit in an automatic contactless manner by the PPE dispenser. The O2 inlet helps to refill the fresh O2 inside the coat for frequent periods using the provided valve. The CO2 outlet helps to remove the unwanted CO2 from the coat at frequent time intervals using the provided valve. The various sensors fixed inside the PPE coat helps to measure the user's health values like breathing pattern, heartbeat rate, and blood pressure. If these values are outside of the threshold values then the control unit alerts the user. The various sensors fixed outside the PPE coat helps to measure environmental conditions like temperature, humidity, air pressure, smoke, poisonous gases, alcohol content, radiation, chemical, and nearby object/human objects. If these values are outside of the threshold values then the control unit alerts the user. The beacons placed at the patient side measures the patient's health conditions and transfers the values to the doctor™s smartphone when it exceeds the threshold values. Then the doctors will take necessary actions on the patients to make him/her normal. The SPPE control unit helps to monitoring and managing the successful functioning of the whole SPPE system. By using this SPPE, the doctors/nurses to make use of the SPPE to wear the PPE kit safely and efficiently as well as dispense the PPE kit in an automatic contactless manner by the PPE dispenser.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/06/2021
(21) Application No.202141028403 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INCLINATION EFFECT ON UNSTEADY MHD CASSON FLUID FLOW ALONG WITH A VERTICAL SURFACE POROUS MEDIUM BY VARIOUS PARAMETERS

(51) International classification	:G06F0030200000, G06F0111100000, G06F0030230000, G06F0119080000, G06F0017130000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Abstract: A numerical investigation of unsteady magneto hydrodynamic natural convective, heat and mass transfer, electrically conducting Casson fluid flow over on an vertical surface taken in to the account with angle of inclination, chemical reaction, viscous dissipation and constant heat flux. The governing non-linear partial differential equations are transformed into ordinary differential equations by using suitable similarity transformations. These equations are solved by using a numerical technique, known as finite element method. The applicable physical parameters appearing in velocity, temperature and concentration distributions are analyzed and discussed. The results are discussed with the help of graphs. We observed that the velocity decreases with an increase in magnetic field parameter, Schmidt number, chemical reaction parameter, and Casson fluid parameter, angle of inclination parameter and Prandtl number while it increases with an increase in Eckert number and Soret number. Temperature increases with an increase in Eckert number while it decreases with increasing values of Prandtl number. Concentration increases with increase in Soret number while it decreases with an increase in Schmidt number and chemical reaction parameter.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028449 A
(19) INDIA
(22) Date of filing of Application :24/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD AND A SYSTEM OF DIRECT RADIO FREQUENCY TO BASEBAND SIGNAL CONVERSION

(51) International classification	:H04B0001300000, H04B0001280000, H04W0088080000, H04B0001000000, H04B0001709300
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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2)VAISH, Sachin

(57) Abstract :
The present invention relates at least to a method and a system (500) of direct radio frequency (RF) to baseband signal conversion. The method comprising receiving (102), by a radio frequency (RF) receiver, the one or more RF signals transmitted across a wide frequency band. The method further comprising converting (104), by an Analog-to-Digital converter (ADC) of the receiver, the one or more received RF signals into a plurality of digital samples. The method further comprising processing (106), by a programmable gate array unit, the plurality of samples associated with the one or more received RF signals for producing a plurality of baseband components. The method further comprising adding (108), by a plurality of fixed-adder stages coupled in parallel, the plurality of baseband components to produce a plurality of adder outputs at the plurality of the fixed-adder stages; and aggregating (110), by an adjustable Adder-Accumulate Circuit, the plurality of adder outputs for generating one or more baseband signals.

No. of Pages : 26 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/06/2021
(21) Application No.202141028462 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BROWNIE COOKIE AND PROCESS FOR PREPARATION THEREOF •

(51) International classification	:A21D0002360000, A23G0003480000, A23G0003340000, A01N0065260000, C08G0081020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT Brownie cookie and process for preparation thereof • Accordingly, a Brownie cookie and process for preparing thereof is disclosed. The process for making Brownie cookie product comprising the steps of: Melting Chocolate with butter; preparing sugar egg mixture and blending it upto 10-12 min followed by addition of dry ingredients followed by 3-4 min blending; adding chocolate-butter mixture into sugar-egg mixture followed by blending for 4-5 min followed by addition of dry fruits and mixing it and keeping it in refrigerator for a period of 10 min; taking it out of the refrigerator and scooping all these ingredients in the tray followed by baking it for a period of 10 min to 13 min (after 8 min, tapping process is completed for few seconds followed by putting it in oven); and keeping it at air conditioned room temperature for cooling down for 10- 15 min followed by packaging of the brownie cookie and keeping it in the chiller or frozen (abt -20 to +6 degree).

No. of Pages : 14 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028518 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT AND RFID BASED OPTIMAL POSITIONING OF AUTONOMOUS SHOCK ABSORBER FOR SMART VEHICLES

(51) International classification	:G06K0017000000, B60G0013000000, B25B0027000000, B66F0007280000, B62K0025280000
(31) Priority Document No	:NA
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(33) Name of priority country	:NA
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(87) International Publication No	: NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
In this invention a fault proof system for optimal positioning of automobile shock absorber is focused based on RFID (Radio Frequency Identification). Generally operators do not use any tool for positioning shock absorbers in automobiles during the assembling process and also do not check for any matching of tools to the vehicle. This problem can be solved by the proposed system where the RFID control system reduces downtime significantly with increased rate of tightening eligibility by 5% integrated with IOT. Conventionally height of the rear suspension is controlled by the automatic lifting equipment for ensuring the angle of shock absorber whose installation and maintenance cost is much higher. In turn RFID implements non-contact induction mode with the advantage of operation for longer distance for correct positioning of shock absorber in automobile. Process design of the RFID controlling system is flexible such that it can be combined readily with the production process for improved and accurate position of shock absorbers in automobile.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028520 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : POWER QUALITY AND INTELLIGENT DIGITAL PROTECTION RELAYS IN MICROGRID

(51) International classification	:H02J0003380000, H02J0003240000, H02J0003180000, H02H0007260000, H02H0001000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
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Filing Date	:NA

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(57) Abstract :
ABSTRACT [605] Our Invention Power Quality and Intelligent Digital Protection Relays in Microgrid is a power grid higher infrastructures have been changing from a centralized controlled power generation unit to a paradigm where the generation capability is spread over an increasing number [508] of small power stations relying on renewable energy local and global sources. The invention a microgrid is a local network including renewable and non-renewable energy sources as well as distributed loads. While microgrids have many benefits for[610] power systems, they cause many challenges, especially in protection systems. The conventional coordination of the protection system is based on the real-time delays between relays as the primary and [612] backup protection. The system protection scheme has to be [614] changed in the presence of a microgrid, so several protection schemes have been proposed to improve the protection system. [616] A microgrid is electrically isolatable from the utility macrogrid and would often have sufficient cumulative capacity to meet the [618] needs of those within in, although most microgrid concepts also specify a utility backup. The invented microgrids could operate as full-time islands, while [619] others could operate as part of the macrogrid during normal operation and only separate into an island during service [620] interruptions. The invention is a undesired effects are accompanied with their installations and operations such as imbalance, [622] voltage fluctuation, and harmonics. To the aspect of voltage quality, the switching on and off of the [624] distributed generation resources may cause power fluctuation, hence the associated power quality disturbances are produced.

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/06/2021
(21) Application No.202141028541 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : EARLY DETECTION OF RHEUMATOID ARTHRITIS USING ARTIFICIAL INTELLIGENCE

(51) International classification	:G06N0003040000, G06N0003080000, G06K0009620000, G06K0009000000, G06N0003000000
(31) Priority Document No	:NA
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(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
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(57) Abstract :
Rheumatoid arthritis may be described as a chronic inflammatory disorder which affects the joints by damaging the body"s tissue. Therefore, the identification and detection of rheumatoid arthritis by hand, especially during its development or pre-diagnostic phases, requires an effective system analysis. In this work, we developed a system based on Artificial Intelligence (Man-made intelligence), utilizing Convolutional Neural Networks (CNN) and Reinforcement Learning Technique for the programmed detection of RA from hand and wrist MRI. The model efficiency is measured with 564 cases (real data) achieving an exactness of 100%. This model would be useful for faster automatic detection of Rheumatoid Arthritis.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/06/2021
(21) Application No.202141028545 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYNTHESIS OF GRAPHENE USING MODIFIED CHEMICAL REDUCTION METHOD

(51) International classification	:C01B0032192000, B82Y0030000000, H01M0004587000, B82Y0040000000, C01B0032230000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT Graphene is one of the most desirable nanomaterials for several decades owing to its extraordinary properties. Many changes have been introduced to synthesize graphene with essential functional groups and interlayer distance (3.35 A). Reducing graphene from graphene oxide is an easy process, but it will remove the crucial functional groups like hydroxyl, epoxy, and alkoxy group. The present invention discloses a reduction technique to synthesize graphene with essential function groups, interlayer distance and high carbon/oxygen (C/O) ratio.

No. of Pages : 18 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028625 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : APPARATUS AND METHOD FOR SOIL TESTING

(51) International classification	:G01N0033240000, G01N0027447000, G01N0001280000, G01R0031280000, G01N0021640000	(71)**Name of Applicant :** **1)ARKASHINE INNOVATIONS PVT LTD** Address of Applicant :No. 9-12-226, 11th Cross, Bhavani Rice Mill Road, Vidyanagar Colony, Bidar, Karnataka - 585403 Karnataka India
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly embodiments herein disclose an apparatus for soil testing, wherein the apparatus (10) comprising a testing module (12) for testing a soil sample solution to determine an amount of macronutrients present in the sample solution by means of fluorescence-based capillary electrophoresis. A testing chip (21) is removably positioned in the testing module (12) for holding the sample solution during test. . Furthermore, the apparatus (10) comprises a sample preparation module (11) for preparing the soil sample solution. A method for soil testing is also disclosed.

No. of Pages : 34 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/06/2021
(21) Application No.202141028644 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PORTABLE APPARATUS FOR BREATHING ASSISTANCE TO MONITOR THE PATIENT SUFFER FROM RESPIRATORY DISEASES

(51) International classification	:A61B0005000000, A61B0005080000, A61B0005087000, A63B0023180000, G16H0050200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
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(57) Abstract :
Nearly one Billion people suffer from respiratory diseases such as chronic obstructive pulmonary diseases, asthma, neuromuscular disorders that greatly affect patient™s muscles and that decrease lung function. Two hundred Million people globally suffer from Chronic obstructive pulmonary disease (COPD) and it is foretold to become the third foremost source of death and disease globally by 2022, mostly due to its growing occurrence in developing and low-income countries. The key source of COPD is found to be tobacco smoke. Other risk factors for COPD pointed are indoor and outdoor air pollution, occupational dusts and chemicals. This invention consists of housing unit which is mouthpiece having a sensor assembly to sense the breathing characteristics of the patient. The input of this invention is designed to receive external data such as environmental related information, patient activity information, physiological information. Output of this invention is designed to provide information or instruction related to breathing exercises or training program.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028654 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN EFFICIENT ENHANCED VLSI ARCHITECURE OF MONTGOMERY MODULAR MULTIPLICATION

(51) International classification	:B60L0053800000, B60S0005060000, B60K0001040000, G06Q0040040000, H01M0002020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
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Filing Date	:NA

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(57) Abstract :
In the modern world, the intelligent character of a battery swap station infrastructure has been concentrated on by innovation organizations, which can offer a standardized foundation for effectively deploying the vast floor of hybrid and electric cars. In the 5 existing petrol-burning plants, the swap battery station will calibrate its electric vehicle use subsystem by substituting, replacing or replacing a couple of minutes of the battery portion or completely loaded battery. The Battery Swaps technique was created as a potential solution for the traditional EV recharge station strategy since it provides a broader experience for individual gamers. This concept is about integrating 10 the battery exchange station with the infrastructure, technology, charging and the battery exchange station's critical issues.

No. of Pages : 22 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028677 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MODULAR SOLAR ENERGY COLLECTOR SYSTEM

(51) International classification	:F24S0023740000, F24S0030425000, F24S0030000000, F24S0023700000, F24S0040800000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
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(57) Abstract :
The present disclosure relates to a parabolic trough solar energy collector. More particularly, it relates to a modular 2D parabolic trough solar energy collector system that incorporates repeating, independent modules that are extendable seamlessly in either direction. The modules contain two bent tubes in the form of a 2D parabola and a reflective sheet of the module takes up a parabolic shape during the assembly process while the module is configurable to accommodate a variety of reflective materials in the form of a thin sheet of varied thickness. The reflective sheets may be fixed to the parabolic tubes by end fix strips. The design of the system has minimum part counts and use of repeat parts due to modularity. The system further includes an in-built feature at the ends of the parabolic trough modules to couple an external tilting mechanism for tilting the parabolic assembly to continuously track the sun.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028717 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NON-ISOLATED DC-DC CONVERTER WITH HIGH GAIN IN CONTINUOUS CONDUCTION MODE OF OPERATION

(51) International classification	:H02M0003158000, C07K0014705000, C07K0016220000, C22C0038340000, B32B0027080000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The project aims to develop a non-isolated DC-DC Converter which is distinguished by its higher gain when compared with the conventional boost converters. These converters find its applications in fields where there is high demand for stepping up of voltages to a greater extent which includes photovoltaic cells and fuel cells applications. Here, the converter is developed for continuous conduction mode of operation with the help of voltage and current waveforms, conversion ratio and simulations. This converter prevents the complexity of cascading boost converters to get higher gain thereby reducing the expenditure and space consumed.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028755 A
(19) INDIA
(22) Date of filing of Application :26/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS OF PREPARATION OF SILYMARIN BASED ORAL TOPICAL MUCOADHESIVE GEL FOR ORAL MUCOSAL DISEASES AND PRODUCT THEREOF

(51) International classification	:A61K0009000000, A61K0047320000, A61K0031357000, A61K0047100000, A61K0036280000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
APPLICANT: DR. C.V.DIVYAMBIKA TITLE: A PROCESS OF PREPARATION OF SILYMARIN BASED ORAL TOPICAL MUCOADHESIVE GEL FOR ORAL MUCOSAL DISEASES AND PRODUCT THEREOF ABSTRACT The present invention discloses a process of preparation of cost effective and more permeable novel potent silymarin based oral topical mucoadhesive gel for oral mucosal diseases. The process of the present invention comprises of following steps; (a)Mixing predetermined volume of distilled water, predetermined volume of propylene glycol to form a solvent solution; (b) dispersing predetermined amount of Carbopol934 in the solvent solution with stirring at predetermined RPM for predetermined time to form Carbopol934 solution; (c) adding predetermined amount of Methyl paraben and predetermined amount of Propyl paraben to the Carbopol934 solution to form carbopol gel base; (d) dissolving predetermined amount of Silymarin with predetermined volume propylene glycol to form Silymarin solution; (e) slowly adding the Silymarin solution into the carbopol gel base under sonication followed by adding predetermined volume of Triethanolamine and predetermined volume of peppermint oil to form mucoadhesive buccal gel. The present invention also disclose a cost effective and more permeable novel potent silymarin based oral topical mucoadhesive gel for oral mucosal diseases prepared by the process described above.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028760 A
(19) INDIA
(22) Date of filing of Application :26/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : THE INFLUENCE OF DIFFERENT TREATMENTS APPLIED TO FLAX FIBERS ON DIFFERENT PROPERTIES OF MORTAR REINFORCED BY THESE FIBERS

(51) International classification	:C04B0028020000, C04B0111000000, D06M0010020000, A61K0036550000, C04B0018240000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
THE INFLUENCE OF DIFFERENT TREATMENTS APPLIED TO FLAX FIBERS ON THE DIFFERENT PROPERTIES OF MORTAR REINFORCED BY THESE FIBERS Several solutions for treating flax fibers have been studied in this work. This need for treatment is explained by the high water absorption capacity of flax fibers which disrupts the rheological behavior of cementitious composites in the fresh state but also affects the physical and mechanical properties in the hardened state. Three treatment solutions were explored: atmospheric plasma, mineral cement/slag coating and linseed oil coating. These treatments were optimized before the incorporation of fibers into the mortars. The hygroscopic and hydroscopic behaviors of flax fibers have been studied. It has been found that flax fibers do absorb large amounts of water very quickly (up to 140% by mass). Atmospheric plasma treatment made it possible to modify the kinetics of water absorption but not the retention capacity. Conversely, linseed oil is the only treatment that actually reduces the water absorption capacity while the cement/slag coating treatment does not modify it. It appeared necessary to take into account the presence of the treatment in the interpretation of the results and therefore to relate the measurements to the mass of raw fibers only. Failure to take into account the treatment products could lead to erroneous interpretations.

No. of Pages : 30 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028767 A
(19) INDIA
(22) Date of filing of Application :26/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LEES - A LIGHTWEIGHT AUTHENTICATION SCHEME FOR SECURE D2D COMMUNICATION IN 5G-IOT NETWORKS

(51) International classification	:H04L0029060000, H04L0009320000, H04L0009300000, H04L0029080000, H04W0076140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(57) Abstract :
With the advent of 5G networks, newer technologies will be applied to it for secure communication, increasing capacity and performance. Device-to-Device (D2D) being an inherent feature in 5G networks will allow for wider coverage with devices acting as users or relays without any intermediate node. However, this poses critical security issues like rogue relays, various attacks like impersonation, eavesdropping, denial-of-service over such direct means of communication. Also, it is recommended to send lesser control messages owning to authenticity and secrecy requirements. Issues compound when IoT devices come into 5G application requirements due to inherent resource constrained nature of such devices. Novel signcryption algorithms which achieve the properties of encryption and digital signature are required to provide secure 5G D2D IoT networks to protect users™ information and their data from being attacked, all at reduced communication costs. In this invention we present LEES- a secure authentication scheme using public key encryption for secure D2D communication in 5G IoT networks which is lightweight and a meld of elliptic curve cryptography based Elgamal-Schnorr Signcryption algorithms. From analysis, it is found that the proposed scheme is low on computation cost, memory consumption, network bandwidth and immune to security threats thus providing confidentiality, authenticity, integrity and non-repudiation features. It can be used in any 5G IoT architecture requiring enhanced D2D security and performance.

No. of Pages : 14 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028782 A
(19) INDIA
(22) Date of filing of Application :26/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMPUTATIONAL OPTIMIZATION OF VLSI PHYSICAL DESIGN WITH GRAPHICAL PROCESSING UNITS ISING METHOD

(51) International classification	:G06N0010000000, G06N0007000000, G06F0017110000, G06F0007580000, G06F0017100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Abstract Many VLSI physical design techniques, such as maximum cut and maximum flow, have significantly more difficult solutions to design, compute, and prove. This domain's extensive elements make certain issues computationally impossible, and as a result, approximate solutions are necessary. Here, we take the Ising spin glass model, a computational approach useful for hard combinatorial optimization problems, and apply it to specific hard combinatorial optimization problems. In the Ising model, ferromagnetism is represented as a mathematical model in statistical mechanics. According to this theorem, while applying the Ising computing technique, a minimal energy state is found for the Ising model, which approximates the expected optimal solution to the original problem. Mapping combinatorial optimization issues into the Ising model is quite popular in combinatorial optimization research. While we're in the VLSI physical design industry, we specialize in the max-cut problem because it's important to numerous difficulties inside that field. While investigating the behavior of the Ising annealing process, we found that the procedure is well-suited to parallel GPU computing massively. Using GPU random thread scheduling shows how to construct random update patterns that improve GPU resource consumption. FPGA- and other hardware-based implementation approaches were demonstrated to be inadequate regarding the rigour required in creating an Ising graph. For a set of demanding optimization methods, proposed GPU implementation delivers more than 2000X speedup over CPU implementation.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/06/2021

(21) Application No.202141028784 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ARTIFICIAL NEURAL NETWORK BASED INTELLIGENT REFRIGERATOR

(51) International classification	:F25D0029000000, F25D0017060000, F25B0049000000, F25D0017040000, H05B0047100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The refrigerator performs refrigeration process by electrically powered compressor which create pressure differences to make refrigerant flow. The refrigerator repeatedly performing a cycle of compression, condensation, expansion, and evaporation. This invention intended to provide intelligent based refrigeration operation by controlling all mechanical components by sensing information and operation information to determine whether the operation state of the intelligent refrigerator is normal or abnormal using artificial neural network-based diagnosis module. The intelligent refrigerator shall include a memory, a processor, a power supply, a driver, a sensing unit, and a communication unit. Further, the processor may further include an AI processor, autonomous module, electrically connected to the refrigerating compartment temperature sensors.

No. of Pages : 12 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028791 A
(19) INDIA
(22) Date of filing of Application :26/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ETA CAP: ELECTRONIC TRAVEL AID CAP FOR DIGITAL ASSISTANCE IN MOVEMENT OF THE VISUALLY IMPAIRED INDIVIDUALS

(51) International classification	:G09B0021000000, A61F0009080000, A61H0003060000, G16H0050200000, A61B0003060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Many people in Telangana are subjected to visual impairment and blindness which are not curable. Most of such people are poor and cannot afford for digital equipment for assistance. Effective interventions are available for health promotion, prevention, treatment and rehabilitation to address the entire range of needs associated with eye conditions and vision impairment across the life course. Some are among the most feasible and cost-effective to implement. For example, uncorrected refractive error can be corrected with glasses while cataract surgery can restore vision. Vision rehabilitation is also effective in improving functioning for people with an irreversible vision impairment. The proposed ETA CAP system™s framework is to help the poor and needy visually impaired or blind people by researching the solution and construction of product(s) providing them with digital assistance.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/06/2021
(21) Application No.202141028796 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR DETECTING GROWTH AND DISEASE CONDITIONS BASED ON VEGETATION INDICES OF PLANTS

(51) International classification	:G06K0009000000, B64C0039020000, B64D0047080000, A01M0007000000, G06K0009520000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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9)Vijaya Menaka Jayaram
10)Dr. Saravanan Bose
11)Don Dougles Baskar

(57) Abstract :
Disclosed herein is a method and system for automatically and efficiently detecting growth status and disease condition prevailing in different plants in different types of agricultural land using an unmanned aerial vehicle (UAV). As shown in FIG. 7, the UAV (100) comprises a multispectral camera to capture the multispectral images in different plants and a controller (102) to process the images using the color mapping algorithm to analyse the mapped target area for observing, measuring and responding to crop condition and calculated age of crops. Based on the disease condition and growth status condition, pesticides and fertilizers are sprayed at appropriate levels in the target field.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028823 A
(19) INDIA
(22) Date of filing of Application :27/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL METHOD - INTEGRATION OF INTERNAL COMBUSTION ENGINE WITH IOT DEVICE

(51) International classification	:F02F0007000000, H02K0007140000, F01P0001020000, F02F0001400000, H02K0007180000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The power tool consists of an internal combustion engine and an integrated gadget connected to the engine. A flywheel or another rotating component is part of an internal combustion engine. The integrated gadget is encased in a housing and is connected to the flywheel or a rotating component. A printed circuit board with a wireless communications module and a power production component that gets power wirelessly from the internal combustion engine comprise the integrated device.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2021
(21) Application No.202141028829 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRANSMISSION GATE VOLTAGE LEVEL TRANSLATOR FOR DEEP SUB-MICRON TECHNOLOGY

(51) International classification	:H03K0003356000, H03K0019018500, H03K0017687000, H03K0003030000, H03K0019000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
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(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A Transmission Gate Voltage level translator for deep sub-micron technology is a digital circuit does voltage level translating. The circuit includes a short circuit aware inverter and a transmission gate based voltage level translation and signal blocking; wherein the digital circuit comprises 2 X 1 Multiplexer to select VDDH or VDDL with one NMOS transistor and one PMOS transistor in the level shifting selection stage; wherein the digital circuit receives an input voltage (VIN) from the multi voltage supply circuits and produces an output voltage (VOUT) when the BLOCK input is given ˜0™; wherein the input VIN has a voltage swing between VDDL and VDDH supply voltages; wherein the output VOUT has a voltage swing between VDDH and VDDL supply voltages; and wherein the level translator circuit selects type of level translation in response to a level of the input voltage. When the BLOCK input is given ˜1™ the signal is completely blocked. The short circuit aware Inverters and Transmission gates as switching elements provides low power consumption and Delay even at higher frequencies.

No. of Pages : 17 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2021
(21) Application No.202141028830 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FEATURE EXTRACTION AND MACHINE LEARNING FOR EVALUATION OF STUDENTS COMMUNICATION SKILLS

(51) International classification	:G06N0020000000, G06Q0010100000, G06Q0010060000, G09B0007020000, H04W0024100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The invention Discloses a system which identifies strengths, weaknesses and areas of opportunities of students for better communication skills using machine learning algorithms, The system also prepares a detailed report on identified parameters and coping strategies for their improvement. The Invention efforts to address the issue of communication skills for their bright career prospects and building confidence in them

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028831 A
(19) INDIA
(22) Date of filing of Application :27/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A STUDY OF EMPLOYEE RETENTION STRATEGIES IN IT INDUSTRY - RANKING OF EMPLOYEE RETENTION STRATEGIES BASED ON DEMOGRAPHIC VARIABLES GENDER, AGE AND EXPERIENCE AT PRESENT ORGANIZATION

(51) International classification	:G06Q0010060000, G06Q0010100000, G06Q0030020000, C07K0014415000, G09B0019000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Employee retention plays an important role in an organization because it affects employee performance. The purpose of this study is to examine the effect of employee retention strategies namely employee reward programs, flexible working environment, timely promotions, career developmental programs, better compensation and performance-based bonus on employee retention and employee performance. The study results revealed that employee retention strategies have positive effect on employee retention as well as employee performance. The study would also helpful for researchers and academicians to understand the role of employee retention in an organization. The major purpose of this study is to identify and analyze the major determinant strategies that affect employee retention. This research closely looked at the following broad strategies: Job Security and Good working environment, Better Compensation System, Effective Training and developmental Programmes, Rewards and Recognition, Employees Participation in management activities, Welfare measures, Promotion opportunities, Challenging Work assignments, Scope for Career growth and development, Fair evaluation system. A total of 615 self-administrative questionnaires data is received and the data was analyzed with the help of SPSS_v20 software. The results demonstrated that employee retention strategies have a significant role in employee retention as well as outstanding enterprise performance. The outcomes of this study will help organizations understand the importance of employee retention strategies in achieving superior organizational overall performance and in retaining competent employees.

No. of Pages : 8 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028839 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SOLAR BASED HYDROGEN GAS BURNER APPARATUS FOR COOKING AND PROCESS HEATING

(51) International classification	:C25B0001040000, C25B0001020000, F02M0025120000, C25B0001060000, C10L0001180000	(71)**Name of Applicant :** **1)Dr. P. KARTHIK** Address of Applicant :Loyola-ICAM College of Engineering and Technolgy, Nungambakkam, Chennai, Tamil Nadu, India 600 034. Tamil Nadu India
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(32) Priority Date	:NA	**3)KRITHIK SHARAVAN**
(33) Name of priority country	:NA	**4)LERIN J BE BLESSLIN**
(86) International Application No	:NA	**5)AASHIK JOE NAVIS**
Filing Date	:NA	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Dr. P. KARTHIK**
(61) Patent of Addition to Application Number	:NA	**2)A.KISHORE KUMAR**
Filing Date	:NA	**3)KRITHIK SHARAVAN**
(62) Divisional to Application Number	:NA	**4)LERIN J BE BLESSLIN**
Filing Date	:NA	**5)AASHIK JOE NAVIS**

(57) Abstract :
The present invention is proposed to produce solar based hydrogen gas burner for cooking or burning purpose. In these burners, hydrogen gas is separated from the water with the aid of electricity obtained from solar panel. The ultimate aim of this project is to minimize the usage of petrol or save petrol for our future generation. There are three major components involved in this apparatus, which are bottom container, intermediate container and upper container. In the bottom container, the anode and cathode plates are immersed in water and are covered using dome structures. When electricity is passed, the water filled in the container, undergoes a process called electrolysis, which separates the water into hydrogen gas at cathode and oxygen gas at anode. The Hydrogen gas from the dome is collected in the upper container, from where it is supplied to the burner to produce flame for cooking or process heating. The intermediate container has the required circuitry and accessories for the working of the system. The gases produced in the anode (oxygen) can be used for any other purpose. This project may be an alternative to conventional LPG gas cylinders used in house hold purpose and can also improve the life quality for people who can or cannot afford a LPG gas cylinder. This project reduces the reliability of the people over the non-renewable/degradable resources like fossil fuels and makes us independent to use the renewable energy resources around them. This project has economic benefit as well as an environmental cause to be implemented.

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028843 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CALOTROPIS GIGANTEA NATURAL FIBER FOR MAKING THERMAL INSULATION

(51) International classification	:G01N0025180000, D06M0011820000, F16L0059020000, C04B0028260000, C03C0013000000	(71)**Name of Applicant :** **1)Dr. P.KARTHIK** Address of Applicant :Loyola-ICAM College of Engineering and Technology, Nungambakkam, Chennai, Tamil Nadu, India 600 034. Tamil Nadu India **2)Dr. K.RENUGADEVI**
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Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Artificial insulating fiber features a closed-cell structure and it is known for its thermal insulation. However, it responds very slowly to bacterial decomposition in the soil, thus making the soil infertile. It also releases poisonous gases on burning, which can cause respiratory problems, or even death, when inhaled. Hence, artificial insulating fiber is harmful to the environment. In the light of this, this invention attempts to find out a material that is as efficient as artificial insulating fiber in terms of thermal insulation and thereby circumventing the disadvantage caused by artificial insulating fiber. In this invention, the thermal conductivity of the CG fiber was found in two methods. In the first method, the CG fibre was made as a pillow and tested its thermal conductivity using the Thermal constants analyzer setup. In the second method, the laminate was prepared with Araldite LY 556 and hardener HY 951 with CG chopped CG fibre reinforcement and its thermal conductivity was tested with the help of Thermal constants analyzer setup. As artificial insulating fibre is not eco-friendly, with the aid of CG fibre in chopped form, our environment could be protected to the great extent by reducing the quantity of usage of artificial insulating fibre.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202141028845 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN INSPECTION METHOD FOR ANOMALY DETECTION IN PHARMACEUTICAL SECTOR USING CONVOLUTIONAL AUTOENCODER

(51) International classification	:G06N0003080000, G06N0003040000, G06K0009620000, G06Q0050220000, G06Q0050260000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention provides a way for anomaly detection in pharmaceutical sector using convolutional autoencoder network and an inspection method for the same. Said convolutional autoencoder network comprises of a server (21), a pharmaceutical manufacturer database (11), a local drug authority database (12), a pharmacy database (13), Health & Welfare authority Council database (14). An anomaly detected report is sent to Health & Welfare authority Council database (14) by the server (21).

No. of Pages : 15 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202141028846 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTONOMOUS FIRE EXTINGUISHING ROBOT

(51) International classification	:B25J0009160000, B25J0011000000, B25J0009000000, G08B0017120000, B25J0005020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
In the evolution of the technology, the robots are noticeable one. The robots are classified into many types like preprogrammed robots, humanoid robots etc., Among that autonomous robots are one type of a robot which is designed to perform a specific task without the help or intervention of humans. Now a days there is an increasing number of fire accidents happening daily in industries, hospitals, forests etc., In that situations the human fire fighters and the people or animals who stuck in the fire are at the stage of losing their life. During fire accidents there are some places where fire fighters cannot go and extinguish the fire and there is a possibility of injured peoples completely surrounded by the fire. Many losing their life at that critical situations. So, extinguishing the fire, monitoring the environment and rescuing the injured people is necessary and should be needed for every fire accident. The present invention Our autonomous fire extinguishing robot is aimed to design with the above three features. The industries has a high range of having fire accidents so, we develop our fire fighting robot primarily for industries. In our project we use an Arduino uno microcontroller, flame sensor, ultrasonic sensor, driver circuit, DC motor, PIR sensor, voice playback board and servo motor for operation. The basic fire fighting robot process is to detect and extinguish the fire automatically. The flame sensor sense the fire and the ultrasonic sensor is used for obstacle detection or free path navigation. Here we use a pyroelectric motion sensor and voice playback board as a human detector. Once the fire is detected, the Pyroelectric Infrared sensor and voice playback board gets activated automatically, PIR sensor used to detect the motion and the voice playback board records the sound. It happens simultaneously when the robot extinguishes the fire. The information of motion and sound with direction are being recorded by the robot during the fire accident will sent to the monitoring system of the industry. It can be done by using IOT (Internet of Things). The all components are interfaced with the Arduino UNO microcontroller. This method of handling is very useful for extinguishing the fire and for rescuing the people. This makes the robot more efficient.

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028849 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART HELMET INBUILT WIRELESS COMMUNICATION KIT AND SYSTEM

(51) International classification	:A42B0003040000, H04R0001100000, A42B0003300000, H04M0001600000, A42B0003060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)DR. ARUL KIRUBAKARAN

(57) Abstract :
A helmet body having integrated and detachable wireless communication kit is operable to serve as a smart helmet to provide user friendly convenient functions. This smart helmet includes a hard outer body, photovoltaic power production unit, wireless earpiece and wireless microphone. The inner body of the helmet accommodates the wireless microphone and wireless earpiece to provide effective wireless communication to the wearer. There may be a physical connection between earpieces, microphone with the base unit in order to achieve effective power distribution from photovoltaic power production unit. A protective inner layer is also included to absorb shocks between the helmet inner body and wearer also to shield against radio frequency signals.

No. of Pages : 15 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202141028851 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MACHINE LEARNING BASED AN INTELLIGENT SMART WATCH FOR VIRUS DETECTION

(51) International classification	:C12Q0001700000, C12N0007000000, G01N0033569000, A61K0039120000, C07K0014005000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)Dr.N.Mahendran
7)Dr.R.Naresh

(57) Abstract :
ABSTRACT A MACHINE LEARNING BASED AN INTELLIGENT SMART WATCH FOR VIRUS DETECTION Detection of viral particles is crucial in practise, as viral infections remain one of the world's most pressing issues. For viral identification in the environment, a variety of analytical approaches are currently available. The ability to detect many target molecules in a tiny sample volume has direct implications in the early diagnosis of illnesses like viruses. The ability to identify the virus with high specificity and sensitivity is critical for correct diagnosis. Diagnosis is still based on time-consuming and costly study. Wearable sensors that can continuously scan the environment for viruses are being developed. This invention suggested a smart watch that could detect viruses in the surroundings. A smart watch is used to track the propagation of a virus in real time. This invention uses piezoelectric, magnetostrictive materials and Buzzer for detecting viruses. Human papillomavirus, vaccinia virus, dengue virus, Ebola virus, influenza A, human immunodeficiency virus, and hepatitis B virus detection using piezoelectric sensors. Detection of bacterial spores, proteins, and classical swine fever using magnetostrictive sensors. It can be used to identify viruses using biosensor materials. These materials have a lot of potential for detecting numerous infectious viruses. These sensors are connected to a smart watch that collects data samples from the surrounding environment. Furthermore, collected data is analysed using a machine learning system, and a buzzer alerts the wearer to the presence of a virus in their environment

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202141028853 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTEGRATED POWER MODULE

(51) International classification	:G11B0005596000, H04L0029080000, E21B0041000000, H02M0003158000, A63B0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Srinivas Kudligi

(57) Abstract :
INTEGRATED POWER MODULE. The module (100) comprises a base layer (102), an insulation layer (106) formed over the base layer (102) and a circuit layer (104) interfacing with the insulation layer (106). Further, the circuit layer (106) comprises a high side track (302), a low side track (304), a plurality of nodes (306) and a plurality of gate driver tracks (308). The plurality of nodes (306) are disposed between the high side track (302) and the low side track (304) and the plurality of gate driver tracks (308) are disposed between the high side track (302) and the nodes (306), and the low side track (304) and the nodes (306). A surface mounted device (502) is connected to the circuit layer (104) via the high side track (302) or the low side track (304, a node (306) and one of the gate driver tracks (308). Reference Figure: FIG. 5A

No. of Pages : 24 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028854 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : BIOMETRIC AUTHENTICATION USING PALM DORSAL VEIN PATTERNS

(51) International classification	:G06K0009000000, G06F0021320000, G06K0009320000, A61B0005117000, A61K0031690000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)M/s. S. SANGAVI
4)M/s. R. SRIMATHI

(57) Abstract :
Biometric authentication has proved to be the most efficient methodology for verification of individuals through biological and behavioral characteristics of the vein patterns as they are stable across the years. The existing methodologies have the drawback as they contain only certain individual features which may causes false prediction or rejection of users as people having some problems such as phlebitis, diabetes. The proposed methodology overcomes this difficulty by introducing predominant features that are independent of the mentioned disorders with the help of base knuckles and the pruned vein pattern of the dorsal palm. The features are extracted such that through the morphological operations all the peculiar region of the palm is covered, through which the authentication is more efficient than the previous works.

No. of Pages : 22 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202141028861 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR CONTROLLING MICROBIAL GROWTH

(51) International classification	:C02F0001680000, C12Q0001040000, C02F0001500000, F24F0006000000, C02F0101000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Dr.T.Govindan
3)Dr.S.Anandhan
4)Mr.R.Muralikrishna

(57) Abstract :
The present invention provides a system and method (10) for controlling the microbial growth in drinking water. The system comprises the fluid medium and metal vessel. The tap and pond water was collected, and stored in different vessels like silver, aluminum, copper, stainless steel, bronze and brass vessel, for identifying the bacteria level. The before and after the storage of water level is measured. This invention will help to use the proper vessel for storing the drinking water in an effective manner. Most illustrative Fig 1

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028866 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ECCENTRIC ROTOR SWITCHED RELUCTANCE MOTOR

(51) International classification	:H02K0041060000, B60T0001060000, H02K0007116000, H02K0007000000, F16H0045020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Srinivas Kudligi

(57) Abstract :
ECCENTRIC ROTOR SWITCHED RELUCTANCE MOTOR. The system comprises a first stator assembly (102) defining a first circular empty space (406) which receives a first rotor member (104a) eccentrically. The first stator assembly (102) is electrically actuated to cause the rotor member (104a) to roll along a periphery of the circular empty space (406). Pins (110a-110f) are engaged to one of a first driven member (106a) or the first rotor member (104a), while holes (302) are defined in the other of the first driven member (106a) or the first rotor member (104a). Each of the holes (302) receives one of the pins (110a-110f). The first driven member (106a) rotates due to nudging of the first driven member (106a) caused by interface established between the holes (302) and the pins (110a-110f) due to the rolling movement of the first rotor member (104a). Reference figure: FIG. 1A

No. of Pages : 60 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028876 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR DETERMINING RELATIVE ANGLE AND DIRECTION OF ROTATION

(51) International classification	:H01L0031020000, F21V0023040000, G05B0023020000, C23C0014340000, G09B0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
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(57) Abstract :
System for determining relative angle and direction of rotation. System (100) comprises an input member (106), an output member (108), an input target member (110), an output target member (112) and a sensor (114). The input member (106) rotates relative to the output member (108). The input target member (110) and the output target member (112) are engaged to the input member (106) and the output member (108), respectively. A first projected portion (502a) of the input target member (110) and a second projected portion (502b) of the output target member (112) projects over the sensor (114) to define a coverage area (506), which increases when the input member (106) relatively rotates in a first direction (404a)and decreases when rotated in a second direction (404b). Change in the coverage area (506) enables determination of the angle and the direction of rotation of the input member (106). Reference figure: FIG. 1C

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028923 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED INFORMATION SYSTEM STATUS USING MACHINE LEARNING ALGORITHM FOR HEALTHCARE

(51) International classification	:G06K0009620000, A61B0005000000, G16H0050300000, G06N0020000000, G16H0050200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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Filing Date	:NA

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(57) Abstract :
Internet of Things and Machine Learning (ML) have wide appropriateness in numerous parts of life, medical care is one of them. With the quick turn of events and improvement of the web, the customary techniques for patient administrations reduced and superseded with electronic medical care frameworks. The utilization of IoT innovation offers clinical experts and patients the most present-day clinical gadget climate. IoT things and Machine-Learning are significant in different orders from distant seeing of the advanced environment to mechanical automation. Worldwide healthcare and human health activities distant monitoring greatly necessitate sensor technology, IoT, wireless communication, and wearable computing for their effective operation. Patient™s psychological and health conditions are continuously monitored by such systems via identifying as well as transmitting measurements like blood pressure, chest sounds, heart rate, respiratory rate, body temperature, electrocardiogram Context-aware data fusion was greatly utilized due to its massive benefits, but the prevailing approaches yield very lesser accuracy. Effective feature extraction and classification technique are suggested for handling data acquisition besides data fusion for data treatment improvement. In an initial stage, IoT device gathering is done which is pre-processed for fusion processing. Dynamic Bayesian Network is an improved balance for tractability which is a tool for CDF operations. Improved Principal Component Analysis is deployed for feature extraction along with dimension reduction. Lastly, this data learning is attained through Hybrid Learning Classifier Model for data fusion performance examination. In this research, Deep Belief Neural Network, as well as Support Vector Machine, are hybridized for healthcare data prediction. Thus, the suggested system is probably a beneficial decision support tool for multiple data source prediction and its predictive ability enhancement.

No. of Pages : 5 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028929 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SAFETY ELEMENT FOR IN TO OUT AIR CLEANER

(51) International classification	:B29C0045140000, B01D0046100000, F24F0003160000, F02M0035020000, B01D0046240000	(71)**Name of Applicant :** **1)MANN+HUMMEL GmbH** Address of Applicant :Schwieberdinger Str. 126, 71636 Ludwigsburg, Germany Germany (72)**Name of Inventor :** **1)Anand Ramamurthy** **2)Anil Kumar Henchinamane Channabasappa**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The disclosure relates to a safety element which acts as secondary filter element for air cleaner in which the air flows from inlet to outlet. In this proposed invention, the safety element is fitted with an outlet of air cleaner for cleaning the air. The safety element can also be placed at an opening position of the outlet in which the filter medium completely covers the opening position of the outlet. The safety element can also be made along with the outlet by means of insert molding process. FIGURE 1A

No. of Pages : 20 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028979 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMPLEMENTATION OF WEB OF THINGS BASED SMART GRID TO REMOTELY MONITOR AND CONTROL RENEWABLE ENERGY SOURCE

(51) International classification	:G01R0019250000, H02J0013000000, H02J0007350000, F24S0030000000, G06Q0050100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
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3)Shashi Kumar HK
4)Vidya
5)Shivaraya SK

(57) Abstract :
In Solar Photovoltaic Plants, the traditional method of managing plenty of solar panels is very challenging and inefficient. Since each panel set needs a digital power meter, which is very expensive to use for collecting the data from the panel. To cope with this problem, a standalone monitoring system of solar panels had been proposed, which consists of DC Power Monitoring Node (DPMN), Panel Parameter Monitoring Nodes (PPMN) and an embedded web server. Instead of monitoring PV plants from the installed place which is very complex and time consuming in nature, this proposed system will help users to remotely monitor and access the real-time data via internet. All the parameters from each panel will be sent to the smart analysis database system which was developed and embedded into the web server. Clients can access this web server for analyzing the performance of the solar plant by using any web browser with specified IP address from anywhere in the world. If the status of the solar panel becomes abnormal, the administrator will receive a message immediately, and necessary steps can be taken. Hence, this system will help the industry in a productive manner.

No. of Pages : 12 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028980 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONSTRUCTION OF HUGE UNDERGROUND TANK FOR USE AS FLUID-STORAGE-TANK OR AS BIOGAS-PLANT.

(51) International classification	:C12M0001107000, B65D0088760000, F17C0003000000, E03B0003030000, B65D0090300000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
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1)VOORADI RAJESHWARA PRASAD

(57) Abstract :
The innovative means and methods for construction of said huge underground tank named as Construction of huge underground tank for use as fluid-storage-tank or as biogas-plant • relates to Physical Sciences. The means and methods for construction of said huge underground tank are as follows. 1) A ˜huge open well™ having trapezoidal cross section is excavated underground to have upward slope not more than natural self supporting slope of all soils. 2) The excavated open well™s bottom face and side walls are ˜water proofed™ using water proofing chemicals, or water proofing chemicals along with cement • . 3) One or more water proofing coverings or layers • are provided along bottom side, and inner periphery of side walls of the open well • for making the open well as an air tight and leak proof container having top side open. 4) In embodiments consisting ˜said open well provided with flexible covering sheets™ a layer of cement concrete, or Shahabad stone flooring, or other covering made of wearing resistant hard material • is provided on top of said flexible sheet covering up to height not less than 0.30 meters height above base (of open well) along its inner periphery. 5) In embodiments using the underground tank as an air tight and leak proof tank, said open-well™s top side opening is covered with a leak proof roof covering. Said roof covering is provided with an air outlet at its elevated top end to allow outward flow of vapour of fluids or gases formed in the tank to avoid development of excess pressure in it. 6) Said huge underground tank is attached through inlet pipe conduits to ˜pump-set used for pumping fluid into it™ or to outlet of an inlet tank (for biogas tanks)˜. Said huge underground tank is attached through outlet pipe conduits to outlet of a pump-set used for pumping fluid out of it (for fluid storage tanks), or to inlet of an effluent tank (for biogas tanks). 7) The land (or ground) surrounding the huge tank is filled with earth to make it as elevated than the surroundings, to avoid flow of runoff water of rain towards said huge underground tank. 8) For preventing percolation of water towards the said huge tank a trench is excavated in the form of a circular ring around the biogas plant • . Said trench is attached at its lower level to another trench provided for leading water to ˜a low level drain™.

No. of Pages : 27 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028981 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A STUDY ON HUMAN RESOURCE DEVELOPMENT PRACTICES IN INFORMATION TECHNOLOGY INDUSTRY IN INDIA(WITH SPECIAL REFERENCE TO SELECT IT COMPANIES IN HYDERABAD)

(51) International classification	:G06Q0010100000, G06Q0010060000, G06Q0099000000, G06Q0010040000, G06Q0030020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Dr. Swaroopa Dubisetty
(72)**Name of Inventor :**
1)Dr.T.Chandra Sekhar Yadhav
2)Dr. Swaroopa Dubisetty

(57) Abstract :
Human resource management is related to the principles of management that are applied to bring about organizational success. Its functions include recruitment, appraisal, rewards and compensation, employee welfare etc. Human resource development, far from having dissimilar functions, works for accomplishing the very HR objective of improving the overall performance of the organization. HRM and HRD are two sides of the same coin working for the realization of the same goal. While HRM deals with the broader management spectrum, HRD constitute its most dynamic and powerful subsystems devoted to enhance and strengthen employee capabilities that are essential for the success of any organization. As an integral part of human capital management, HRD tackles multiple functions. It is an extensive system of skill development. From hiring to deployment, it plans and executes different strategies and programs for the augmentation of human skills and capabilities. This department is entrusted with the unenviable task of selection of suitable staff, refresh their job skills, train and motivate them to give their best to the organization. To make development relevant and applicable to the diverse needs of the organization, HRD includes such processes as career development, updation of knowledge, exploration and development potentialities, work culture, creation of opportunities, employee satisfaction and commitment, change management etc.

No. of Pages : 10 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028985 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMMUNE AND PHYSICAL FITNESS PREDICTION USING MACHINE LEARNING PROGRAMMING.

(51) International classification	:G06N0003000000, G06K0009620000, G16B0005000000, G16H0050200000, G06N0020000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Dr. RUDRA PRATAP DAS (Professor)
(72)**Name of Inventor :**
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2)Dr. BABJI PRASAD CHAPA (Associate Professor)
3)Dr. RUDRA PRATAP DAS (Professor)

(57) Abstract :
ABSTRACT [658] Our Invention Boost Immune System: Immune and Physical Fitness Prediction using Machine Learning Programming is an Early carcinoma designation is crucial, because it will forestall additional complications and save the lifetime of the patient by treating the sickness at its most curable stage. The During this invention we have a tendency to propose a replacement artificial system model for associative classification with competitive performance for carcinoma detection. [660] The planned model has its foundations within the biological system. It mimics the detection skills of the immune system to supply correct identification of antigens. The Wilcoxon check was wont to establish the statistically vital variations between our proposal and alternative classification algorithms supported identical bio-inspired model. [662] The invention is also used a math tests proved the improved performance shown by the planned model by outperforming alternative immune-based algorithms. The planned model tested to be competitive with relation to alternative well-known classification models. The model edges from an occasional procedure value. [664] The success of this model for classification tasks shows that swarm intelligence is helpful for this type of downside, which it's not restricted to improvement tasks.

No. of Pages : 18 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028986 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AUTOMATED CLASSIFIER FOR ANALYZING NEUROLOGICAL DISORDERS.

(51) International classification	:A61B0005000000, H04N0019503000, A61B0005160000, H04N0019170000, G06T0007000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT Our Invention an automated classifier for analyzing neurological disorders is a state-of-the-art review of research on automated diagnosis of 5 neurological disorders in the past 2 decades using AI techniques and the epilepsy, Parkinson™s disease, Alzheimer™s disease, multiple sclerosis, and ischemic brain stroke using physiological signals and images. The invention is a different feature extraction method, dimensionality reduction techniques, feature selection, and classification techniques are reviewed. The systems using AI and advanced signal processing techniques can assist clinicians in analyzing and interpreting physiological signals and images more effectively. A method and system for predicting neurological disorders is provided. The method comprises receiving videos of individuals and detecting Regions of Interest (ROI) in video frames. The method further comprises determining a Motion Vector (MV) for each ROI in a set of successive frames and comparing value of the determined MV with pre-stored values. Furthermore, the method comprises identifying a MV matching a pre-stored value thereby identifying a ROI and a frame corresponding to the identified MV, wherein the pre-stored value indicates onset of an expression and also the method comprises determining MVs for the identified ROI in subsequent sets of successive frames and comparing value of the determined MVs with a pre-stored value of MV corresponding to peak and offset of the indicated expression. The method further comprises identifying the frame corresponding to the peak and offset of the indicated expression and generating pictorial representation for predicting neurological disorders.

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028988 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ARTIFICIAL INTELLIGENCE RULE BASED VISUAL CRYPTO-STEGANOGRAPHY METHOD FOR SECURE DATA COMMUNICATION IN IOT SYSTEM USING BLOCKCHAIN TECHNOLOGY

(51) International classification	:H04L0009080000, G06F0021620000, H04L0029060000, H04L0009060000, H04L0009320000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Dr. C. NANDINI

(57) Abstract :
ABSTRACT ARTIFICIAL INTELLIGENCE RULE BASED VISUAL CRYPTO- STEGANOGRAPHY METHOD FOR SECURE DATA COMMUNICATION IN IOT SYSTEM USING BLOCKCHAIN TECHNOLOGY A method for encrypting data for transmission over a communication channel. The method includes generating, by a generation engine, a cover image by equating the one or more 2D images associated with a user and a 3D image. Further, the 3D image is based on the one or more 2D images. The method includes embedding, by a multimodal steganography engine, a plurality of biometric features extracted from the one or more 2D images with a masked image resulting in generation of a stego-image. The masked image is generated upon masking the data with the cover image. The method includes creating, by an image visual cryptography engine, one or more shares from a plurality of sub-bands associated with the stego-image using random visual cryptography. The method includes encrypting, by an encryption engine, the one or more shares through a public key and storing in a blockchain placed in a cloud space. Figure 3

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141028989 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ADJUSTABLE FOLDABLE LADDER

(51) International classification	:E06C0007080000, E06C0007500000, E06C0001120000, E06C0007420000, E06C0007120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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5)OMKAR ARANVEKAR

(57) Abstract :
The present invention herein belongs to a mechanical apparatus, particularly, relates to an adjustable foldable ladder, more particularly height adjustable ladder which provisioned with foldable capacity configured to stick to the wall or surface to prevent misalignment, effectively, comprising a pair of telescopic legs, said telescopic legs [101] configured as detachable and provide support to the ladder, a pair of bipods [102], a pair of vacuum suction cups, said vacuum suction cups [103] attached detachably to prevent the misalignment of said ladder, a plurality of horizontal pins [109], and a plurality of vertical pins [110], wherein the horizontal and vertical pins used to dismantle and assemble the plurality of parts or sections of ladder. Said ladder is made automatically foldable with the help of a servo motor mechanism. Said ladder is resizable, easy to assemble and dismantle, compact, and easy to carry. FIGURE 1

No. of Pages : 30 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/06/2021
(21) Application No.202141029006 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART SYSTEM FOR DRIVER™S PERFORMANCE EVALUATION USING MACHINE LEARNING

(51) International classification	:B60W0040090000, G06N0020000000, G07C0005000000, C12Q0001684800, G06Q0010060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)Sandeep Srivastava
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8)Mohammed Fahad
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10)Dr. T.C.Manjunath

(57) Abstract :
The present invention relates to smart system for driver™s performance evaluation using machine learning. The objective of the present invention is to solve the problems in the prior art technologies related to monitor the driving skills and performance of the driver using automatic technologies.

No. of Pages : 30 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029013 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : E- JET ENGINE WITH VARIABLE HEATING TECHNOLOGY

(51) International classification	:B64C0039020000, H02J0007350000, B41J0002060000, A61K0049000000, B64C0039060000	(71)**Name of Applicant :** **1)Jaganadan.H** Address of Applicant :II Year EEE Department of Electrical and Electronics Engineering Sri Krishna College of Engineering and Technology Coimbatore 641008 Tamil Nadu India
(31) Priority Document No	:NA	**2)Haynes Immuanel. S**
(32) Priority Date	:NA	**3)Gayatri R Chandran**
(33) Name of priority country	:NA	**4)Ajay S**
(86) International Application No	:NA	**5)Bharathwaraji RS**
Filing Date	:NA	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Jaganadan.H**
(61) Patent of Addition to Application Number	:NA	**2)Haynes Immuanel. S**
Filing Date	:NA	**3)Gayatri R Chandran**
		4)Ajay S
(62) Divisional to Application Number	:NA	**5)Bharathwaraji RS**
Filing Date	:NA	

(57) Abstract :
The abstract is to create a Fully electrical Engine for future air travel without polluting the Environment. It also improves the abilities of armed force by varying the heat produced as per the ground situation which makes the flights & UAV undetectable from thermal cameras. By implementing this the Recharging ability in air by solar power is achieved which improves the flight time in air. Also the Noise produced is minimum and vibrations are low which improves the flight experience. By Replacing the existing technology by E-Jet engine the Wight of the total Vehicle is reduced and it improves the cargo ability of and performance of the vehicle. It also crates the future technology like Flying hover board and many other technology compact and efficient with minimal use of Electrical energy.

No. of Pages : 4 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029016 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD OF EXTRACTING HYDROCHAR FROM BIODEGRADABLE SOLID WASTE BY HYDROTHERMAL CARBONIZATION USING LASER BEAM

(51) International classification	:C10L0009080000, C10L0005460000, B09B0003000000, C02F0011100000, C10L0005440000	(71)**Name of Applicant :** **1)SUBASH P.K** Address of Applicant :No.6/77, Balaraman Street, Nanmangalam, Chennai, Tamilnadu, India 600129. Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)SUBASH P.K**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention provides method of extracting hydrochar from biodegradable solid waste by hydrothermal carbonization comprising the steps of: (1) semi auto-segregating the municipal solid waste from plastic and other metal waste materials; mixing the shredded biowaste (2) with water to form aqueous solution (3); pumping the formed aqueous solution into the hydrothermal carbonization (HTC) vertical reactor (4) through inlets 4(5) to carry out hydrothermal carbonization process, wherein, laser beam (4) (1) is channelized and passed into the reactor to provide constant heart source supply throughout the aqueous solution of waste and maintaining the reaction condition of mixture for about 2-5 hours with constant temperature of 190°C - 220°C and constant Pressure of 5 - 15 Bar and obtaining the final product activated carbonaceous substance hydrochar (8) after passing the obtained semi solid carbonized municipal solid waste into the cooling tower (5) for quenching the semi solid carbonized municipal solid waste materials.

No. of Pages : 24 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029017 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR AUTOMATIC RETRACTION AND RETRIEVAL OF TWO WHEELERS SIDE STAND

(51) International classification	:B62H0001020000, B60N0002000000, B62J0027000000, G01G0019520000, A47C0004280000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)PRADEEPA BARKAVE K
3)RAVISHANKAR T K
4)SWARNA LATHA G
5)SNEHA HARIHARAN

(57) Abstract :
The invention relates to automatic retention and retrieval for two-wheeler side stand. The system comprises of load sensor, proximity sensor, and ignition switch, servomotor, integrated with the microcontroller unit. The present invention also ensures the retraction and retrieval of the side stand only if the occupant sits on the seat of the vehicle, thereby activating the load sensor. Thereafter, the signal from the microcontroller actuates the servomotor, which in turn provides tension in the helical spring and allows rotating in clockwise direction for retraction and counterclockwise direction for retrieval. The present invention ensures safety by providing automatic retraction and retrieval of side stand thereby it avoids accidents due to non-retraction of two wheeler side stand. Fig 1.

No. of Pages : 15 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/06/2021
(21) Application No.202141029024 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DRIVE AND FLY ELECTRIC CARGO VEHICLE

(51) International classification	:B60F0005020000, B64C0039020000, B64C0037000000, B64C0027080000, G05D0001000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT An drive and fly electric cargo vehicle comprises a brushless motor 2 with propeller 1 in centre of the wheel to flies like a quad copter and outer rotor motor coupled with tire to drive on ground. The vehicle has four modes such as drive, take-off, fly and landing mode. The wheel comprises two servo motors 4 connected on both ends of the spokes 3 to turn the brushless motor 2 with propeller from drive to take-off mode and landing to drive mode. The vehicle further comprises rotary servo motors 15 to turn the wheel left or right direction in drive mode and a linear servo motors 16 to turn whole wheel from take-off to fly mode and vice versa. The vehicle comprises cargo bay in centre of the vehicle. The present invention relates to an electric flying cargo vehicle that is configured to autonomously deliver goods to various destinations by complete drive or fly mode or partial drive or fly mode.

No. of Pages : 20 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029025 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL SOFT SBOC & LDPC BASED LLR DECODING ALGORITHM

(51) International classification	:H03M0013110000, H04N0019960000, H04L0005140000, G06F0011340000, H04L0027060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)T.V.S Ram

(57) Abstract :
A novel log likelihood ratiobased interface algorithm for efficient implementation between synthesized binary offset carrier demodulator and low-density parity-check decoder in order to achieve maximum coding gain. The look-up table based log likelihood ratio decoding algorithm is proposed for minimizing the hardware requirement with achieving the maximum coding gain. The proposed approach is much simplified compare to other existing approaches and does not provide any degradation in the performance of demodulator. Figure 3

No. of Pages : 18 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029037 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMPOSITION FOR WATER BASED DRILLING MUD

(51) International classification	:C09K0008508000, C09K0008040000, C09K0008240000, C09K0008120000, C09K0008030000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT Composition for water based drilling mud comprises base fluid, base mud, filtrate reducer, viscosifier, pH controlling agent, weighing agents, inorganic salts and additives. The present invention is to develop a synergistic blend of lufa sponge from Cucurbitaceae family preferably ridge gourd with the water based mud comprising a base liquid, a base clay, a weighing agent, a polymer additive and an inorganic salts. The said water-based drilling mud is stable at extreme temperature and pressure and the said mud has improved rheology and filtration properties.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029058 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTERNET OF THINGS SECURITY TACTICS CENTRED ON LEARNING NETWORK INTRUSION DETECTION

(51) International classification	:H04L0029060000, H04L0029080000, G06N0020000000, G06Q0030020000, G06F0021550000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :

Abstract People all across the world are starting to notice IoT-enabled expansion. Security on the Internet of Things is becoming critical (IoT). Any Internet-connected gadgets are now at risk when their security is compromised. However, it may allow these devices to be enlisted as part of a botnet. Mirai appears to be the malware used in the video surveillance system penetration. Distributed denial of service attacks has rendered the Internet unusable. Attack vectors and their complexity have increased over time. An increasing volume of IoT data is generated, which necessitates a more significant focus on IoT techniques. A survey classifies existing security measures by examining their strengths and weaknesses. The research explores network-based intrusion detection methods, technologies, datasets, and open-source sniffing software. Then, it gathers information, analyzes, and compares the best NIDS approaches in the IoT environment. The inspection covers both classic and machine learning (ML) NIDS techniques. This indicates where future improvements may lead. IoT Network Intrusion Detection Systems (including Machine Learning methods) were focused. While other polls review only traditional systems, this research covers all NIDS. Unlike other surveys, this study has multiple aspects of Internet learning methodology included. First and foremost, we rely on that the study would benefit academia and industry. This study aims to illustrate the hazards and obstacles IoT creates and provide a personal NIDS to address these issues. In addition, the findings would help network security professionals to separate NIDSs from standard ones.

No. of Pages : 12 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029061 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : WINDMILL AIR CONDITIONING SYSTEM

(51) International classification	:F03D0003060000, B60H0001320000, F03D0009250000, F03D0015100000, F25B0001000000	(71)**Name of Applicant :** **1)ACADEMY OF MARITIME EDUCATION AND TRAINING (AMET) DEEMED TO BE UNIVERSITY** Address of Applicant :135, Kanathur, East coast road, Chennai Tamil Nadu India
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(32) Priority Date	:NA	**1)R Karthikeyan**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT Windmill air conditioning system of the present invention comprises vertical axis windmill, compressor 8, condenser 10, accumulator 9 and evaporator 11. The windmill of the system exposed to the open air starts rotating and the connected gear box 2 delivers power to turn the compressor shaft. The said vertical axis windmill is capable of generating 5kW, when installed in the roof-top 15. Further the present invention reduces 80% of greenhouse emission caused by air conditioner system 3 and specifically intermittent operation of this windmill won™t affect the air conditioning process.

No. of Pages : 22 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029084 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AIR CONDITIONING SYSTEM USING VEHICLE VIBRATION

(51) International classification	:F04B0027080000, B60H0001320000, F04B0039000000, F25B0030020000, F25B0041060000	(71)**Name of Applicant :** **1)ACADEMY OF MARITIME EDUCATION AND TRAINING (AMET) DEEMED TO BE UNIVERSITY** Address of Applicant :135, Kanathur, East coast road, Chennai Tamil Nadu India
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT Air conditioning system using vehicle vibration contains that vibro compressors 10, accumulator 11, condenser 12, expansion valve 13 and evaporator 14. The said compressor is a piston type compressor, connected in between axle and the frame of the vehicle. The present invention further comprises vibro-compressor and engine driven compressor. The said vibro-compressor 2 is effective only when vehicle is in motion, whereas the regular engine driven compressor 3 is employed when vehicle is at rest. The present invention facilitates in saving 10-15% of fue consumption and reduces 10-15% of emission.

No. of Pages : 16 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029138 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : UTILISATION OF ROBOTS IN CONSTRUCTION INDUSTRY DURING COVID-19

(51) International classification	:G06Q0010060000, E01D0021000000, B25J0009160000, B62D0065020000, A61K0031365000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)S.KARTHIKA DEVI
5)Dr.M.Kaarthik
6)M.J.KAVVYASRI
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3)P.VARSHINI
4)M.J.KAVVYASRI

(57) Abstract :
Our research is about the utilisation of robots in the construction industry during Covid-19. During this pandemic, we people get our work struck, not only in the construction industry, but also in all aspects of our life. This paper is to specify how robots work these days instead of a human working on-site. In order to bring a solution to these kinds of problems in the construction industry, COLLABORATIVE ROBOTS(COBOTS) can be initiated for the process of an underwater bridge construction. But you might wonder! We have all heard about a robot doing only a specified task allotted by the members. COBOTS are different form of robots which directly interact with a human and respond in real-time movement of the worker. Once the challenges in the construction industries are identified, then different solutions can be nourished. Such a kind of challenge is to build a bridge under the sea, not by a human, but with a collaborative robot

No. of Pages : 10 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029205 A
(19) INDIA
(22) Date of filing of Application :29/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A DIGITAL ASSISTANT SYSTEM FOR RENDERING A SERVICE AND A METHOD TO OPERATE THE SAME

(51) International classification	:G06Q0010060000, H04L0029080000, G06Q0050060000, G06F0001329000, B66B0001340000	(71)**Name of Applicant :** **1)ANANDA PADMANABAN SRINIVAS** Address of Applicant :PLOT NO. 4, 5TH STREET, SRI LAKSHMI NAGAR, VALASARAVAKKAM, CHENNAI, 600087, TAMIL NADU, INDIA Tamil Nadu India
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(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A digital assistant system (100) is disclosed. A service request receiving module (110) receives a plurality of service requests from a client, elicits requirement information associated with the plurality of service requests from the client. A service request analysis module (120) determines a goal for accomplishment of each of the plurality of service requests by establishing a connection with a central research hub, formulates one or more optimal strategies for achieving the goal determined corresponding to each of the plurality of service requests by utilizing a research output obtained from the central research hub. A strategy recommendation module (130) recommends the one or more optimal strategies formulated to the client, receives an opinion corresponding to the one or more optimal strategies, provides one or more alternative strategies to the client for finalization of a strategy. A strategy execution module (140) executes the strategy finalized corresponding to each of the plurality of service requests for rendering the service. FIG. 1

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029289 A
(19) INDIA
(22) Date of filing of Application :30/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MODIFIED LIQUID LIMIT TESTING APPARATUS FOR RAPID MEASUREMENT OF LIQUID LIMIT IN SOIL

(51) International classification	:C09K0019040000, G01N0021640000, B42D0025230000, A61B0003000000, C08L0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A novel liquid limit testing apparatus design, Multiple soils testing can be done at the same time

No. of Pages : 3 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029299 A
(19) INDIA
(22) Date of filing of Application :30/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF RECYCLED PLASTICS BASED COMPOSITE ROOF TILES WITH USED FACE MASK, PHASE CHANGE MATERICAL AND BOVINE WASTE

(51) International classification	:G06F0016350000, B29K0705000000, B09B0003000000, E04B0001800000, G06F0009480000	(71)**Name of Applicant :** **1)VIT-AP UNIVERSITY** Address of Applicant :VIT-AP UNIVERSITY, Beside AP Secretariat, Near Vijayawada, Andhra Pradesh, India 522237. Andhra Pradesh India
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(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Over the past two decades, environmentalists are keen on the techniques for management of solid waste, generated mostly by humongous usage of plastics in the industries/households. Plastic pollution has taken a serious toll on the existence of mankind; clogged coasts with the various forms of plastics are the paradigm for how threatening the situation is going to be in future years. According to a report by Global Industry Analysts, plastic consumption is all set to reach around 297.5 million tons by the end of 2030. India, being a nation with diversified population is striving to reduce the plastic pollution which is at 11 kg in per capita consumption of plastic products. The proposed composite tiles can serve as an effective heat barrier thereby reducing the energy cost particularly the cost of running air conditioner which would result in a net saving of energy and thereby using the same in other beneficial applications. The implementation of the phase change material in composite roof tile is novel approach in this proposed work in terms of its implementation i.e., by encapsulating the phase change materials like paraffin wax or lac etc., in between the tiles produced by recycling plastics to reduce the indoor warmth and also using the Micro balloons as an exterior coating over the tiles to increase the reflectivity which helps in reducing the temperatures.

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029303 A
(19) INDIA
(22) Date of filing of Application :30/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SANISHIELD (AUTOMATIC SANITIZER DISPENSER WITH BATTERY BACKUP)

(51) International classification	:G06F0011140000, G07F0015000000, A47L0015440000, G01F0011000000, G07F0013100000	(71)**Name of Applicant :** **1)VIT-AP UNIVERSITY** Address of Applicant :VIT-AP UNIVERSITY, Beside AP Secretariat, Near Vijayawada, Andhra Pradesh, India 522237. Andhra Pradesh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
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(33) Name of priority country	:NA	**2)Dr.Gurumurthy Komanapalli**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The proposed machine is very portable and can mount on any terrain with two screws. It is compatible with outdoor use also. It is also provided with battery backup, using lithium-ion batteries(18650) and accompanied by BMS (Battery Management System) for controlling the charging procedure. By using this, the equipment can work independently for up to one month (-8000 triggers), and the solenoid valve-based switching mechanism provides an accurate and precise dispensing quantity of the sanitizer. Another salient feature of the proposed design is according to our need, we can reset the operation time (aka dispensing quantity of sanitizer) without opening the machine using the proximity delay configuration feature. This product can work without the interference of sunlight (photo interference), hence it can be mounted on locations where sunlight falls directly. The product comes with a 1.8 1 ABS body with an unbreakable polycarbonate tank; thus, we can use all sorts of sanitizer liquid available in the market. Integrated MGU developed especially for the machine makes the functionality very efficient. Above all, it is very user-friendly. The user needs to put his hand beneath the device, and no contact with any part of the machine is required. The user will get a sufficient quantity of the sanitizer set by the institution where the device is installed. The use Integrated IR-TSOP mechanism makes the product unique. As the product uses a flammable liquid (sanitizer), all the safety precautions are taken to avoid short-circuits in the control unit. Another attractive feature of the proposed design is if any internal leakage of sanitizer occurs because of mishandling or damages incurred by the user, the device will shut down on its own until the leakage is rectified. The machine comes with a buzzer, and it will be turned on once the liquid sanitizer is completed, and it will buzz continuously until it is refilled. With a sensing distance of up to 10 cm, this machine is a perfect sanitizing dispenser for communal safety. With the above attributes, it is suitable for the use in -households, -hotels, -hospitals, -other public places.

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/06/2021
(21) Application No.202141029314 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VLC TRANSCEIVERS FOR SMART MUSEUMS

(51) International classification	:H04B0010116000, H04B0010114000, H02J0050000000, G01S0005160000, G06F0003030000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The system comprises plurality of light sources for illuminating the plurality of artefacts and obtaining the information regarding the said artefacts arranged in the museum; transmitter for sending the data concerning the artefact as a VLC signal by identifying the unique and specific identification number (IDN) for each of the artifact arranged in the smart museum by the DIP switch and the SIL resistor network, processing of the said IDN for executing a serial communication to the receiver by the micro controller circuitry, converting the said 8 digit binary value into signal voltage by the processing circuitry, converting the said signal voltage to signal current by the trans-conductance amplifier (TCA) prior to the transmission, converting the said signal current to visible light impulses by the LED for the transmission as Visible Light Communication (VLC) and finally transmitting the said light impulses comprising the data and information concerning the information of the unique artifacts.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029353 A
(19) INDIA
(22) Date of filing of Application :30/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART FABRIC CHILD RESCUE SYSTEM FROM SEXUAL VIOLENCE

(51) International classification	:G08B0021020000, A41D0001000000, G08B0025010000, G08C0017020000, A41D0001060000	(71)**Name of Applicant :** **1) Mrs. S. MYTHILI** Address of Applicant :DEPARTMENT OF ECE, BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM, TAMIL NADU, INDIA - 638 401. Tamil Nadu India
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(32) Priority Date	:NA	**3)Dr. M. KALAMANI**
(33) Name of priority country	:NA	**4)Dr. M. KRISHNAMOORTHI**
(86) International Application No	:NA	**5)Ms. S. POUSIA**
Filing Date	:NA	**6)Ms. C.R. DHIVYAA**
(87) International Publication No	: NA	(72)**Name of Inventor :**
(61) Patent of Addition to Application Number	:NA	**1) Mrs. S. MYTHILI**
Filing Date	:NA	**2)Ms. K. NITHYA**
		3)Dr. M. KALAMANI
(62) Divisional to Application Number	:NA	**4)Dr. M. KRISHNAMOORTHI**
Filing Date	:NA	**5)Ms. S. POUSIA**
		6)Ms. C.R. DHIVYAA

(57) Abstract :
Today, the child abuse is the major challenging and sensitive problem encountered throughout the globe. The primary objective of this invention is to develop the user friendly, comfort, highly secure, protective and smart fabric with wireless child rescue module for preventing the child abuse and sexual violence. Smart Fabric Child Rescue System from Sexual Violence comprising: a wearable fabric for a child; a group of sensors are placed in said fabric in front of sensitive parts of the body; a hidden pocket is provided in said fabric above the backside sensors of the body; and a microcontroller and Buzzer are placed inside the said hidden pocket. The wearable fabric made up of Kadha provides comfortable feel for wearing. The sensors are Flexiforce sensors placed in fabric at five most sensitive parts of the body which is used to measure the intentional touch on a child. The hidden pocket is designed such that it holds the entire embedded system setup in hidden. The microcontroller is an ArduinoUno ATMEGA328 used to acquire the sensor signal and activates the buzzer module whenever the bad touch occurs for a child. The Buzzer is a piezoelectric used to produce the alarm signal whenever bad touch occurs and it grasps the people attention around the child for immediate safety. Smart Fabric Child Rescue System from Sexual Violence comprising a wireless module is attached with said microcontroller. The wireless module is a GSM/GPRS module sends the alert message to the parent number and women welfare organization along with the child"s location to rescue the child from sexual violence.

No. of Pages : 14 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029356 A
(19) INDIA
(22) Date of filing of Application :30/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : READY-TO-USE BIOSURFACTANT AND PREPARATION METHOD THEREOF

(51) International classification	:A01N0063000000, G06F0111060000, C12R0001385000, A01N0063100000, C12R0001380000	(71)**Name of Applicant :** **1) Dr. P. POONGUZHALI** Address of Applicant :#12, SWAMINATHAN STREET, NELLIKUPPAM, CUDDALORE, TAMIL NADU, INDIA - 607105 Tamil Nadu India
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(32) Priority Date	:NA	**3)Dr. R. PARTHASARATHI**
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(86) International Application No	:NA	**5)Dr. AR. KANNAPPAN**
Filing Date	:NA	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1) Dr. P. POONGUZHALI**
(61) Patent of Addition to Application Number	:NA	**2)Dr. S. RAJAN**
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(62) Divisional to Application Number	:NA	**4)Dr. R. SRINIVASAN**
Filing Date	:NA	**5)Dr. AR. KANNAPPAN**

(57) Abstract :
This invention relates to composition and process for the preparation of bacterial biosurfactant was achieved by optimization using Response surface methodology (RSM). The stable ready to use biosurfactant formulation is stable for 24 months and used to control pests. The selected strain Pseudomonas aeruginosa PBS29 (Accession number MG273769) was confirmed using 16S rRNA sequencing. Rice water (20%, v/v) was chosen as the cheapest carbon source for < formulating medium to optimize biosurfactant production using Central Composite Design. Enhanced biosurfactant" yield of 9.35 g/1 was attained through RSM by 0.59-fold higher than preliminary analysis. The model was significant with a regression coefficient of 0.98. The optimal condition was identified as 1.18% nitrogen source [glutamic acid] (w/v), pH 6.8, temperature at 37.4 °C, 2.5% inoculum size (v/v), and 167.9 rpm agitation, respectively. Furthermore, the detection of rhl gene, TLC, and FT-IR spectroscopic analysis suggested the biosurfactant as rhamnolipid. In-vitro antifungal activity and biocontrol strategy of the biosurfactant demonstrated against Fusarium wilt of Abelmoschus esculentus at the concentration of 100 ug/ml both by soil drenching and foliar spray by pot trial.

No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029727 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTONOMOUS VACCINE DISTRIBUTION AMONG MASSES USING ARTIFICIAL INTELLIGENCE

(51) International classification	:A61K0039000000, G06N0020000000, G06N0005020000, G06K0009000000, G05D0001020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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Filing Date	:NA

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(57) Abstract :
The novel corona virus (covid-19) is a real threat to humanity since its emergence as pandemic. The eradication of covid-19 measures are considered seriously by the government and other public agencies, however, the spread cannot be controlled due to its virulence. In order to eradicate the spread of virus spread, it is necessary to implement the vaccination to entire population within shorter duration of time. Hence, in this proposal, an artificial intelligence based vaccination distribution is considered in an Indian state. The artificial intelligence scheme considers various parameters for vaccination to make it effective among . public. This method enables the vaccinators to find the needed ones at shorter distance to be vaccinated first based on priority.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029761 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC POWER CONTROLLER BASED ON THE ROOMS TEMPERATURE

(51) International classification	:G11B0007006000, H04W0052080000, H04W0052520000, H04J0013000000, H02J0007000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)N BHARATH CHOWDARY
5)P L AASHIKA

(57) Abstract :
In the present technological revolution automation system achieved great popularity in the last decades and it increases the comfort and quality of life. Automation describes a wide range of technologies that reduce human intervention in processes. Human intervention is reduced by predetermining decision criteria, sub process relationships, and related actions and embodying those predeterminations in machines. Now a day's usage of Electricity and power consumption is very precious. So we need to find out the ways of how to reduce power consumption and improve the power system. The world is moving towards the term calledautomation" which can be achieved by giving a little bit of intelligence to the hardware we use. This automation should be done in a way such that it brings the best out of the appliance and decreases it's work when there is no need of it.

No. of Pages : 14 No. of Claims : 0

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202141029973 A
(19) INDIA
(22) Date of filing of Application :03/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED SMART DEVICE

(51) International classification	:H04L0029080000, H04L0009320000, G09B0019000000, A61B0005000000, A63B0071060000	(71)**Name of Applicant :** **1)Dr. S.Kalarani** Address of Applicant :St. Joseph's Institute of Technology, Old Mahabalipuram Road,Chennai, Tamil nadu,India Tamil Nadu India
(31) Priority Document No	:NA	**2)Dr.Lilly Ramesh**
(32) Priority Date	:NA	**3)Dr. D.Manohari**
(33) Name of priority country	:NA	**4)Dr.M.K.Kirubakaran**
(86) International Application No	:PCT//	**5)Dr.K.Vijayalakshmi**
Filing Date	:01/01/1900	(72)**Name of Inventor :**
(87) International Publication No	: NA	**1)Dr. S.Kalarani**
(61) Patent of Addition to Application Number	:NA	**2)Dr.Lilly Ramesh**
Filing Date	:NA	**3)Dr. D.Manohari**
(62) Divisional to Application Number	:NA	**4)Dr.M.K.Kirubakaran**
Filing Date	:NA	**5)Dr.K.Vijayalakshmi**

(57) Abstract :
An internet of thing (IOT) device includes a transceiver coupled to a processor. blockchain smart contracts can be used with the device to facilitate secure operation. FIG. 1

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2021

(21) Application No.202141029986 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : Sustainable Development of Rural India using Modern Tools and Technologies in Agriculture Sector

(51) International classification	:G06Q0050020000, G06Q0010060000, C05F0011000000, A01B0079000000, A01C0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)Dr. Rama Satish K V
5)Dr. ASHOKA S. B.
6)Dr. Chethana Sridhar
(72)**Name of Inventor :**
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2)Dr. Manjunath M
3)B. R. Shobha Rani
4)Dr. Rama Satish K V
5)Dr. ASHOKA S. B.
6)Dr. Chethana Sridhar

(57) Abstract :
Agriculture is an important sector with the majority of the rural population in developing countries depending on it. The sector faces major challenges of enhancing production in a situation of dwindling natural resources necessary for production. The growing demand for agricultural products, however, also offers opportunities for producers to sustain and improve their livelihoods. Information and communication technologies play an important role in addressing these challenges and uplifting the livelihoods of the rural poor. The widespread use of IT to make a direct contribution to agricultural productivity. Satellite technology, 185 geographic information systems using the techniques of agronomy and soil science helps to increase agricultural production. And drones can do soil health scans, monitor crop health, assist in planning irrigation schedules, apply fertilizers, estimate yield data and provide valuable data for weather analysis.

No. of Pages : 12 No. of Claims : 1

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/07/2021

(21) Application No.202141029987 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : REAL TIME PEDESTRIAN CROSSING DETECTION USING DEEP LEARNING

(51) International classification	:G06K0009000000, G06K0009620000, G05D0001000000, G08G0001160000, B60R0021340000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Dr E Kavitha
4)Dr. Lakshmi P
5)Mr.D.Saravanan
6)Mr.Kolli Srinivas
7)Dr.D.Stalin David
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9)Mr.S.Samiur Rehman
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11)Dr G Adilakshmi
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4)Dr. Lakshmi P
5)Mr.D.Saravanan
6)Mr.Kolli Srinivas
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8)Mrs.S.Deivarani
9)Mr.S.Samiur Rehman
10)Mrs. Mallika Chowdary Chirumamilla
11)Dr G Adilakshmi

(57) Abstract :
In the extensive use of this method in autonomous driving, pedestrian detection garnered significant interest. Various studies have been conducted over the past decade to discover an optimum way to detect pedestrians, but less was targeted to detect and recognize pedestrian activity. We concentrate on the two questions here: pedestrian and pedestrian detection identify profound learning methods at present detection time based on JAAD datasets. This innovation presents a Faster R-CNN pedestrian detection to detect and identify whether the pedestrian crosses the roadway in the detection time. The technique contrasts with the widely used pedestrian detection systems that distinguish foot and non-foot users amongst road users.

No. of Pages : 21 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147026568 A
(19) INDIA
(22) Date of filing of Application :15/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AIRFLOW DETECTION DEVICE, AIRFLOW DETECTION METHOD, AND AIRFLOW DETECTION PROGRAM

(51) International classification	:B05B0016000000, B05B0013040000, B05B0016600000, G06T0007120000, G06Q0050040000
(31) Priority Document No	:2019-162631
(32) Priority Date	:06/09/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2020/032903
Filing Date	:31/08/2020
(87) International Publication No	:WO 2021/045008
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
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2)YAMASHITA Tomoo

(57) Abstract :
An airflow detection device (1) according to the present invention detects an airflow in a painting booth, and comprises: a thread-like member (2) placed inside the painting booth; a photography device (4) capable of generating image data obtained by photographing the thread-like member (2); and an arithmetic unit capable of performing arithmetic processing on the image data. The airflow detection device (1) is characterized in that the thread-like member (2) is placed in the painting booth with at least a part thereof hanging down, and that the arithmetic unit identifies a part corresponding to the thread-like member (2) in the image data and detects an airflow on the basis of the position of the part.

No. of Pages : 21 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147026828 A
(19) INDIA
(22) Date of filing of Application :16/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SOLDERING ALLOY, SOLDERING PASTE, PREFORM SOLDER, SOLDERING BALL, WIRE SOLDER, RESIN FLUX CORED SOLDER, SOLDER JOINT, ELECTRONIC CIRCUIT BOARD, AND MULTILAYER ELECTRONIC CIRCUIT BOARD

(51) International classification	:H05K0003340000, B23K0035260000, B23K0035020000, H01L0023000000, B23K0035300000
(31) Priority Document No	:2019-098427
(32) Priority Date	:27/05/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2020/018837
Filing Date	:11/05/2020
(87) International Publication No	:WO 2020/241225
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The invention relates to a soldering alloy having an alloy composition containing, in % by mass, 13 to 22% In, 0.5 to 2.8% Ag, 0.5 to 5.0% Bi, and 0.002 to 0.05% Ni, the remainder being Sn. The invention also relates to a soldering paste, a preform solder, a soldering ball, a wire solder, a resin flux cored solder, and a solder joint, which comprise the soldering alloy. The invention also relates to a multilayer electronic circuit board and an electronic circuit board joined using the solder joint.

No. of Pages : 30 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/03/2020

(21) Application No.202031011161 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HOME SAFETY DEVICE THROUGH MOBILE PHONE

(51) International classification	:H04M0001230000, A61M0005320000, H04M0001725000, B25J0011000000, H04H0060390000	(71)**Name of Applicant :** **1)SNEHASIS DEY** Address of Applicant :EAST RANGA MATIA, P.O-RUPNARAYAN PUR BAZAR, DIST. PASCHIM BARDDHAMAN, PIN-713364 West Bengal India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
PROV.

No. of Pages : 13 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/06/2021
(21) Application No.202131024688 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL AUTOMATED SECURITY MODEL FOR COVID-19

(51) International classification	:H04L0029060000, G06F0021620000, G06F0021330000, G06F0021320000, G06F0021310000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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11)TARUN KUMAR SHARMA

(57) Abstract :
ABSTRACT COVID-19 can spread among people through direct/indirect or close contact with infected people through nose and mouth secretions which are released during sneezing, coughing or speaking. To reduce the spread of infection wearing PPE kits, cleaning hands and disinfecting people as well as contaminated surfaces are the only possible. A disinfecting or sanitizing tunnel as shown in fig (1) is a walk through pathway with continuous release of sanitizer or disinfecting agent. It can be used as an efficient way to break the chain of the virus in public places. An loT based as shown in fig (2) disinfecting tunnel can be used to effectively perform contactless disinfection of the surfaces to reduce the risk of further infection even if one gets contaminated during working or moving. After the lockdown is phased out, the tunnel can effectively manage and help in the movement of public. Primarily focusing on the significance, structural design and functioning of the tunnel. To make the tunnel cost-effective and sustainable solar panels and steel rods have been used. The disinfectant tunnel is highly efficient as it offers no contact disinfection or sanitization.This sensitization tunnel must detect human to sanitize, this invention illustrates a novel approach of using sensors for human detection and since this invention is based on IoT as backbone so security model must be there to guard against malicious user.

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025084 A
(19) INDIA
(22) Date of filing of Application :05/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM FOR COUNTING PEOPLE IN A CROWD USING THE AUDIO WATERMARKING TECHNOLOGY

(51) International classification	:G10L0019018000, G06K0009000000, H04W0004021000, G06F0003160000, G06F0030200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Mr.Ninad Madhab
3)Dr.Sharmila Subudhi
4)Dr.Deepak Kumar Patel
(72)**Name of Inventor :**
1)Mrs.Alina Dash
2)Mr.Ninad Madhab
3)Dr.Sharmila Subudhi
4)Dr.Deepak Kumar Patel

(57) Abstract :
The present invention discloses a system for counting people in a crowd using the audio watermarking technology. The method and system for counting the number of people in a crowd by using the audio watermarking technology & Deep Learning data modelling includes, but not limited to, an area measurement meter for a predefined geofence or area by implementing a combined site meter; a watermark audio detecting device to detect each of the received audio samples; a deep learning module to extract and filter each of the persons' voice and data by evaluating their voice frequency and performing further deep modelling analysis on it, to identify the number of people in a crowd. Accompanied Drawing [FIG. 1]

No. of Pages : 21 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025147 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SMART AND SAFETY CANE FOR VISUALLY IMPAIRED AND ELDERLY PERSONS

(51) International classification	:G09B0021000000, A61H0003060000, A45B0009000000, A23L0033000000, G06F0003160000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)MR.BIJAY KUMAR PAIKARAY
(72)**Name of Inventor :**
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3)MS.SONY SNIGDHA SAHOO
4)MR.BIJAY KUMAR PAIKARAY

(57) Abstract :
This invention relates to a smart and safety cane for visually impaired and elderly persons which can assist then in their day to day life for easy and safe communication. More particularly, this present invention relates a smart IOT enabled walking cane which can track current location of the user, detect the obstacles on the path, provides an easy emergency rescue alert system. Furthermore, this invention also relates to a personal self- defence device, personal video surveillance system with an effective flash light system for safety and reliable outside journey. So this device transforms the social dependents to self-dependents.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025347 A
(19) INDIA
(22) Date of filing of Application :07/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR SHARING GRAPHIC CARD , RANDOM ACCESS MEMORY AND PROCESSOR OVER REMOTE NETWORK CONNECTION.

(51) International classification	:G06F0009500000, H04N0021630000, G06F0008410000, G06F0003023000, G06F0013000000	(71)**Name of Applicant :** **1)AVINASH KUMAR SINGH** Address of Applicant :SON OF PRATAP BAHADUR SINGH, CHANDAULI, PATAR, SIWAN Bihar India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)AVINASH KUMAR SINGH**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A method and system for sharing graphic card, random access memory and processor between a remote user and service provider over the said connection which can be internet, intranet or local housing setup to the given user on requirement basis. The system allows the user to add on extra processing power, RAM and graphic processing power i.e graphic card memory to speed up the ongoing process reducing time, increasing speed, efficiency and vice-versa to optimize the hardware and processing power present. The whole system is managed by a universal resource management system, which allocates the hardware or processing power based on the membership policy defined in the system for both the service providers and users. The platform allows the users to either add on above mentioned resources separately or in a bundle from or share the above-mentioned resources to the resource management system under different role. The policy determines the hardware and power to be allocated, given the user is the member of the platform and has obtained a said membership, otherwise follows a different set of rules. The system allows multidevice and cross platform usage, i.e its not restricted to desktops, laptops , it can be used by mobile phones and other hardware™s to do the job swiftly and efficiently. In simple terms the above mentioned method/system helps in sharing processing power, wherein the tasks if performed on the local system and mobile phones will take more time and sometimes require costly setup.

No. of Pages : 23 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025581 A
(19) INDIA
(22) Date of filing of Application :08/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MUSHROOM PANEER AND METHOD OF PRODUCING THE SAME •

(51) International classification	:A23L0019000000, A23L0033000000, A23L0033185000, A23L0009200000, A23L0031000000	(71)**Name of Applicant :** **1)Dr. RAJENDRA PRASAD CENTRAL AGRICULTURAL UNIVERSITY** Address of Applicant :PUSA, SAMASTIPUR BIHAR India Bihar India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
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(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The invention provides healthy non-dairy paneer i.e. mushroom paneer as an alternative to dairy products for human consumption. The present invention relates to treated oyster mushroom comprising effective fat and protein content for desired taste, and more particularly, relates to the heat and coagulant treated coagulated mushroom solids/ Paneer. The mushroom paneer contains 0.3-0.4 % by wt. fat, 20-25% by wt. protein, calcium 470-500 mg/100g by wt., energy 380 K.cal/100g by wt., and carbohydrate 6.36g per 100g by wt. with uniformly entrapped and retained taste and optionally flavouring agents. The invention further provides a method for preparing the mushroom paneer. The process involved washing 1 kg of fresh oyster mushroom in running water and grind in 4 lit of water. After filtering with general sieve 2 more lit of water is added in filtered residue to make the final volume 6 lit. Further, grinding the slurry and filtered by general sieve. Churning thoroughly by mechanical means or hand blender. Filter the churned slurry with muslin cloth. Filtered water is heated at 80 degree Celsius and keeps aside. Mixing coagulant in the proportion of 1 lit/kg mushroom properly and heating at 80 degree Celsius for 30 minute to coagulate the mushroom solid, Strain the coagulant mixture into the muslin cloth and add 1 cup of cold water, Gather the muslin cloth and squeeze out as much water from it, twist and flatten it. Place it on a plate and place a heavy weight over it to set for 7-8 hours. This produced 250-350 gm paneer mushroom from 1 kg of fresh oyster mushroom having a good texture and enhanced nutritional value.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025591 A
(19) INDIA
(22) Date of filing of Application :09/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SEMI-AUTOMATIC DEVICE FOR RODENT MARKING AND WEIGHING IN THE LABORATORY WITH LESS MANUAL INTERACTION.

(51) International classification	:A61B0005000000, A61D0003000000, A01K0001030000, G01G0017080000, A61D0007000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)NITESH KUMAR
2)AKANKSHA SINGH
3)SANTANU SINGH
4)BULET KUMAR GUPTA

(57) Abstract :
This invention is a system and a method for marking rodents used in laboratories for experimental purposes using a semi-automatic mechanism where the system is capable of weighing the rodent along with providing it with a marking on the tail which stays permanent till the experiments ongoing on the rodent. The system has an easy weighing system that keeps the rodent intact and permits it to move less and in addition to nullifying the possibility of it escaping from the block to obtain accurate weight. It has another compartment where the rodent can be placed and its tails can be automatically punched with a permanent marker to provide it with identity without causing the animal any stress in addition to saving the person monitoring the rodent from getting bitten or scratched in the process.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025786 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SANJIVANI- A NOVEL COLS DEVICE TO PREVENT FROM CARDIAC ARREST, ELECTROCUTION, CHOKING AND CHEMICAL SUFFOCATION

(51) International classification	:B41J0002165000, H04L0029060000, B60H0001000000, A01M0023380000, A61H0031000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)DR ASHOK KUMAR BADAMALI

(57) Abstract :
Due to life style change there is increase in number of coronary artery disease related cardiac arrest. Cardiac arrest is sudden stoppage of heart due to rhythm disturbances . Victims of electrocution, lightening injury, drowning.and suffocation due to smoke by fire mishap in multistoried buildings, educational institution and marketplaces needs cardiopulmonary resuscitation (CPR) by first responders. Sanjivani QCPR,a manual cardio pulmonary resuscitation(CPR) or compression only life support (COLS) assist device is deployed for use on a victim of cardiac arrest of any origin like heart attack, electrocution, drowning, lightening injury,fire smoke inhalations or choking, food or drug allergy. The device has a rigid body structures with electronic components for visual feedback unit, audible signal unit and scope forsignal transmission to nearby ambulance and emergency department of hospital. Its ergonomically designed to ease of the stretching forces on small hand bones of conventional manual cardiopulmonary resuscitation. The bottom part of the device which comes in contact with victim's chest resembles area of adult palm i.e 4 inches. The electronic components receiving the mechanical compression force and converting to electrical signals is kept in the lower part of the device and separated from victim's chest or breast bone by silicon diaphragm or any other non-slippery elastomers. The upper part of the device is of 8.5 inch to avoid coning of shoulder blades and fatigue during resuscitation. The visual signal unit is incorporated in the central upper body part indicating 3 parameters Good-Job, No-recoil and Too-Slow to provide visual data by blinking LED on three parameters of Chest compressions like adequate Rate, depth &Recoil, Low recoil or low rate. The audio signal unit give a background metronome rate of 100 beats per minute to guide the resuscitator. The intermittent audio feedbacks like Good-job, No-Recoil& too-slow helps the resuscitating person in remediating his or steps.The audio feedback is multilingual and a default language is set at the time of installation. The signal transmitting unit will transmit the alert signal to nearby ambulance and emergency healthcare unit if enabled. The trend of resuscitation data is captured in the memory and can be transferred to suitable software for analysis subsequently. The Whole unit is name asSanjivani QCPR".

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131025800 A
(19) INDIA
(22) Date of filing of Application :10/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED SOLAR ASSISTED INEXPENSIVE CERAMIC BASED WATER PURIFICATION FOR NATURAL RAIN WATER HARVESTING

(51) International classification	:E03B0003280000, C02F0001140000, H04L0029080000, H02J0007350000, G06Q0050100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
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11)DR.SANJAY RAMKRISHNA BHOYAR

(57) Abstract :
ABSTRACT IOT based solar assisted inexpensive ceramic based water purification for natural rain water harvesting To solve the problem of scarcity of drinking water, different approaches have been adopted those are sometimes expensive. This work presents a sustainable technology which purifies natural rain water in two stages. After harvesting the rain water, it is kept in slanted glass house which helps to get the sunrays and it kills most of the harmful bacteria after reaching a certain temperature. In the inlet and outlet of this glass house, IoT based temperature control sensor will control the flow of water according to temperature reaching of the water signaling with LED light. After this first stage of purification, the evaporated water passes through a ceramic pot for second level of filtration. The proposed system comprises of Temperature sensor,Aurdino R3,Digital display,Solenoid valve,Power supply as shown in fig (2) ..This sustainable inexpensive and effective technology for cleaning and rain water harvesting method will be of utmost importance having two stage purification method.

No. of Pages : 14 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131026295 A
(19) INDIA
(22) Date of filing of Application :14/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED RAIN WATER HARVESTING SYSTEM FOR WASHING MACHINE BY USING RASPBERRY PI

(51) International classification	:A47J0031460000, G06Q0050160000, B01J0019100000, E03B0007020000, A61K0031135000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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7)MR. SOURAV SAHA

(57) Abstract :
Water is an essential human need. In July 2010, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights. Contaminated water does not only taste bad, it could be deadly. Water-related diseases affect more than 1.5 billion people every year. Unfortunately, there is limited awareness of the possibility of contamination in the house water tanks, and more should be done to educate consumers on the importance of maintaining a hygienic water tank. In this project a system is proposed to remotely sense, record, and report the quality of water stored in reservoir. The system sends alert messages to the landlord. When one of the quality parameters is lower than the standard values and the water of the reservoir tank can also be used by the help of the dc motor valve controller by which the water is supplied to the washing machine. The whole process will be controlled by the smart phone.

No. of Pages : 10 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131026296 A
(19) INDIA
(22) Date of filing of Application :14/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTI SENSOR BASED SMART MEDICAL RING FOR HEALTH MONITORING SYSTEM

(51) International classification	:A61B0005145500, A61B0005000000, A61B0005024000, A61B0005010000, G16H0010600000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)MR. SOURAV SAHA

(57) Abstract :
In this pandemic situation everyone worried about help. A smart medical ring will be discovered to minimize this problem. This device will help to measure the temperature, oxygen level and pulse rate all together. Objective of this project is to combine the features of thermometer and pulse oximeter into a single device with a reducible size compare to other available devices so that anyone can use this device in any place at any time and also can wear the ring in his/her finger. Here two sensors are implemented to measure these three different parameters. The thermometer and the pulse oximeter are most required measuring tools in our daily life to check the common health parameters. That™s why this smart medical ring will be discovered by researchers to help the common people and medical field.

No. of Pages : 8 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131026317 A
(19) INDIA
(22) Date of filing of Application :14/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL SOLAR ASSISTED DEFLUORIDATION DEVICE USING LANGMUIR ISOTHERM MODEL FOR FLUORIDE FREE DRINKING WATER.

(51) International classification	:C02F0101140000, F24S0010400000, H02S0020300000, C02F0001140000, F24D0017000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Fluoride tainting in water may create ecological dangers. In this examination, the combination of bio diminished graphene oxide (TPGO,50%) and calcium impregnated silica joined with titanium dioxide (Ca-SiO2-TiO2,50%) were utilized for fluoridation limit which was investigated. The ideal conditions for the boundaries like adsorbent portion, temperature, and contact time to research the fluoride expulsion proficiency. It was seen that the incorporated item have higher de-fluoridation effectiveness. The balance information for de-fluoridation by bio diminished graphene oxide (TPGO) and calcium impregnated silica joined with titanium dioxide (Ca-Si02-Ti02) were best fitted to the Langmuir isotherm model. The test results were applied to get factual investigation. The outcomes proposed that there was a nearer communication among exploratory and hypothetical outcomes. Generally, the combination of those adsorbents were an earth kind and savvy alternative for defluoridation. This eco agreeable methodology is used in sun based helped electronic defluoridation gadget which comprises of sun based board, programmed stirrer(connected with DC Motor) with filtration unit so fluoride free water will be acquired for drinking reason by enormous mass. From the viewpoint of pragmatic application, the water supply framework which is straightforwardly associated with tube well or artesian well, the defluoridation gadget will be added there to get fluoride free drinking water for utilization. Along these lines, it very well might be inferred that this creative and practical gadget will be helpful for society.

No. of Pages : 11 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/06/2021
(21) Application No.202131026408 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATIC RAIN-WATER HARVESTER WITH FILTRATION AND UV PURIFICATION

(51) International classification	:H04W0080100000, B29C0073160000, A01C0023000000, E03B0001040000, A01K0063040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)Dr. Subrata Manna
2)Spandan Manna

(57) Abstract :
Rain-water harvesting is a popular practice in hill region and other water-scarce area. Water is collected mostly from sloppy roofing sheet and stored in a tank on ground. Few people pump-up this water to roof-top tank to get running water in home. But it involves additional tank, water pump, pipe and fittings, high electric consumption and manual intervention. Again it may contain dust and pathogens like bacteria and parasites which make it unfit to wash mouth and sprinkle in eye. The present device (Fig. 1) is a low powered (60 Watt), sensor-based pumping system along with two stage filtrations and UV purification system without any additional storage. It is connected just below the gutter (4) and lifts filtered and purified water to rooftop tank while raining. Its sensors (2, 9) determine water-level of equipment and roof tank and operate accordingly. The excess water is drained out through outlet (6).

No. of Pages : 15 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/06/2021
(21) Application No.202131026443 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED SOLAR ASSISTED CLIMATIC READER FARMING ROBOT

(51) International classification	:G06N0003000000, G06Q0010060000, G01D0021020000, G06Q0050020000, B25J0009160000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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21)Dr. Surindar Gopalrao Wawale
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23)Dr P Karthigeyan

(57) Abstract :
It has probably been heard of how people across various industries are using robotics in their respective industries. However, rise of AI, IoT devices, growing population and new developments in robotics has made it to fit in the world of agriculture. These farming robots will be proved miracle when growers face a costly, long-term labor shortage, lack of knowledge regarding usage of fertilizers and high food demand with this growing population. All of these mentioned crisis can be eradicated and agriculture sector can be improved on a very large extent by the use of smart robots and hence benefit to the agriculture sector and farming. These farming robots will not only help in irrigation, fertilization, crop disease management but also waste management. Farming robots will be dynamic (movable) in nature and will continuously capture data related to rainfall, wind speed, wind direction, solar intensity at the macro level. Whereas data related to temperature, humidity, leaf wetness, soil temperature and moisture will be capture at the micro level. Powered by the sun, these farming robot can capture various data related to macro and micro climatic factor, thus building a fully autonomous farming robot which has the ability to use solar power to run all day and providing all the live data to the farmers.

No. of Pages : 23 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027009 A
(19) INDIA
(22) Date of filing of Application :17/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM FOR POWER GENERATION BY USING BOWING ELBOW AND PROCESS OF GENERATION THE SAME.

(51) International classification	:F02C0003340000, H02J0003380000, F28F0009000000, H01M0002120000, H04Q0009000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)KAUSHIK TARAFDAR

(57) Abstract :
The present invention relates to a system for power generation by using bowing elbow. More particularly, the present invention relates to the system for power generation by using bowing elbow wherein the bowing elbow and terminal oscillating plates and driver weight are together with having an arrangement wherein their loads and torque perfectly balance through push arm with the associated main wheel. This invention relates to the process of generation of power wherein the load is distributed all throughout the wheel in such a way that lowers its mass moment of inertia as well as implying higher kinetic energy. The present invention relates to a system for power generation which is free from energy loss in the process of energy conversion and has a simple structure, low production costs, and easy maintenance, since an energy source is not converted into energy required for power generation by using a complicated facility, such as when fossil fuel, nuclear, or renewable energy is used for power generation.

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027065 A
(19) INDIA
(22) Date of filing of Application :17/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR VACCINATION OF CITIZENS AGAINST COVID-19 USING SMART ROBOTIC ARMS BASED ON COMPUTATIONAL INTELLIGENCE METHOD

(51) International classification	:B25J0009160000, A61B0034000000, A61K0039000000, G06Q0010100000, A61B0034300000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present invention relates to system for vaccination of citizens against covid-19 using smart robotic arms based on computational intelligence method. The objective of the present invention is to solve the problems in the prior art technologies related to robotic drug injective and robotic medical device.

No. of Pages : 29 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027197 A
(19) INDIA
(22) Date of filing of Application :18/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROPOSED MODEL FOR REVIVAL OF SMALL BUSINESS THROUGH PRIVATE INVESTMENT ALONG WITH GOVT. SUPPORT DURING COVID 19 FINANCIAL CRISIS

(51) International classification	:G06Q0040060000, G06Q0040020000, G06Q0040000000, G06Q0010060000, G06Q0030020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)Mr.Prakash Acharya

(57) Abstract :
The present disclosure proposes a system and method for small business revival through private financial aid. The proposed method is effective for revival of small businesses through private investment with support of governments. The proposed system provides a possible revenue generation model in any crisis with involvement of private investors. The proposed system highlights the conditional aspect of financing made by a private investor and avoids future agency risk. The proposed system aids survival of small businesses during financial crisis and enables them to maintain budget balance.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027198 A
(19) INDIA
(22) Date of filing of Application :18/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CUSTOMER GRIEVANCE REDRESSAL MECHANISM OF CO-OPERATIVE BANKS IN INDIA

(51) International classification	:H04B0007060000, G06Q0030020000, G06Q0010100000, G06Q0010060000, B60W0040080000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Dr.Suresh Kumar Sahoo
3)Prof. Dr.Srinivas Subbarao Pasumarti

(57) Abstract :
The present disclosure proposes a system and method for consumer feedback for healthy banking. An intermediary administration or service permits a customer to share, either anonymously or not anonymously, feedback information with a provider by means of the intermediary administration over an organization, and gives assumptions that the feedback data is appropriately addressed. The provider is store in the intermediary a set of rules, which includes heightening standards to raise the input data to elements inside the provider as per an acceleration request, and rules for reacting to criticism data inside a time span. After receiving a response from a provider via the intermediary the customer is asked to indicate a level of satisfaction with the provider response and has the option of escalating the feedback information to another entity according the escalation rules or closing the communication with provider via the intermediary concerning the feedback information.

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027793 A
(19) INDIA
(22) Date of filing of Application :21/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ELECTRONIC ENDODONTIC FILE FOR LOCATING THE ROOT APEX AND DETERMINING THE WORKING LENGTH

(51) International classification	:A61C0005420000, A61C0019040000, A61C0005440000, G06F0003060000, G02B0006120000	(71)**Name of Applicant :** **1)DR. S. VIJAY SINGH** Address of Applicant :Quarter no. A22 NEIGRIHMS Campus, Mawdiangdiang, Shillong 793018 Meghalaya Meghalaya India **2)DR ARUNA VIJAY SINGH**
(31) Priority Document No	:NA	(72)**Name of Inventor :**
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(33) Name of priority country	:NA	**2)DR ARUNA VIJAY SINGH**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention is related to electronic endodontic file (10) for file for locating the root apex and determining the working length. The present invention solves problems in the old endodontic file related to false reading when used in tooth with perforations, fracture, anomalies, variations or other defect.

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131027979 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CLOUD BASED EV CHARGING ARCHITECTURE

(51) International classification	:G01C0021340000, G07C0005080000, B60W0050000000, H04L0029080000, B60W0040090000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)SAI KRISHNA MULPURI
2)Bikash Sah
3)Praveen Kumar

(57) Abstract :
This disclosure is directed to a cloud based architecture (13) for Electric Vehicle (EV) charging that could provide assistance and control in selecting optimal charging station (12) to the user (6) subscribed to the services. This disclosure also directed to a cloud platform (13) which is configured to provide driving assistance (7) to the user of electric vehicle based on the individual driver history data stored as per driver profiles, driving pattern (8) and thereby estimating range (11) and providing optimized route (24) based on available capacity of the battery. An isolation system (23) for separating/bypassing dead/aged cells in a battery pack (1) as a part of fault prognostics unit is also included in the cloud platform (13).

No. of Pages : 19 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028032 A
(19) INDIA
(22) Date of filing of Application :22/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MULTIFACTORIAL SYSTEM AND METHOD FOR PENNY ACCOUNT INVESTMENT MANAGEMENT

(51) International classification	:G06Q0030060000, G06Q0030020000, G06Q0020220000, G07F0015020000, G07F0007100000	(71)**Name of Applicant :** **1)Sukanti Suna** Address of Applicant :Daldalipara, Post-Modipara, Ps-Khetrajpur, Sambalpur-768002, Odisha, India Orissa India (72)**Name of Inventor :** **1)Sukanti Suna**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The system (100) and method is disclosed to facilitate system (100) management of a penny account for investment purpose. The system (100) includes a registration unit (208) to register a user, his penny account and also one or more merchants as a vendor to sell their goods, items, and services. A banking unit (210) performs financial transaction related operations, such as storing standing instructions by the user and deduct the amount at the source or at instructed financial activities. The System (100) includes an electronic commerce module where vendors are registered. The vendors are requisite to offer discount to the users on purchase, the discounted amount is debited from the user™s payment. Each debited amount is invested against the registered penny account into multiple government aided schemes. The amount deduction can be scheduled daily, weekly, or monthly as instructed by the user.

No. of Pages : 23 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028110 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : A RULE-BASED CHARGING TECHNIQUE INCORPORATING ELECTROCHEMISTRY OF BATTERY TO FAST CHARGE AND CONSTRAIN BATTERY DEGRADATION

(51) International classification	:H02J0007000000, B60L0053300000, B60L0058120000, H02P0009080000, G06F0001260000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Guwahati
Address of Applicant :Office of Dean II&SI, Indian Institute of Technology Guwahati, Guwahati, Assam, India Assam India
(72)**Name of Inventor :**
1)Bikash Sah
2)Praveen Kumar

(57) Abstract :
A charging method involving controllers and power electronics switch configured system is disclosed. The controller performs control of charge transfer to the energy storing electrochemical device using power electronics switch configured system. The charge transfer involves use of continuous and intermittent charge transfer of positive or negative amplitude with rest period for a specified time. The time period is proposed to be either determined based on the prespecified values or an optimization algorithm depending on the service provider. Further, the rise and fall of ambient temperature of the charging location and the internal energy storing electrochemical device is also incorporated to reduce the rate of battery degradation.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028111 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF A LINEAR ELECTROMAGNETIC ACTUATOR FOR AUTOMOBILE SUSPENSION APPLICATIONS

(51) International classification	:H02K0041030000, H02K0033000000, B60G0017015000, H02K0016000000, H01F0007020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Guwahati
Address of Applicant :Office of Dean II & SI, Indian Institute of Technology Guwahati, Guwahati, Assam Assam India
(72)**Name of Inventor :**
1)Don Vinit X V
2)Rajendra Kumar
3)Praveen Kumar

(57) Abstract :
The aim of this invention is to develop a new electromagnetic actuator primarily for applications related to vibration control. It relates to the arrangement of coil arrays and permanent magnet arrays to improve efficiency and force density. In this invented topology, the usage of permanent magnet material is reduced significantly when compared with the existing permanent magnet linear actuators. The proposed actuator is arranged in parallel with a linear spring. In addition, the sensor unit and electronic control unit can be coupled with this actuator, which can replace the conventional passive suspension system of the automobile to improve performance.

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028112 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LAMINATION DESIGN FOR HIGH POWER AND TORQUE DENSITY THREE-PHASE INDUCTION MOTOR FOR USE IN TWO-WHEEL DRIVE

(51) International classification	:G06F0030230000, B60L0003120000, B60L0015200000, H02K0015000000, F22B0001280000	(71)**Name of Applicant :** **1)Indian Institute of Technology Guwahati** Address of Applicant :Office of Dean II & SI, Indian Institute of Technology Guwahati, Guwahati, Assam Assam India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Rajendra Kumar** **2)Praveen Kumar**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
This invention aims to find the relations between the various geometry parameters to achieve the optimum design of 1.5kW, three-phase induction motors (IMs) for electric vehicle application. Two major performance parameters aimed for this work are motor efficiency and power density. Three widely used pole combinations of three-phase IMs are analysed with the finite element method. Based upon the design and, study of different IM design variants for these pole-combinations, the work presents the ranges of relative dimensions of the most effective design parameters.

No. of Pages : 12 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028113 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LAMINATION DESIGN FOR A HIGH POWER AND TORQUE DENSITY THREE-PHASE INDUCTION MOTOR TO DRIVE A FOUR-WHEEL LIGHT ELECTRIC-MOTOR VEHICLE

(51) International classification	:G06F0030230000, B60L0003120000, B60L0015200000, H02K0015000000, F22B0001280000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Guwahati
Address of Applicant :Office of Dean II &SI, Indian Institute of Technology Guwahati, Guwahati, Assam Assam India
(72)**Name of Inventor :**
1)Rajendra Kumar
2)Praveen Kumar

(57) Abstract :
This invention aims to find the relations between the various geometry parameters to achieve the optimum design of 12.5kW, three-phase induction motors (IMs) for electric vehicle application. Two major performance parameters aimed for this work are motor efficiency and power density. Three widely used pole combinations of three-phase IMs are analysed with the finite element method. Based upon the design and, study of different IM design variants for these pole-combinations, the work presents the ranges of relative dimensions of the most effective design parameters.

No. of Pages : 12 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028114 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : DESIGN OF 1.2KW LOW SPEED, HIGH POWER AND TORQUE DENSITY THREE-PHASE OUTER ROTOR (HUB) INDUCTION MOTOR TO DRIVE A FOUR-WHEEL LIGHT ELECTRIC-MOTOR VEHICLE

(51) International classification	:H02K0003280000, B63H0023240000, H02K0017120000, H02K0016020000, H02K0017160000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Guwahati
Address of Applicant :Office of Dean II & SI, Indian Institute of Technology Guwahati, Guwahati, Assam, India Assam India
(72)**Name of Inventor :**
1)Rajendra Kumar
2)Praveen Kumar

(57) Abstract :
The innovation presented in this document discloses a 1.2kW outer rotor three-phase induction motor of high power and torque density for use in a two-three wheel vehicle as a propeller. The motor is provided with a copper casted squirrel cage outer rotor with the three-phase windings placed in the stator slots. The motor is designed to drive the wheel directly without any intermediatory gearbox and hence, small value of slenderness ratio (active stack length/air-gap diameter) is selected to ensure the high torque at the low speeds.

No. of Pages : 14 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202131028115 A
(19) INDIA
(22) Date of filing of Application :23/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTERIOR PERMANENT MAGNET SYNCHRONOUS MOTOR (IPMSM) LAMINATION DESIGN TO ACHIEVE HIGH POWER DENSITY AND REDUCE COGGING TORQUE AND TORQUE RIPPLE FOR MEDIUM POWER COMMERCIAL EV APPLICATIONS

(51) International classification	:H02K0001270000, H02K0029030000, H02P0006100000, G06F0030230000, G06F0030150000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Institute of Technology Guwahati
Address of Applicant :Office of Dean II & SI, Indian Institute of Technology Guwahati,Guwahati, Assam Assam India
(72)**Name of Inventor :**
1)Binita Nanda
2)Praveen Kumar

(57) Abstract :
An optimized lamination design of an Interior Permanent Magnet (IPM) motor can help achieve a high power and torque density with less cogging torque, less torque ripple and less THD in the back emf. This invention aims to find the relations between the various geometry parameters to achieve the optimum design of a 12.5kW, three-phase IPM motor for electric vehicle application. The number of poles are selected between 4, 6 and 8 based on the efficiency map using Finite Element Method (FEM). The invention presents the ranges of the ratios of different geometrical design parameters to achieve a high saliency ratio, power density and torque density with less cogging torque and torque ripple.

No. of Pages : 19 No. of Claims : 8

Publication After 18 Months:

The following Patent Applications have been published under Section 11A (3) of The Patents (Amendment) Act, 2005. Any Person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act, 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/01/2020

(21) Application No.202011000202 A

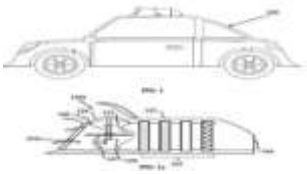
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ELECTRICITY-FREE MULTIPLANAR VEHICLE MOUNTED OUTDOOR AIR PURIFIER

(51) International classification	:F04B0039000000, A61M0005165000, C10K0001020000, F24C0015000000, B60T0017020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Harsh Jain
Address of Applicant :E-532, Third Floor, Greater Kailash-2, New Delhi - 110048 Delhi India
(72)**Name of Inventor :**
1)Harsh Jain

(57) Abstract :
The various embodiments of the present invention provide a multiplanar air purifying apparatus mounted on a vehicle. The apparatus comprises an air inlet unit, a pressure multiplier, a filter unit, and an outlet unit. The air inlet unit is installed in front end of the said apparatus in a direction of movement of the vehicle. The pressure multiplier is a hollow chamber installed behind the air inlet unit. The filter unit is detachably attached behind the pressure multiplier. The outlet unit comprises an air outlet and a water outlet attached behind the filter unit in a superimposing manner. The said apparatus comprises a housing with a plurality of serially arranged interconnected compartment for housing the air inlet unit, the pressure multiplier, the filter unit and the outlet unit respectively.



No. of Pages : 18 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202011000218 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR FLUORESCENCE IMAGING OF FUNCTIONAL SILVER NANOPARTICLES AND MULTI DRUG RESISTANT BACTERIA

(51) International classification	:G01N0021640000, A61K0049000000, A01N0059160000, C12Q0001681800, G01N0033580000	(71)**Name of Applicant :** **1)Prem Chandra Pandey** Address of Applicant :Department of Chemistry, Indian Institute of Technology (BHU), Varanasi-221005 Uttar Pradesh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Prem Chandra Pandey**
(33) Name of priority country	:NA	**2)Govind Pandey**
(86) International Application No	:NA	**3)Roger Jagdish Narayan**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to a method for the fluorescence imaging of A. baumannii and functional silver nanoparticles interaction. It has been found that as made functional silver nanoparticles act as fluorescent quencher for fluorescein and the quenching ability of the same is linearly decreased as a function of A. baumannii cell number. At corresponding MIC of these three Ag-NP, 102 cells/ml remained survived at incubation of 6 hours, whereas complete killing was observed at their respective MBC values. Fluorescence imaging confirmed specific binding of microbial cell with functional silver nanoparticles.

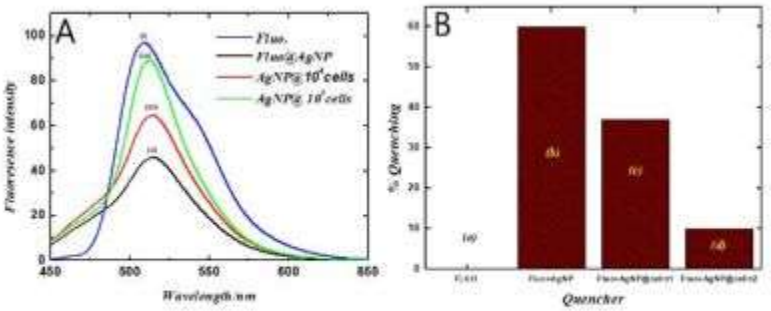


Figure-1

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000277 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A COMPOSITION AND METHOD FOR PREPARATION THEREOF FOR SUPPRESSION OF DUST GENERATED IN BLASTING OPERATIONS

(51) International classification	:G06F0017240000, F42D0003020000, E21F0005020000, E21C0035220000, F42D0005050000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH 'an Indian registered body incorporated under the Regn. of Soc. Act (Act XXI of 1860)
Address of Applicant :ANUSANDHAN BHAWAN, 2 RAFI MARG NEW DELHI INDIA 110001 Delhi India
(72)**Name of Inventor :**
1)FIROJ ALI
2)BRAJ MOHAN LAT PINGUA
3)PRADEEP KUMAR SINGH

(57) Abstract :
The invention discloses a synergistic composition based on dust suppression mechanism for . reduction of dust generated by' blasting and is reliable to use -in diameters 83 mm polythene leaflets and above blast holes. It can be place as deck charge ·in bottom, middle and top decking portions. The composition is in solution form which forms easily surface tension films in and around nearby blasting zone during detonation of explosives. This surface tension films adsorb and reduces the dust generated by blasting and it is· non-reactive with mining explosives and cost effective.

No. of Pages : 16 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011000294 A

(19) INDIA

(22) Date of filing of Application :03/01/2020

(43) Publication Date : 09/07/2021

(54) Title of the invention :EJECTOR-DIFFUSER FOR GAS TURBINE ENGINE"

(51) International classification :F01N0001140000,F01D0025280000,B01D0050000000,F01N0013080000,F41J0002020000

(31) Priority Document No :NA

(32) Priority Date :NA

(33) Name of priority country :NA

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)**Name of Applicant :**

1)INDIAN INSTITUTE OF TECHNOLOGY DELHI

Address of Applicant :Hauz Khas, New Delhi 110 016, (India) Delhi India

(72)**Name of Inventor :**

1)SINGH, Sidhnath

2)SINGH, Lakhvinder

3)SINHA, Sawan Suman

(57) Abstract :

The present disclosure provides ejector-diffuser (100) for gas turbine engine(102). The ejector-diffuser (100) comprises casing (104) including inlet opening (106) for receiving exhaust gas (101), an outlet opening (108) adapted to discharge exhaust gas (101), and plurality of annular slots (114). A first guidance member (116) is disposed at first slot (118). The first guidance member (116)includes first member (122) inclined about axis (A-A™) and second member (130) connected to first member (122) and oriented parallely to axis (A-A™). A second guidance member (136) is also disposed at each of other slots (138) and inclined with respect to axis (A-A™). The first and second guidance members (116, 136) are adapted to entrain ambient air via each of annular slots (114)
into casing(104), such that ambient air mixes with exhaust gas (101), thereby supressing thermal signature of exhaust gas (101) discharged from gas turbine engine (102).

No. of Pages : 35 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000319 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR PRODUCING TRIMELLITIC ACID FROM BIOMASS

(51) International classification	:C07D0309380000, C07D0309400000, C12P0019140000, C08K0005120000, C07D0315000000	(71)**Name of Applicant :** **1)INDIAN INSTITUTE OF TECHNOLOGY DELHI** Address of Applicant :Hauz Khas, New Delhi - 110016 Delhi India (72)**Name of Inventor :** **1)HAIDER, Mohammad Ali** **2)KHAN, Tuhin Suvra** **3)ALAM, Mohammad Imteyaz**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Provided herein is a process for the preparation of trimellitic acid (TMA) from furans, pyrones and lactones obtained from biomass. The furans, pyrones and lactones are converted to a Diels-Alder adduct; and subsequently the Diels-Alder adduct follows either oxidation, dehydrogenation, decarboxylation, or dehydration in presence of at least one catalyst to obtain trimellitic acid.

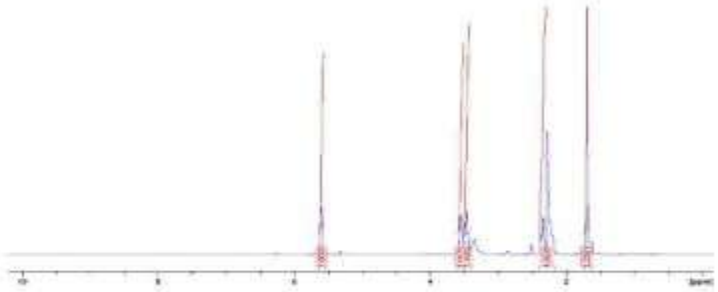


Figure 1

No. of Pages : 34 No. of Claims : 23

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000369 A
(19) INDIA
(22) Date of filing of Application :04/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : THREE-DIMENSIONAL TOUCH KNOB

(51) International classification	:G06F0003041000, G06F0003044000, H03K0017960000, G06F0001160000, G06F0003020000	(71)**Name of Applicant :** **1)YOUNG FAST OPTOELECTRONICS CO., LTD.** Address of Applicant :No. 31, Jiang-Jiann 1st Road, Kuan Yin, Taoyuan, Taiwan (72)**Name of Inventor :** **1)LIN, MENG-KUEI** **2)PAI, CHIH-CHIANG**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A touch knob includes a knob shell having a three-dimensional contour with a curved joint surface; an ITO touch sensor disposed on the knob shell; a ductile auxiliary conductive unit connected on the touch sensor to form an overlapping area covering the joint surface, and the auxiliary conductive unit in the overlapping area having a conductive pattern corresponding to the touch sensor; and a surface coating layer having a three-dimensional contour corresponding to the knob shell and attached on both the touch sensor and the auxiliary conductive unit. An opaque mask surface is provided on an inner side of the surface coating layer. The mask surface cloaks the overlapping area.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202011000468 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARTUS FOR AUTOMATIC CATEGORIZATION OF CALLS IN A CALL CENTER ENVIRONMENT

(51) International classification	:H04M0003510000, G06F0017270000, G06F0016930000, G06F0017220000, G06F0017210000	(71)**Name of Applicant :** **1)Uniphore Software Systems Inc** Address of Applicant :1001 Page Mill Road, Building 4, Suite 100-B, Palo Alto, CA 94304, USA U.S.A.
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)SOMNATH ROY**
(32) Priority Date	:NA	**2)SAMITH RAMACHANDRAN**
(33) Name of priority country	:NA	**3)UMESH SACHDEV**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A system for categorizing a call between an agent and a caller comprises at least one processor and a memory communicably coupled to the at least one processor. The memory comprises computer executable instructions, which, when executed by the at least one processor implement a method as follows. A call document comprising text of the call between the agent and the caller is received by the system. The system categorizes the call into at least one class using regressive probability analysis of the call document. The system splits the call document to at least two portions, the at least two portions comprising a call header and a call body, and thereafter, using rule-based entity extraction, the system extracts a mandatory entity from the call header and an optional entity from the call body.

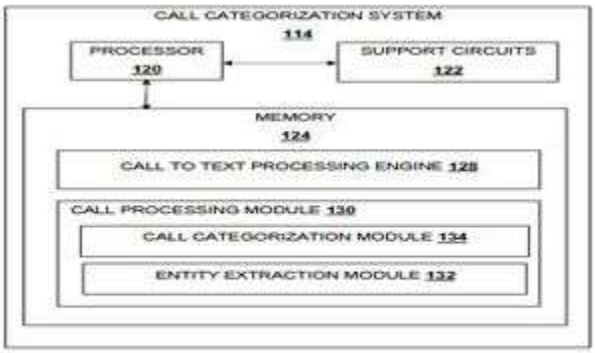


FIG. 1B

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202011000553 A
(43) Publication Date : 09/07/2021

(54) Title of the invention :METHOD AND SYSTEM FOR CREATING HIGH CONFIDENCE MICRO-PERSONAS THROUGH HYBRID MACHINE LEARNING METHODS"

(51) International classification	:G06Q0030020000, G06N0020000000, G06F0016280000, G06N0005020000, G06Q0010100000	(71)**Name of Applicant :** **1)Sterlite Technologies Limited** Address of Applicant :House No. IFFCO Tower, 3rd Floor, Plot No.3, Street Sector 29, City Gurgaon , State Haryana Country India Pin code 122002 Haryana India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Tarak Trivedi**
(33) Name of priority country	:NA	**2)Krishna Mohan S K**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present disclosure provides a method and system for creating high confidence micro-personas through hybrid machine learning methods. The method and system corresponds to a campaign management system (108). In addition, the campaign management system (108) receives a plurality of data associated with a plurality of subscribers (102). Further, the campaign management system (108) pre-processes the plurality of data associated with the plurality of subscribers (102). Furthermore, the campaign management system (108) clusters the plurality of data for generation of a plurality of clusters based on one or more attributes. Moreover, the campaign management system (108) dynamically creates a plurality of micro-personas associated with the plurality of subscribers (102). Also, the campaign management system (108) filters the plurality of micro-personas based on a probabilistic information of a click-through rate for each of the plurality of subscribers (102).

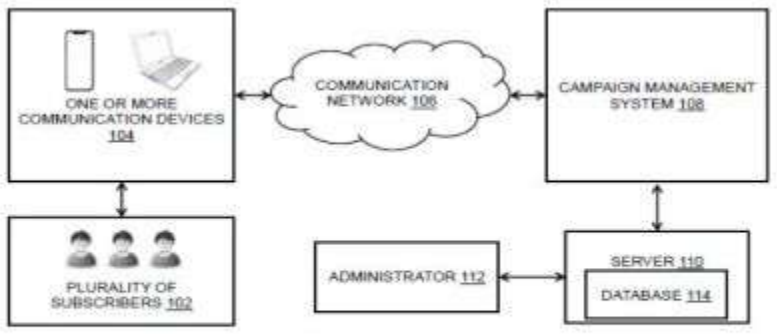


Fig.1

No. of Pages : 32 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

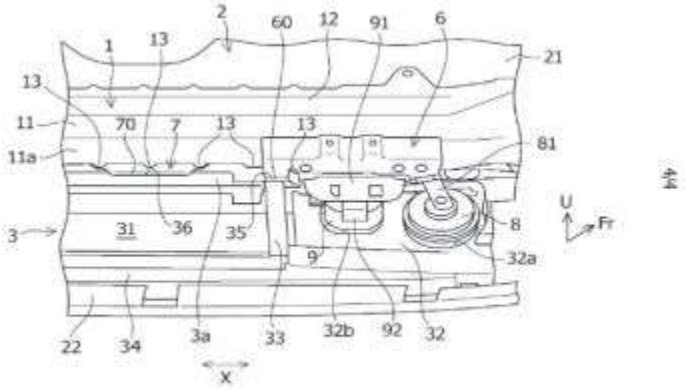
(21) Application No.202011000561 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROTECTIVE STRUCTURE FOR RADIATOR

(51) International classification	:B60R0019180000, B62D0025080000, B60R0019520000, B60R0019500000, B60R0019480000	(71)**Name of Applicant :** **1)SUZUKI MOTOR CORPORATION** Address of Applicant :300 Takatsuka-cho, Minami-ku, Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Noriyasu, TAKEFUJI**
(33) Name of priority country	:NA	**2)Hiroshi, YAMADA**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A protective structure for a radiator, the structure including: a bumper member (1) located at a vehicle front portion and extending in a vehicle width direction; a bumper fascia (2) located on a vehicle front side of the bumper member (1), and mounted to the bumper member (1); and a shroud (3) mounted to the bumper fascia (2), and including an air intake hole portion (31), in which on a vehicle rear side of the bumper member (1), a radiator (5) is located at a position on a vehicle front side of a condenser (4), wherein reinforcements (6 and 7) are mounted to the bumper member (1), and at an upper portion or a lower portion of the reinforcements (6 and 7), forward-bent portions (60 and 70) are provided, the forward-bent portions (60 and 70) being bent toward a vehicle front, and coming into contact with the shroud (3) at a time of a front collision.

FIG.4



No. of Pages : 21 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202011000607 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN APPARATUS FOR PREPARING A BEVERAGE

(51) International classification	:A47J0031440000, G03G0021160000, A47J0031600000, A01J0009000000, B65D0081320000	(71)**Name of Applicant :** **1)DESMANIA DESIGN PVT. LTD** Address of Applicant :330, SECTOR 8, IMT MANESAR GURGAON HARYANA-122052, INDIA Haryana India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)ABHISHEK BHAGAT**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
An apparatus (100) for preparing a beverage is disclosed. The apparatus includes a main body (200), a milk container (104) for holding milk and a water container (108) for holding water. The milk container (104) disposed on the main body (200). Similarly, the water container (108) also disposed on the main body (200). The milk container (104) is removably attached with the main body (200). The milk container (104) is provided with a scale (110) to measure the remaining quantity of the milk in the milk container (104). The apparatus (100) further comprising plurality of pots (102) containing at least one spices in each pot (102a), wherein the plurality of pots (102) are disposed on the main body (200).

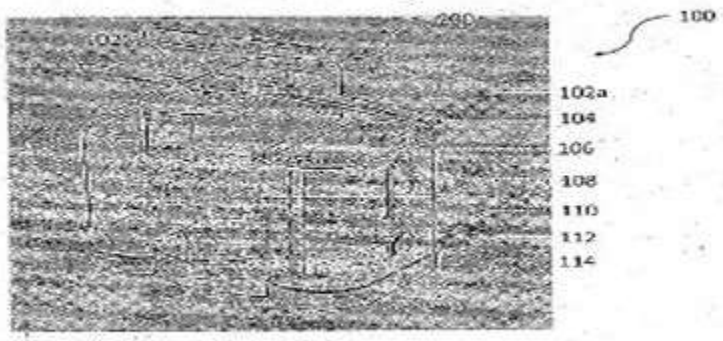


FIGURE 1

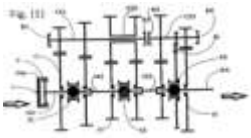
No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000610 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYNCHRONIZED SERIES COMPOUND EIGHT SPEED GEARBOX

(51) International classification	:C07D0417060000, C07D0207160000, C07D0277060000, H01L0029778000, H01L0029200000	(71)**Name of Applicant :** **1)SIDDHANT SAHAI** Address of Applicant :44/2, SURYA VIHAR-II, FARIDABAD, HARYANA-121003, INDIA Haryana India (72)**Name of Inventor :** **1)SIDDHANT SAHAI**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The gearbox uses compounding of gears to give various outputs, eve·ry pair have two pairs of gears with synchroniser, these gears have 2 counter gears on counter shaft, which are connected with each other same axis one gear ofthis pair is connected to output shaft and the other is free to pivot on the inp1,1t shaft, when the synchronizer is paired with this free gear, the output is driven by the gear reductic;>n attained, and when the synchronizer is coupled with the gear which have output shaft fixed on it, direct drive is attained.



No. of Pages : 7 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011000679 A

(19) INDIA

(22) Date of filing of Application :07/01/2020

(43) Publication Date : 09/07/2021

(54) Title of the invention : A UXO NEUTRALIZATION MECHANISM FOR NEUTRALIZING A UXO USING A HIGH-PRESSURE WATER JET

(51) International classification :F16J0015340000,F42D0005040000,H01L0021670000,H02K0015020000,A22C0029020000

(31) Priority Document No :NA

(32) Priority Date :NA

(33) Name of priority country :NA

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)**Name of Applicant :**

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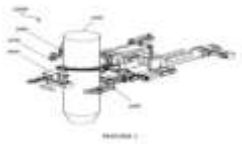
Address of Applicant :Ministry of Defense, Govt of India, Room No: 348, B-wing, DRDO Bhawan, Rajaji Marg, New Delhi-110105, India Delhi India

(72)**Name of Inventor :**

1)Ajay Kumar Patel
2)Mridu Kant Pathak
3)Anupam Bansal
4)Purnanand Rajendra Singh
5)Sunil Shankar Taware
6)Sanjeev Shankar Lonkar
7)Debi Prasad Satapathy

(57) Abstract :

The present disclosure is related to mechanisms for neutralizing a UXO and envisages a mechanism for neutralization of a UXO using a high-pressure water jet. The UXO neutralizing mechanism (1000) comprises a UXO handling mechanism (200), a stationary assembly (300), a revolving assembly (400) and a circumferential displacement mechanism (350). The UXO handling mechanism (200) holds, lifts and aligns the UXO (100) in a predetermined orientation. The stationary assembly (300) supports a driving means (308, 310). The revolving assembly (400) supports a water jet nozzle (402). The circumferential displacement mechanism (350) is configured between the stationary assembly (300) and the revolving assembly (400) to be driven for displacing the nozzle (402) to cause penetration of the shell of the UXO (100) while the UXO (100) is held coaxially with the revolving assembly (400) by the UXO handling mechanism (200). The mechanism (1000) is fast and precise.



No. of Pages : 24 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202011000732 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR IONIC LIQUID ASSISTED CHEMICAL FIXATION OF CARBON DIOXIDE

(51) International classification	:C05F0017000000, B01D0053140000, B01D0053620000, C01B0032600000, B01J0031020000	(71)**Name of Applicant :** **1)Shoolini University of Biotechnology and Management Sciences** Address of Applicant :Village-Bhajol, P.O. Sultanpur, Solan, 173229, Himachal Pradesh, India Himachal Pradesh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Gupta, Neeraj**
(33) Name of priority country	:NA	**2)Soni, Abhishek**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses a process for chemical fixation of carbon dioxide into cyclic carbonate by using ionic liquids. Cyclic carbonate is an industrially valuable product and carbon dioxide is primary greenhouse gas which causes global warming. Therefore, the present invention offers many benefits viz. fixation of carbon dioxide thereby having application in processes for reducing global warming, producing industrially important cyclic carbonate under 1 atm pressure of CO2 at room temperature. Imidazolium based ionic liquid was used to form N-heterocyclic carbene in the presence of a base, which activated the CO2. Piperidinium based acidic ionic liquid was used to activate the styrene oxide.

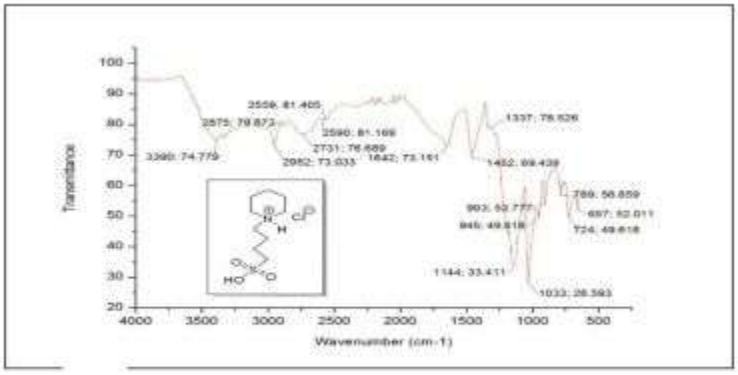


FIGURE: 1

No. of Pages : 27 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000828 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESS FOR PREPARING RESONATING STRUCTURES OF A-HYDROXY NAPHTHALENE AND B“HYDROXY NAPHTHALENE

(51) International classification	:C07D0417120000, A61K0008365000, C07C0051310000, C07D0417040000, C07C0309350000	(71)**Name of Applicant :** **1)Chetan Dangi** Address of Applicant :H. No. 2-E-18, Mahaveer Nagar Ext, Kota, Rajasthan- 324009, India. Rajasthan India (72)**Name of Inventor :** **1)Chetan Dangi**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses a process for preparing resonating structures of a-Hydroxy Naphthalene and P-Hydroxy Naphthalene, comprises the steps of employing □ lpha-Hydroxy Naphthalene and beta-Hydroxy Naphthalene ; calculating □ lpha-Hydroxy Naphthalene and beta-Hydroxy Naphthalene resonating type structure using arithmetic progression formula =[2a + (n-l)d] Where n = [(Total resonating ring) - 1] and total ring = 7; calculating resonating structures of alpha-Hydroxy Naphthalene and beta-Hydroxy Naphthalene using the formula T3S ia i 5[n i 10

No. of Pages : 19 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202011000840 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A LUMINESCENT THIN FILM BASED ON GRAPHENE QUANTUM DOTS (GQDS)

(51) International classification	:B82Y0040000000, B82Y0030000000, C01B0032184000, B82Y0020000000, C01B0032194000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)AMITY UNIVERSITY
Address of Applicant :AMITY UNIVERSITY CAMPUS, SECTOR-125, NOIDA UTTAR PRADESH-201313, INDIA Uttar Pradesh India
(72)**Name of Inventor :**
1)SHIKHA WADHWA
2)ASHISH MATHUR
3)ALISHBA TANYA JOHN

(57) Abstract :
ABSTRACT A LUMINESCENT THIN FILM BASED ON GRAPHENE QUANTUM DOTS (GQDS) The present invention relates to a system and method for luminescent thin film based on graphene quantum dots (GQDs). GQDs were synthesized by a rapid and low cost microwave-assisted hydrothermal protocol using glucose as a precursor molecule. The method for producing Ultra-Voilet (UV) luminescent thin film on glass using graphene quantum dots (GQDs), comprising the steps of synthesizing, the final produce by a microwave-assisted hydrothermal protocol using glucose as a precursor molecule. The produced Ultra-Voilet (UV) luminescent thin film, enabling the optical transparency by using UV light. Dated this 07th day of January, 2021 AMITY

No. of Pages : 15 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000841 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN INTEGRATED SMART TECHNOLOGIES FOR ENERGY EFFICIENT ELECTRICAL CARS AND STREET LIGHTS

(51) International classification	:H05B0037020000, B29C0035080000, F23G0005460000, F21S0008080000, A47K0013300000	(71)**Name of Applicant :** **1)AMITY UNIVERSITY** Address of Applicant :AMITY UNIVERSITY CAMPUS, SECTOR-125, NOIDA UTTAR PRADESH-201313, INDIA Uttar Pradesh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)IMAN ALI**
(33) Name of priority country	:NA	**2)DEVESH KUMAR**
(86) International Application No	:NA	**3)ASHAD AHMED**
Filing Date	:NA	**4)AKANSHA SINGH**
(87) International Publication No	: NA	**5)KONARK GUPTA**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
AN INTEGRATED SMART TECHNOLOGIES FOR ENERGY EFFICIENT ELECTRICAL VEHICLE AND STREET LIGHTS
The present invention relates to a system and method which consists of smart street lights which will turn on and off as per the indication of the vehicle passing through the one particular street with lightweight solar panels on the top of the street light pole and the electricity generated due to solar energy is stored in the battery for utilization during night time.

No. of Pages : 25 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202011000845 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A THERMOSENSITIVE MARKING PEN

(51) International classification	:A61K0045060000, G01K0011120000, G01K0003040000, C08F0212080000, A47G0019220000	(71)**Name of Applicant :** **1)AMITY UNIVERSITY** Address of Applicant :AMITY UNIVERSITY CAMPUS, SECTOR-125, NOIDA UTTAR PRADESH-201313, INDIA Uttar Pradesh India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)ASHISH KUMAR**
(33) Name of priority country	:NA	**2)ARUN KUMAR SHARMA**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to provides a thermosensitive pen, color changing temperature indicator. It provides with change in color which is proportional to the change in temperature and time which represent the true shelf-life of the specific products. It also gives an indication, when the product is nearing its shelf-life.

No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202011000875 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VEHICLE MONITORING SYSTEM

(51) International classification	:B60R0021010000, B60R0021017000, A01M0031000000, G07C0005000000, G01M0003000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)CGC Technical Campus Jhanjeri
Address of Applicant :State Highway 12A Jhanjeri, Sahibzada Ajit Singh Nagar, Punjab 140307, India. Punjab India
(72)**Name of Inventor :**
1)Dheeraj Singh
2)Anurag Yadav
3)Kritika
4)Abhishek Singh
5)Dr. Raman Chadha

(57) Abstract :
The present invention relates to a vehicle monitoring system, comprises a copper layer fabricated on a chassis of the vehicle for signal transmission, a tin lead cover wrapped over to protect the copper layer to prevent signal from interference, multiple laser light sensors for detecting wheel alignment, oil leakage and tyres air pressure, controller for generating a data signal, a thermal sensor for measuring temperature inside the vehicle and further actuating a fire extinguisher by controller upon detection of temperature greater than that of the user defined temperature, a safing sensor to detect collision of the vehicle and deploying an air bag through controller upon detection of collision, amplifier as a comparator for detecting short circuit and disconnecting power supply during short circuit and a communication module for transmitting data signal to a user interface.

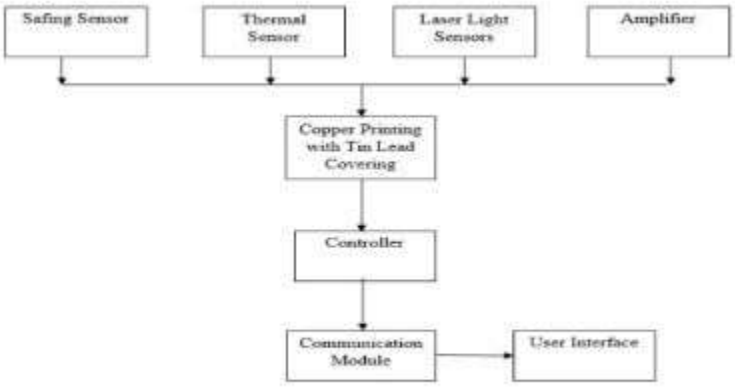


Figure 1

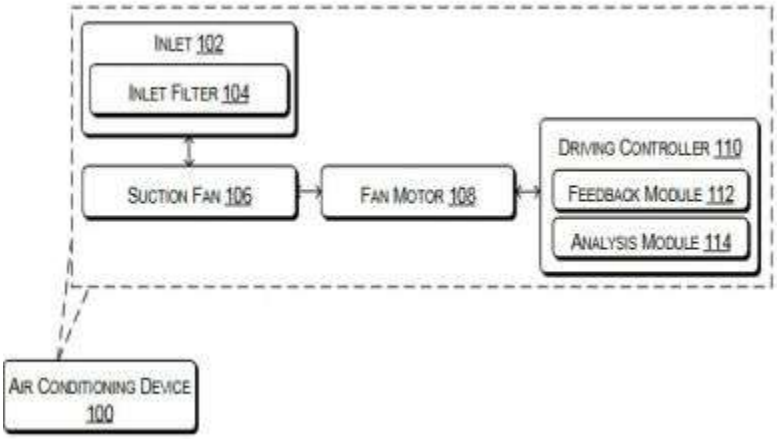
No. of Pages : 11 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202011000892 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : ACCUMULATED PARTICULATE MATTER DETECTION IN AN AIR CONDITIONING DEVICE

(51) International classification	:B60H0001000000, F24F0011300000, F02D0041020000, F24F0011770000, A47L0009280000	(71)**Name of Applicant :** **1)PANASONIC INDIA PVT. LTD.** Address of Applicant :12th Floor, Ambience Tower, Ambience Island, NH-8, Gurgaon, Haryana 122002, India Haryana India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)JINDAL, Mudit**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Techniques are disclosed for detecting presence of accumulated particulate matter on an inlet filter (104) of an air conditioning device (100). In an example, revolutions per minute (RPM) of a fan motor (108) driving a suction fan (106) of the air conditioning device (100) is determined. A driving controller (110) of the air conditioning device then computes a difference between the RPM of the fan motor (108) and a threshold RPM, where the threshold RPM indicates an RPM of the fan motor (108) at a rated voltage of the air conditioning device (100). An absolute value of the difference is then ascertained to be greater than a threshold. Based on the ascertaining, the driving controller (110) determines and indicates the presence of the accumulated particulate matter on the inlet filter (104).



No. of Pages : 29 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202011000898 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SHIFT DEVICE

(51) International classification	:A61B0008000000, G01D0011240000, F16H0061688000, H04N0005225000, G01L0005220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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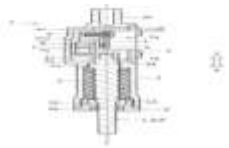
Address of Applicant :2-1, Somejidai 6-chome, Hamakita-ku, Hamamatsu-shi, Shizuoka, 434-0046, Japan. Japan
(72)**Name of Inventor :**
1)YUSUKE SAWAKI

(57) Abstract :
To provide a shift device that can prevent a malfunction by controlling the influence of external magnetism while maintaining assembly performance and manufacturing costs. A shift device 1 includes a shaft member L that is displaceable in accordance with shift operation of a shift pedal of a vehicle, a housing 2 that houses the shaft member L in a displaceable manner and configured to integrally move with the shaft member L that has reached its displacement end so as to enable shift transmission of the vehicle, a permanent magnet M that is formed on the shaft member L and configured to generate magnetism, and a magnetometric sensor 5 that is attached to the housing 2 and configured to detect a magnetic variation of the permanent magnet M so as to detect displacement of the shaft member L with respect to the housing 2. The magnetometric sensor 5 is arranged in the housing 2.



No. of Pages : 24 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/03/2020
(21) Application No.202014010447 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CORNEA PROJECTION DEVICE FOR OPHTHALMIC SLIT LAMP MICROSCOPE

(51) International classification	:A61B0003135000, A61F0009008000, A61B0003125000, A61F0009009000, G02B0003080000
(31) Priority Document No	:202010005705
(32) Priority Date	:03/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)CHONGQING KANGHUARUIMING SCIENCE TECHNOLOGY CO. LTD
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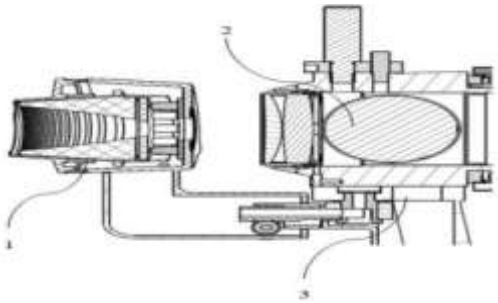
(72)**Name of Inventor :**
1)Yi Wang

(57) Abstract :
An additional cornea projection device for ophthalmic slit lamp microscope, comprising: a cornea projection device, a slit lamp microscope optical body, an curved arm and the connecting part. The cornea projection device is connected to the upper or lower part of the optical body of the slit lamp microscope, or to the left or right side of the curved arm. When the cornea projection device is not in use, it can be rotated to a non-working position while being kept connected, and there is no obstacle to the normal use of the slit light source projection device of the ophthalmic slit lamp microscope. An ophthalmic slit lamp microscope with a cornea projection device has a simple overall structure, reliable performance, low cost, obvious advantages, convenient for production, debugging and maintenance.



No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/12/2020

(21) Application No.202014052655 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART CAPACITOR

(51) International classification	:H01L0027108000, H01G0004330000, H01G0013000000, H01G0002100000, A61J0007040000
(31) Priority Document No	:62/958,324
(32) Priority Date	:08/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Schneider Electric USA, Inc.
Address of Applicant :Boston ONE Campus, 800 Federal Street, Mail Stop: 1N, Andover, Massachusetts 01810-1067, United States of America U.S.A.
(72)**Name of Inventor :**
1)A, Pradeep William
2)CHAKRASALI, Malatesha B.
3)KULKARNI, Ravindra Narayan
4)BASU, Sutanu

(57) Abstract :
Methods and systems include identifying an abnormal condition in a PFC circuit comprising an input configured to be coupled to a 3-phase power source and to receive input 3- 5 phase power from the 3-phase power source, a bus having a plurality of bus lines, each bus line configured to be coupled to the input and to carry one phase of the input 3-phase power, a PFC leg including a contactor configured to selectively couple a capacitor bank included in the PFC leg to the bus. In response to identifying the abnormal condition, the contactor is controlled to decouple the capacitor bank from the bus, and after a reset button has been activated, the 10 contactor is recoupled to the capacitor bank to resume operating the PFC leg to provide power factor correction to the input 3-phase power. Figure 3

No. of Pages : 32 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/12/2020
(21) Application No.202014053881 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR REQUESTING SIDELINK TRANSMISSION RESOURCES IN A WIRELESS COMMUNICATION SYSTEM

(51) International classification	:H04W0072040000, H04W0076140000, H04B0007260000, H04W0016140000, H04W0072100000
(31) Priority Document No	:62/958,061
(32) Priority Date	:07/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)ASUSTeK COMPUTER INC.
Address of Applicant :No. 15, Lite Rd., Peitou Dist., Taipei City 112, Taiwan
(72)**Name of Inventor :**
1)Pan, Li-Te
2)Kuo, Richard Lee-Chee

(57) Abstract :
METHOD AND APPARATUS FOR REQUESTING SIDELINK TRANSMISSION RESOURCES IN A WIRELESS COMMUNICATION SYSTEM A method and apparatus are disclosed from the perspective of a first User Equipment (UE) (300) to request dedicated sidelink configuration. In one embodiment, the method includes the first UE transmitting (1205) a first Radio Resource Control (RRC) message to a network node, wherein the first RRC message includes a sidelink Quality of Service (QoS) information, and wherein a presence of an identity of a sidelink QoS flow in the sidelink QoS information is mandatory and a presence of a QoS profile of the sidelink QoS flow in the sidelink QoS information is optional. The method also includes the first UE receiving (1210) a second RRC message from the network node, wherein the second RRC message includes a dedicated sidelink configuration and the identity of the sidelink QoS flow associated with the dedicated sidelink configuration. Fig: 12

No. of Pages : 77 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/12/2020
(21) Application No.202014054043 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POWER SUPPLY SYSTEM

(51) International classification	:H01L0025100000, H01L0023538000, H05K0001140000, A61K0008350000, H01H0023200000
(31) Priority Document No	:202010018822.8
(32) Priority Date	:08/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Delta Electronics (Shanghai) Co., Ltd.
Address of Applicant :1F&7F&8F, Building 1, No.1675 Huadong Road, Pudong, Shanghai 201209, China China
(72)**Name of Inventor :**
1)Pengkai JI
2)Shouyu HONG
3)Haoyi YE
4)Jianhong ZENG

(57) Abstract :
ABSTRACT POWER SUPPLY SYSTEM A power supply system includes a system board electrically connected to a load; a first package and a second package provided on an upper side of the system board; and a bridge member provided on upper sides of the first package and the second package, comprising a passive element and used for power coupling between the first package and the second package, wherein vertical projections of the first package and the second package on the system board are both overlapped with a vertical projection of the bridge member on the system board, the first package, and the second package are encapsulated with switching devices, terminals on upper surfaces of the first package and the second package are electrically connected to the bridge member, and terminals on lower surfaces thereof are electrically connected to the system board.

No. of Pages : 67 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/12/2020

(21) Application No.202014054853 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM WITH ACTIVE FILTER FOR A BATTERY

(51) International classification	:H02J0001000000, H02J0009060000, H02M0001120000, B60L0058190000, H03K0005133000
(31) Priority Document No	:16/733,418
(32) Priority Date	:03/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Westinghouse Air Brake Technologies Corporation
Address of Applicant :1001 Air Brake Avenue Wilmerding Pennsylvania U.S.A. 15148 U.S.A.
(72)**Name of Inventor :**
1)Ajith K. Kumar
2)Ravisekhar N. Raju
3)Patrick L. Jansen

(57) Abstract :
ABSTRACT SYSTEM WITH ACTIVE FILTER FOR A BATTERY A system may be provided that may include a first battery, and an inverter coupled to the battery. The system may also include a first active filter including a first switch element, second switch element, third switch element, and fourth switch element. Each switch element may be coupled to the first battery or the inverter. The first, second, third, and fourth switch elements may be configured to increase or decrease an applied voltage or current of the first battery.

No. of Pages : 44 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202014055340 A
(19) INDIA
(22) Date of filing of Application :19/12/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DENTAL FLOSS STICK

(51) International classification	:A61C0015040000, B62D0025040000, A61K0008020000, A47C0027080000, B65D0025520000	(71)**Name of Applicant :** **1)Peng Li** Address of Applicant :No. 4, Unit 2, 10th Floor, Area 12, Heping Street, Chaoyang, Beijing, China China (72)**Name of Inventor :** **1)Peng Li**
(31) Priority Document No	:202020029692.3	
(32) Priority Date	:08/01/2020	
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The invention discloses a dental floss stick, comprising an upper piece and a lower piece, wherein both the upper piece and the lower piece are U-shaped; the top of both ends of the opening of the upper piece and the top of both ends of the opening of the lower piece (are rotatably connected; the upper part of both ends of the opening of the upper piece is provided with a bulge, and the upper part of both ends of the opening of the lower piece is provided with a groove corresponding to the bulge; the middle part of the upper piece is provided with a female buckle, and the middle part of the lower piece is provided with a male buckle matching the female buckle; the upper part of both ends of the opening of the upper piece is provided with a dental floss; the dental floss is wound on the upper piece, and the winding place of the dental floss and the upper piece is located on the upper side of the bulge; the upper part of either end of the opening of the lower piece is provided with a blade; the blade is located at the groove, and the blade has the function of cutting the dental floss; the middle part of the upper piece is provided with a handle. The invention has simple structure and convenient use. It is convenient to replace dental flosses, which avoids waste of dental floss sticks, and has high practical value and promotion value.

No. of Pages : 13 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :19/12/2020

(21) Application No.202014055369 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INSPECTION DEVICE FOR CYLINDRICAL BODIES

(51) International classification	:G01B0011270000, G01B0005000000, G01N0021952000, H04B0007155000, B23K0037053000
(31) Priority Document No	:20150706.8
(32) Priority Date	:08/01/2020
(33) Name of priority country	:EPO
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Schott AG
Address of Applicant :Hattenbergstrae 10, 55122 Mainz (DE) Germany
(72)**Name of Inventor :**
1)WITZMANN, Dr. Andr
2)EISNER, Armin
3)WITKOWSKI, Robert

(57) Abstract :
Herein, a specific inspection device for a cylindrical body and a specific bundle of cylindrical bodies having improved straightness are described.

No. of Pages : 27 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/12/2020
(21) Application No.202014055669 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRANSMISSION DEVICE

(51) International classification	:F16H0007180000, F16H0057040000, H04N0013178000, F16H0003720000, H04B0003520000
(31) Priority Document No	:2020-001419
(32) Priority Date	:08/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)SUZUKI MOTOR CORPORATION
Address of Applicant :300 Takatsuka-cho, Minami-ku, Hamamatsu-shi, Shizuoka 432-8611, Japan Japan
(72)**Name of Inventor :**
1)Shota SATO

(57) Abstract :
TRANSMISSION DEVICE 5 A transmission device according to present invention includes a detent side cam 48 that is provided integrally with an intermediate member 44, a switch side cam 59 that is configured to move integrally with a shift-and-select shaft 41, a neutral switch 71 that is configured to detect a shift position in accordance with contact with the switch side cam 59, a detent member 73 that contacts the detent side cam 48 to apply a shift load. A shift case 31 10 includes a front side wall 32a that is inclined relative to an orthogonal plane orthogonal to an input shaft 13 when seen from an axial direction of the shift-and-select shaft 41. The neutral switch 71 and the detent member 73 are attached so as to be perpendicular to the front side wall 32a.

No. of Pages : 34 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/12/2020
(21) Application No.202014055901 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : OBSTRUCTION DETECTION SYSTEM

(51) International classification	:B60Q0009000000, B60W0040060000, G05D0001020000, B60W0030095000, G08G0001096200
(31) Priority Document No	:16/733,465
(32) Priority Date	:03/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)XORAIL, LLC
Address of Applicant :5011 Gate Parkway Building 100, Suite 400 Jacksonville FL U.S.A. 32256 U.S.A.
(72)**Name of Inventor :**
1)James Lucas
2)Brad Von Tersch
3)Mike Kirchner

(57) Abstract :
ABSTRACT OBSTRUCTION DETECTION SYSTEM A system includes one or more processors. The one or more processors are configured to receive crossing obstruction information from an optical sensor disposed proximate a crossing of a route traversed by a vehicle, with the crossing obstruction information indicating a presence of an obstruction to the crossing; obtain position information indicating a position of the vehicle traversing the route; determine proximity information of the vehicle indicating proximity of the vehicle to the crossing using the position information; determine a presence or absence of an alert state indicating a potential of the crossing being obstructed using the crossing obstruction information and the proximity information; and perform a responsive activity based responsive to a determination of the presence of the alert state.

No. of Pages : 34 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/12/2020
(21) Application No.202014056750 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AIR GUIDING SYSTEM OF COMBUSTION ENGINE

(51) International classification	:F02M0025120000, C01B0003040000, F02M0035040000, F02B0043100000, B01D0046000000
(31) Priority Document No	:109200340
(32) Priority Date	:08/01/2020
(33) Name of priority country/region	:Taiwan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Shih Feng Chao
Address of Applicant :No. 23, Zili 4th St., Wuqi Dist., Taichung City, Taiwan
(72)**Name of Inventor :**
1)Shih Feng Chao

(57) Abstract :
ABSTRACT AIR GUIDING SYSTEM OF COMBUSTION ENGINE An air guiding system of a combustion engine comprises a hydrogen generator (1) for generating hydrogen; an air supply device (2) for supplying air; a nitrogen filter (3), connected with the air supply device (2) to receive air for filtering nitrogen molecules in the air; and a combustion chamber (4), connected with the hydrogen generator (1) and the nitrogen filter (3) to receive the hydrogen and filtered air as a fuel for combustion. The invention filters out nitrogen molecules in the air, so that the combustion product does not generate nitrogen dioxide, thereby protecting the environment and human health.

No. of Pages : 7 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/12/2020
(21) Application No.202014057541 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NETWORK SLICE QUOTA MANAGEMENT

(51) International classification	:H04W0048180000, H04M0015000000, H04W0004240000, H04L0012140000, H04N0019174000
(31) Priority Document No	:62/956,713
(32) Priority Date	:03/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :One Apple Park Way Cupertino, California 95014, United States of America U.S.A.
(72)**Name of Inventor :**
1)PRABHAKAR, Alosious Pradeep
2)VENKATARAMAN, Vijay
3)KISS, Krisztian
4)NIMMALA, Srinivasan
5)XING, Longda
6)AGUD RUIZ, Jordi

(57) Abstract :
Apparatuses, systems, and methods for performing network slice quota management. 5 A network slice quota management function may store capacity information for one or more network slices. The network slice quota management function may receive a request for an indication of whether a network slice has additional capacity. The network slice quota management function may provide an indication of whether the network slice has additional capacity in response to the request. The capacity 10 information may relate to the capacity of the network slice with respect to the number of wireless devices registered for the network slice, or to the capacity of the network slice with respect to the number of packet sessions established with the network slice, or both, among various possibilities.

No. of Pages : 76 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202014057549 A
(19) INDIA
(22) Date of filing of Application :31/12/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : CIRCULAR SAW BLADE AND ELECTRIC TOOL

(51) International classification	:B23D0061020000, B25F0005000000, B23D0045160000, B23D0059000000, B27B0009020000
(31) Priority Document No	:202020009133.6
(32) Priority Date	:03/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BOSCH POWER TOOLS (CHINA) CO. LTD.
Address of Applicant :567 Bing Kang Road, BinJiang District Hangzhou, Zhejiang 310052, China China
(72)**Name of Inventor :**
1)WANG, Shaojiang

(57) Abstract :
The present application provides a circular saw blade, being disc-shaped and having a rotation centre (S), the circular saw blade comprising an even number of sawteeth (10) which have tooth tips and are distributed along a periphery of the circular saw blade, adjacent said sawteeth (10) being separated by a trough; the circular saw blade has several near-to-teeth cooling holes (20), each of the near-to-teeth cooling holes (20) passing through a midpoint (P1) of a connecting line (L1) of two outermost tooth tips of four adjacent tooth tips (T). The circular saw blade according to implementations of the present application facilitates cooling.

No. of Pages : 12 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202014057552 A
(19) INDIA
(22) Date of filing of Application :31/12/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR DETERMINING WHETHER DPF APPARATUS IS CLOSE TO FULL LOAD

(51) International classification	:B60L0003000000, G05D0001100000, F01N0003023000, G06F0009540000, H01M0004131500	(71)**Name of Applicant :** **1)ROBERT BOSCH GMBH** Address of Applicant :Postfach 30 02 20, 70442 Stuttgart, Germany Germany
(31) Priority Document No	:202010008997.0	(72)**Name of Inventor :** **1)ZHANG, Shoudong** **2)HU, Feng**
(32) Priority Date	:06/01/2020	
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present application provides a system for preventing DPF apparatus 5 overheating, the system comprising a fuel consumption calculator (22); a timer (24); a mileage calculator (26); and an optimized prevention controller (27), configured to calculate a fuel consumption amount factor (FF), an engine operation duration factor (EF) and a vehicle travelled mileage factor (DF), and set the largest of these as a maximum optimization factor (MF); a basic prevention controller (37), configured to 10 obtain a carbon loading amount factor (SF); and a main control unit (10), configured to set the larger of the maximum optimization factor (MF) and carbon loading amount factor (SF) as a prevention factor (F) when an optimized prevention module (20) is enabled or to set the carbon loading amount factor (SF) as a prevention factor (F) when the module is disabled.

No. of Pages : 21 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/12/2020
(21) Application No.202014057553 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CIRCULAR SAW BLADE AND ELECTRIC TOOL

(51) International classification	:B23D0061020000, B25F0005000000, B23D0045160000, B23D0059000000, B27B0009020000
(31) Priority Document No	:202010005797.X
(32) Priority Date	:03/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BOSCH POWER TOOLS (CHINA) CO. LTD.
Address of Applicant :567 Bing Kang Road, BinJiang, District Hangzhou, Zhejiang 310052, China China
(72)**Name of Inventor :**
1)TOLAZZI, Massimo
2)WANG, Shaojiang

(57) Abstract :
CIRCULAR SAW BLADE AND ELECTRIC TOOL The present subject matter provides a circular saw blade and an electric tool. The circular saw blade is in the form of a plate and has a rotation centre, the circular 5 saw blade comprising multiple cutter shoulders (2) distributed along a periphery of the circular saw blade, each of the cutter shoulders (2) comprising a cutter tooth (21) located at a front edge and a cutter back (22) located at a rear edge, and a tooth back (23) between the cutter tooth (21) and cutter back (22), with adjacent said cutter shoulders (2) being separated by a trough (3), characterized in that the tooth back (23) 10 comprises a first peak (231) between the cutter tooth (21) and the cutter back (22), and a second peak (232) at the cutter back (22). The circular saw blade according to implementations of the present subject matter facilitates heat dissipation.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/10/2020
(21) Application No.202017046266 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BACILLUS SUBTILIS CJBS303 AND COMPOSITION COMPRISING SAME

(51) International classification	:C12N0001200000, C12R0001125000, A23K0010160000, C12R0001070000, C02F0003340000
(31) Priority Document No	:10-2019-0026476
(32) Priority Date	:07/03/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000133
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/179999
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)CJ CHEILJEDANG CORPORATION
Address of Applicant :(Ssangnim-dong) 330, Dongho-ro Jung-gu, Seoul 04560 Republic of Korea
(72)**Name of Inventor :**
1)KIM, Yu Jin
2)PARK, Min Ah
3)OH, Eun Seon
4)WOO, Seo Hyung

(57) Abstract :
The present application relates to a Bacillus subtilis CJBS303 strain and use thereof, and provides a strain having the effect of reducing odors from livestock manure, a composition and a microbial agent which comprise the strain, and a feed composition comprising the composition.

No. of Pages : 21 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202017050326 A
(19) INDIA
(22) Date of filing of Application :19/11/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : ANODE ACTIVE MATERIAL FOR SECONDARY BATTERY, ELECTRODE COMPRISING SAME, AND METHOD FOR MANUFACTURING SAME

(51) International classification	:H01M0004360000, H01M0004587000, H01M0010052500, H01M0004133000, H01M0004020000
(31) Priority Document No	:10-2019-0000664
(32) Priority Date	:03/01/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000152
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/141953
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)CHOI, Hee Won
2)KIM, Je Young
3)WOO, Sang Wook
4)PIAO, Li Lin

(57) Abstract :
The present invention relates to an anode active material for a secondary battery, which has improved cycle swelling properties and rapid charge performance, an anode comprising same, and a method for manufacturing same. The anode active material is a mixture of scaly natural graphite and spherical natural graphite, wherein an average particle diameter (D 50) of the scaly natural graphite is 10 to 15 and an average particle diameter (D 50) of the spherical natural graphite is 14 or less.

No. of Pages : 48 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202017050455 A
(19) INDIA
(22) Date of filing of Application :19/11/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : ENERGY STORAGE SYSTEM HAVING STRUCTURE CAPABLE OF DISSIPATING HEAT TO ADJACENT BATTERY MODULES

(51) International classification	:H01M0002100000, H01M0010647000, H01M0010656800, F21Y0115100000, H02J0015000000
(31) Priority Document No	:10-2019-0001421
(32) Priority Date	:04/01/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000139
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/141943
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)LG CHEM, LTD.
Address of Applicant :128, Yeoui-daero, Yeongdeungpo-Gu, Seoul 07336 Republic of Korea
(72)**Name of Inventor :**
1)LEE, Jin-Kyu
2)KIM, Soo-Han

(57) Abstract :
An energy storage system according to one embodiment of the present invention, comprises: a pair of rack frames spaced apart from each other and arranged side by side; a plurality of L brackets fastened to the rack frames; a plurality of battery modules mounted on a pair of L brackets facing each other, and forming a plurality of layers along the longitudinal direction of the rack frame; a first heat transfer member interposed between the battery modules and the L brackets; and a second heat transfer member interposed between the rack frames and the L brackets.

No. of Pages : 13 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/11/2020
(21) Application No.202017050905 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SLAVE BMS INSPECTION SYSTEM AND METHOD

(51) International classification	:H01M0010420000, H02J0007000000, H01M0010480000, B60L0058120000, H04Q0009000000
(31) Priority Document No	:10-2019-0015709
(32) Priority Date	:11/02/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000317
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/166827
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)LG CHEM, LTD.
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(72)**Name of Inventor :**
1)CHOI, Yean Sik
2)PARK, Chan Ha
3)YANG, Seong Yeol

(57) Abstract :
The present invention relates to a master battery management system (BMS) which is used in a battery system and in which a plurality of slave BMSs and the master BMS wirelessly communicate with each other, the master BMS comprising: a receiving unit for receiving, from each of the plurality of slave BMSs, data about a corresponding slave BMS and data transmission information about at least one other slave BMS of the plurality of slave BMSs, excluding the corresponding slave BMS, during one period in which each of the plurality of slave BMSs transmits data at least once; and a determination unit for determining a communication error or an abnormal slave BMS by using the data about the corresponding slave BMS and the data about the at least one other slave BMS, the data being received from each slave BMS during the one period, wherein the data transmission information about the at least one other slave BMS is information related to the data transmission history of the other slave BMS.

No. of Pages : 22 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/12/2020
(21) Application No.202017056095 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FLUID MANAGEMENT SYSTEM AND METHOD

(51) International classification	:A61F0013420000, H01L0021670000, G01F0023292000, G01N0021800000, C12Q0001040000
(31) Priority Document No	:62/789283
(32) Priority Date	:07/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012209
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/146209
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)ILLUMINA, INC.
Address of Applicant :5200 Illumina Way San Diego, CA 92122 U.S.A.
(72)**Name of Inventor :**
1)HOLST, Gregory, L.
2)TAYLOR, Jay

(57) Abstract :
A fluid detection system includes a wicking material to draw fluid away from a first location with space limitations and proximate to a fluid device or a fluid interface. The wicking material draws the fluid to a remote fluid indicator at a second location. Contact between fluid and the remote fluid indicator produces a detectable alteration to the remote fluid indicator, and a non-contact optical sensor detects the alteration.

No. of Pages : 21 No. of Claims : 23

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202114000106 A
(19) INDIA
(22) Date of filing of Application :02/01/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : FORMULATION AND IT™S USE AS DEFOAMER

(51) International classification	:A61Q0019000000, A61K0008894000, A61K0031090000, C08G0018610000, C11D0017000000
(31) Priority Document No	:20150732.4
(32) Priority Date	:08/01/2020
(33) Name of priority country	:EPO
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Evonik Operations GmbH
Address of Applicant :Rellinghauser Strasse 1-11, 45128 Essen (DE) Germany
(72)**Name of Inventor :**
1)SCHULZ, Alexander
2)FAVRESSE, Philippe
3)HERRWERTH, Sascha
4)SCHUBERT, Frank
5)LOBERT, Matthias
6)TROENDLIN, Johannes
7)THOMALLA, Thomas
8)SCHIERLE, Thorsten
9)GIPPERT, Michael
10)URBATH, Jonas

(57) Abstract :
The present invention relates to a formulation comprising a polyether siloxane, which is characterized in that a polyether that is terminated with an ester group and that is different from the polyether siloxane is present in the formulation in an amount of from 0.5 to 10 % by weight based on the complete formulation, to a process for the production of a defoamed composition, wherein the inventive formulation is added to the composition to be defoamed, and to a composition comprising a formulation according to the invention, wherein the composition is a coating agent, a paint or a varnish.

No. of Pages : 28 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2021

(21) Application No.202114000117 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SEALING PLUG

(51) International classification	:H01M0002360000, H02G0003220000, A61J0001100000, H02G0003040000, E04G0017060000	(71)**Name of Applicant :** **1)ILLINOIS TOOL WORKS INC.** Address of Applicant :155 Harlem Avenue, Glenview, Illinois 60025, United States of America U.S.A.
(31) Priority Document No	:202010004805.9	(72)**Name of Inventor :** **1)WANG, Shaoyi**
(32) Priority Date	:03/01/2020	
(33) Name of priority country	:China	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A sealing plug for sealing a hole in a panel, comprising: a sealing plug body, a sealing lip and a support lip, the sealing plug body comprises upper portion and lower portion; the sealing lip is disposed around the sealing plug body, and the sealing lip extends downward from the upper portion of the sealing plug body and away from a central axis of the sealing plug body; the support lip is disposed around 10 the sealing plug body, and extends upward from the lower portion of the sealing plug body and away from the central axis of the sealing plug body; the sealing plug body has a recess recessed inwardly from an outer surface of the sealing plug body, the recess extends around the sealing plug body, and an opening of the recess is located above and adjacent to a junction of the sealing plug body and the support 15 lip.

No. of Pages : 24 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2021
(21) Application No.202114000173 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DOUBLE-BLIND MATING PLUGGABLE-MODULES HOLDER

(51) International classification	:H05K0007140000, C25D0007120000, G01R0001040000, H01R0039380000, H02K0005160000
(31) Priority Document No	:16/734529
(32) Priority Date	:06/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)CIENA CORPORATION
Address of Applicant :7035, Ridge Road, Hanover, Maryland, 21076, United States of America U.S.A.
(72)**Name of Inventor :**
1)Rivaud Daniel
2)Colton Fabien
3)Mayenburg Anthony

(57) Abstract :
ABSTRACT DOUBLE-BLIND MATING PLUGGABLE-MODULES HOLDER A pluggable-modules holder (150) for a plurality of pluggable-modules (130) of a rack-mounted unit (120) is disclosed. The pluggable-modules holder (150) includes a holder body (152) and a plurality of holder ports (154). Each of the holder ports (154) extends through the holder body (152) and is sized to hold a portion of a respective pluggable-module (130). The holder body (152) can be configured to connect to a rack-mounted unit (120) before and/or after the plurality of pluggable-modules (130) can be inserted into the plurality of holder ports (154).

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202114000234 A
(19) INDIA
(22) Date of filing of Application :04/01/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AIR BLOWING DEVICE

(51) International classification	:G03G0015020000, D06F0058380000, F26B0021000000, B82Y0010000000, A47L0005220000
(31) Priority Document No	:2020-000976
(32) Priority Date	:07/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)HONDA MOTOR CO., LTD.
Address of Applicant :1-1, Minami-Aoyama 2-chome, Minato-ku, Tokyo 107-8556 Japan, Japan
(72)**Name of Inventor :**
1)MATSUSHITA Koichiro
2)NAKAMURA Yohei
3)KITADA, Yoshihiro

(57) Abstract :
To make it possible to reduce reverse flow of airflow in an air blowing device. [Solving Means] An air blowing device includes a driving shaft 22, a fan 51 rotated as one body with the driving shaft 22, and a fan cover 52 covering the fan 51 from an outer side of an axial direction of the driving shaft 22. Air sucked in through the fan cover 52 by rotation of the fan 51 is blown out toward an outer side in a radial direction of the fan 51. The fan cover 52 includes a tubular section 71 extending in the axial direction of the driving shaft 22 on an outer side in the axial direction relative to the fan 51, an opening section 73 provided inside the tubular section 71 and intersecting the axial direction, and an opening section-side rib 77 extending in the axial direction from the opening section 73 toward the fan 51. A circular circumference-shaped fan-side rib 60 extending in the axial direction of the driving shaft 22 is provided at one side surface 58a on the opening section 73 side of the fan 51. The tubular section 71, the fanside rib 60, and the opening section-side rib 77 form a 63 labyrinth structure 80.

No. of Pages : 74 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2021
(21) Application No.202114000235 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HYBRID ADDITIVE MANUFACTURING SYSTEM

(51) International classification	:B33Y0030000000, B33Y0010000000, B22F0003105000, B33Y0050020000, B33Y0040000000	(71)**Name of Applicant :** **1)The Boeing Company** Address of Applicant :100 North Riverside Plaza, Chicago, IL 60606-1596, U.S.A. U.S.A. (72)**Name of Inventor :** **1)SAHU, Megha** **2)PRAKASH, Om**
(31) Priority Document No	:16/736,411	
(32) Priority Date	:07/01/2020	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A hybrid additive manufacturing system a build chamber (10), a polymer additive manufacturing system (12) housed within the build chamber and a physical vapor deposition (PVD) system (13) housed within the build chamber. A controller (56) is configured to issue control signals to the polymer additive manufacturing system and PVD system for layered deposition of polymer and PVD layers in a multilayer part.

No. of Pages : 26 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/01/2021

(21) Application No.202114000400 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CLUTCH CONTROLLER

(51) International classification	:F16D0048060000, B60W0010020000, F16H0061686000, F16H0037080000, B60W0030020000
(31) Priority Document No	:2020-000995
(32) Priority Date	:07/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)AISIN SEIKI KABUSHIKI KAISHA
Address of Applicant :1, Asahi-machi 2-chome, Kariya-shi, Aichi-ken, 448-8650 Japan Japan
(72)**Name of Inventor :**
1)Yuichiro KITAMURA
2)Yasuhiro HOSOI
3)Yuki TSUBOI

(57) Abstract :
A clutch controller (30) controls a clutch device (10) provided on a torque transmission path between a driving source and a transmission. The clutch controller (30) includes: a control unit (35) configured to control engagement and disengagement of the clutch device (10); a detection unit (33) configured to detect whether or not a differential rotation speed between a rotation speed of an engine and an input rotation speed of the transmission when a vehicle is traveling and the transmission is in neutral is equal to or higher than a predetermined speed; and a calculation unit (34) configured to calculate a clutch stroke when the vehicle is traveling and the detection unit (33) detects that the differential rotation speed is equal to or higher than the predetermined speed.

No. of Pages : 42 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202114000729 A
(19) INDIA
(22) Date of filing of Application :07/01/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : TEMPERATURE PROTECTION CIRCUIT AND CONTROL METHOD THEREOF

(51) International classification	:H02H0005040000, A01G0013000000, D06F0033000000, H05B0045500000, H04B0001400000
(31) Priority Document No	:202010013417.7
(32) Priority Date	:07/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BOSCH AUTOMOTIVE PRODUCTS (SUZHOU) CO., LTD.
Address of Applicant :No. 126 Su Hong Xi Lu Suzhou Industrial Park, Suzhou, Jiangsu 215021, China China
(72)**Name of Inventor :**
1)ZHANG, Haibo
2)ZHAN, Kang

(57) Abstract :
The present subject matter relates to a temperature protection circuit (1000), 5 said circuit comprising: a thermal sensitive element (110); and a voltage-dividing element (120) connected with the thermal sensitive element (110) in series, wherein the resistance of the voltage-dividing element (120) varies with an external control signal so that the difference between the resistance of the thermal sensitive element (110) and the resistance of the voltage-dividing element (120) is within a preset range. 10 Thus, the voltage between the two ends of the thermal sensitive element (110) is comparable to the voltage between the two ends of the voltage-dividing element (120) even at a high temperature and the working accuracy of the temperature protection circuit (1000) is effectively improved.

No. of Pages : 30 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2021
(21) Application No.202117007691 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BATTERY MANAGEMENT APPARATUS AND METHOD

(51) International classification	:H02J0007000000, G01R0031360000, H01M0010480000, G01R0031383500, G01R0019165000
(31) Priority Document No	:10-2019-0007120
(32) Priority Date	:18/01/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000205
Filing Date	:06/01/2020
(87) International Publication No	:WO 2020/149557
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)LG CHEM, LTD.
Address of Applicant :128, Yeoui-daero, Yeongdeungpo-Gu, Seoul 07336 Republic of Korea
(72)**Name of Inventor :**
1)SHIN, Hak-Yong

(57) Abstract :
A battery management apparatus according to the present invention comprises: a voltage measurement unit configured to measure a battery voltage of a battery; a bending degree measurement unit provided on at least one side of the battery to measure a battery bending degree of the battery; and a processor configured to receive the battery voltage from the voltage measurement unit, receive the battery bending degree from the bending degree measurement unit, set a reference bending degree according to whether the battery voltage is included in any one of an over-discharge voltage section, an allowable voltage section, and an over-charge voltage section, compare the battery bending degree with the reference bending degree, and perform a protection operation for the battery on the basis of a result of comparing the bending degrees.

No. of Pages : 30 No. of Claims : 15

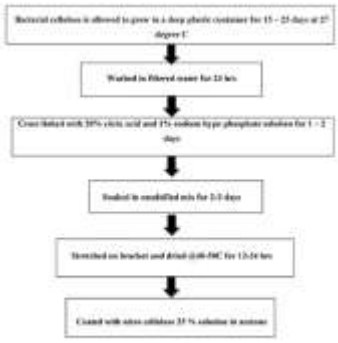
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2020

(21) Application No.201921026808 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : The invention describes methods and processes for production bioleather using micro-organisms.

(51) International classification	:G06Q0050040000, E21B0043017000, B27N0003140000, B21F0027120000, B42C0019020000	(71)**Name of Applicant :** **1)PRITESH DHANESH MISTRY** Address of Applicant :EC 52/B, 304, MANGAL GEET CHS,OPP.EASYDAY, EVERSHINE CITY, VASAI (EAST), PALGHAR, MAHARASHTRA, INDIA-401 208. Maharashtra India
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)PRITESH DHANESH MISTRY**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT: This invention describes a process of making a Dried Bacterial cellulose scaffold (DBCS) which can replace natural and synthetic leather. The scaffold is made with the combination of yeast and bacteria by breeding them in a container and then the celluloses is coated with wax and oil to obtain the texture required as similar as leather after properly washing it and drying it. The cellulose is dried and then finally coated with emulsion based out of nitrogen to obtain the final product. The method of making is eco-friendly which causes no harm in the making. This is pollution free and no animal killing is required in making the bioleather. TITLE The invention describes methods and processes for production bioleather using micro-organisms.



No. of Pages : 10 No. of Claims : 6

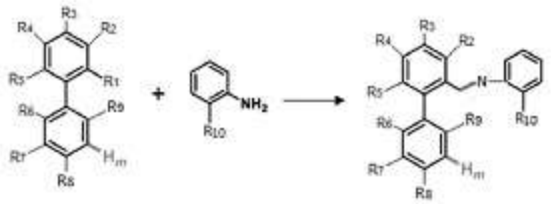
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.201921053680 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A PROCESS FOR DISTAL C-H FUNCTIONALIZATION

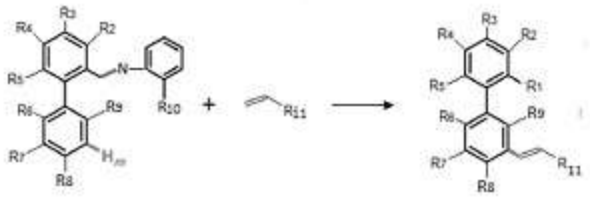
(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)Indian Institute of Technology Bombay** Address of Applicant :Powai, Mumbai , Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Sukdev Bag**
(33) Name of priority country	:NA	**2)Sadhan Jana**
(86) International Application No	:NA	**3)Suman Bhowmick**
Filing Date	:NA	**4)Sukumar Pradhan**
(87) International Publication No	: NA	**5)Nupur Goswami**
(61) Patent of Addition to Application Number	:NA	**6)Debabrata Maiti**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to distal C-H olefination. The process comprises reacting a compound of formula (I) with a amine compound of formula (II) (Temporary Directing Groups - TDG) to obtain an imine compound of formula (III) followed by reacting said imine compound of formula (III) with a compound of formula IV to obtain a compound of formula V



Formula I Formula II Formula III

followed by reacting said imine compound of formula (III) with a compound of formula IV to obtain a compound of formula V



Formula III Formula IV Formula V

No. of Pages : 47 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202021000088 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A DIGITAL DOSING APPARATUS

(51) International classification	:B01F0015000000, B01F0015040000, G05D0011130000, G01N0035000000, A01K0005020000	(71)**Name of Applicant :** **1)ORG ENGITECH LTD** Address of Applicant :1009/P, B/h Kashi Pack care, Opp Techflow, Kubadthal, Kathwada-Singarva, Ahmedabad-382340, Gujarat Gujarat India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)GAJERA, ANIL ARVINDBHAI**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The subject matter of this invention discloses a digital dosing apparatus for automatically receiving and mixing predefined amount of concentrated chemical with water to prepare a diluted chemical without any human intervention. The digital dosing apparatus of present invention is comprising of: a dilution tank having an upper level sensor and a lower level sensor for receiving water and concentrated chemical to prepare diluted chemical; a feed chemical tank connected with the dilution tank through secondary pump to feed concentrated chemical into the dilution tank; a primary pump to feed water into the dilution tank. The dilution tank of dosing apparatus automatically receives feed water and concentrated chemical when the lower level sensor gives a signal to a control unit and stops the primary pump when the upper level pump sends the signal to the control unit.

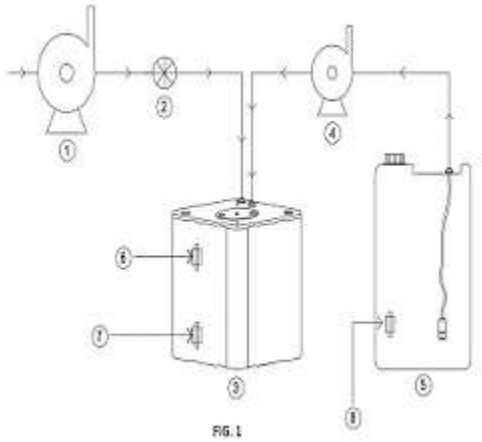


FIG. 1

No. of Pages : 20 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202021000093 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SECURITY SYSTEM AND METHOD THEREOF FOR PROVIDING SECURITY TO A VEHICLE

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)TATA MOTORS LIMITED** Address of Applicant :Bombay House, 24 Homi Mody Street, Hutatma Chowk, Mumbai - 400 001, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Sajal Gupta**
(33) Name of priority country	:NA	**2)Dhiraj Baburao Khandekar**
(86) International Application No	:NA	**3)Aniruddha Mohan Kulkarni**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Embodiment herein provide a security system and method thereof for a vehicle. The security system comprising a dual mode controller (2) connected to one or more sensors (1) and is operable in a reverse parking assistance mode and a theft detection mode. The dual mode controller (2) detects whether ignition of the vehicle is in on-condition or off-condition. When the ignition of the vehicle is in the off-condition, the dual mode controller (2) operates in the theft detection mode to detect an intruder at or near the vehicle using the one or more sensors (1). Further, when the ignition engine of the vehicle is in the on-condition, the dual mode controller (2) operate in both a theft detection mode and the reverse parking assistance mode to alert a driver of obstacle while moving the vehicle in a reverse direction using the one or more sensors (1). FIG. 1

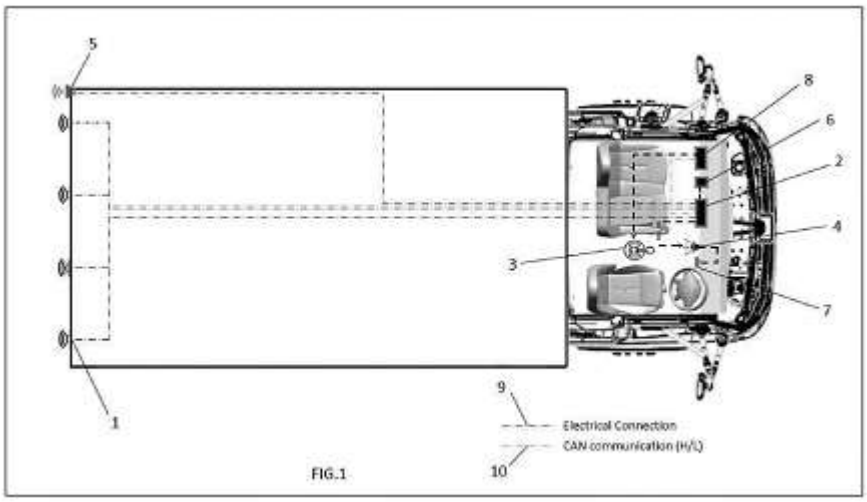


FIG.1

No. of Pages : 30 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202021000138 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A BRAKE PAD ASSEMBLY FOR DISC BRAKES

(51) International classification	:F16D0065092000, F16D0065097000, F16D0065000000, F16D0069040000, F16D0065095000	(71)**Name of Applicant :** **1)Foundation Brake Manufacturing Private Limited** Address of Applicant :Division of Chassis Brakes International, Suzlon One Earth, Sun Building-Level 2, Hadapsar, Pune 411028, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Raajha Muthu Raju Pravasa Raju**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A brake pad assembly (300) for disc brakes is disclosed. The brake pad assembly (300) comprises a shim (302) sandwiched between a first backplate (304) and a second backplate (306). A brake pad (308) is joined over one of the first backplate (304) and the second backplate (306). The brake pad assembly (300) prevents shim pinching and shim debonding, achieves low or no excitation of brake pads, and provides protection from thermo-mechanical damages of the shim (302) over time. (Fig. 3)

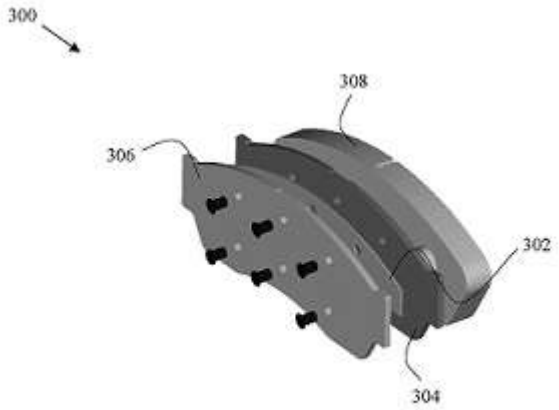


Fig. 3

No. of Pages : 16 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202021000139 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ARRANGEMENT OF BRAKING MATERIAL FOR DRUM BRAKES

(51) International classification	:F16D0065080000, F16D0066020000, F16D0069040000, F16D0051000000, F16D0069000000	(71)**Name of Applicant :** **1)Foundation Brake Manufacturing Private Limited** Address of Applicant :Division of Chassis Brakes International, Suzlon One Earth, Sun Building-Level 2, Hadapsar, Pune 411028, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Raajha Muthu Raju Pravasa Raju**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
An arrangement of braking material (500) for drum brakes is disclosed. A brake lining (502) may be supported from underneath by an under-layer (504). The under-layer (504) may be joined over a brake shoe (506) of a drum brake. The under-layer (504) may support the brake lining (502) while the brake lining (502) comes into contact with an inner surface of a drum of the drum brake, for braking. Such arrangement of the braking material (500) improves noise performance, is cost effectiveness, and optimizes thickness of the brake lining (502). (Fig. 5)

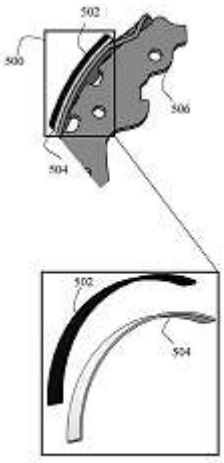


Fig. 5

No. of Pages : 16 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

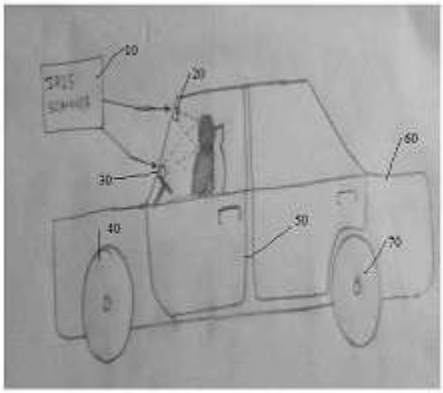
(21) Application No.202021000167 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : APS-SYSTEM: ADVANCED PRIMARY SAFETY SYSTEM IMPLEMENTED IN ELECTRONIC VEHICLES ONLY

(51) International classification	:G06K0009000000, G08B0021060000, G08C0017020000, B60Q0001520000, B60W0030090000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)ER. SHREEPAD VISHWANATH MHAMANE
Address of Applicant :SHREE DATTA NIWAS PLOT NO : C-1-17 ,CHOUDHARI NAGAR MANTHA ROAD , JALNA. 431203, MH, INDIA Email ID : shreepadmhamane74@gmail.com AADHAR ID : 524338190943 Mo no: 7057842086 Maharashtra India
2)ER. DEVADATT KIRAN KULKARNI
3)ER. AKSHAY ANIL MORE
4)ER. JUBER JAVED MUJAWAR
5)GEH RESEARCH
(72)**Name of Inventor :**
1)ER. SHREEPAD VISHWANATH MHAMANE
2)ER. DEVADATT KIRAN KULKARNI
3)ER. AKSHAY ANIL MORE
4)ER. JUBER JAVED MUJAWAR
5)GEH RESEARCH

(57) Abstract :
My Invention APS-SYSTEM • This system is aimed at making vehicle driving safer than before. This is implemented using advanced microprocessor and intelligent iris sensor. We have derived the driver™s condition in real time environment and we detected of sleep using iris sensor detector connected to microprocessor such that when the level of sleep crosses a permissible limit, the vehicle will slow down the speed of vehicle and alert neighbor & rear vehicles driver. Also the led on dashboard will automatically blink and guzzle speaker near ear of driver. This Invention APS-SYSTEM • can be implemented in electronic vehicles and HEV™s .



No. of Pages : 25 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202021000170 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BRINJAL (SOLANUM MELONGENA) EVENT EE-6726, KIT AND METHOD OF DETECTION OF EVENT EE-6726

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)MAHYCO PRIVATE LIMITED** Address of Applicant :19, Raj Mahal, 84, Veer Nariman Road, Mumbai -400020, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Narendran Madhavan Nair**
(33) Name of priority country	:NA	**2)Ratnapal Popatlal Gandhi**
(86) International Application No	:NA	**3)Bharat Char**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The invention provides brinjal event EE-6726, and plants, plant cells, seeds and plant parts comprising event EE-6726 which confers resistance to Lepidopteran insect damage. The invention also provides nucleic acid sequences specific for event EE-6726 and plants, plant cells, seeds and plant parts comprising nucleic acids specific for event EE-6726. This invention also provides methods for detection the presence of the event EE-6726 based on DNA sequence of the recombinant construct inserted into the brinjal genome that resulted in the EE-6726 event and/or the genomic sequences flanking the insertion site.

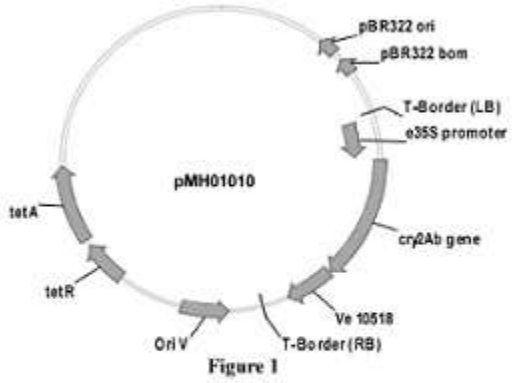


Figure 1

No. of Pages : 77 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000190 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A CATALYST COMPOSITION FOR OXIDATIVE DEHYDROGENATION OF ALKANE

(51) International classification	:C07C0005480000, B01J0037020000, B01J0035000000, B01J0037040000, C07C0005333000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Oil Corporation Limited
Address of Applicant :G-9, Ali Yavar Jung Road, Bandra (East), Mumbai-400 051, India Maharashtra India
(72)**Name of Inventor :**
1)LOGANATHAN, Kumaresan
2)KARTHIKEYANI, Arumugam Velayutham
3)DOOSA, Hima Bindu
4)THAKUR, Ram Mohan
5)PULIKOTTIL, Alex Cheru
6)SAU, Madhusudan
7)KAPUR, Gurpreet Singh
8)RAMAKUMAR, Sankara Sri Venkata

(57) Abstract :
The present invention provides a catalyst composition for the production of olefins from lighter alkanes by oxidative dehydrogenation route and methods of making the dehydrogenation catalyst composites.

No. of Pages : 16 No. of Claims : 14

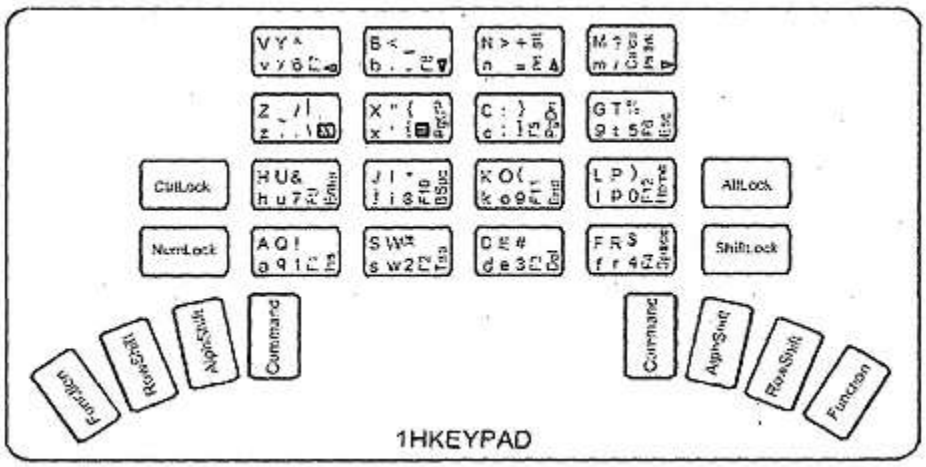
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000199 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : 1HKEYPAD

(51) International classification	:G06F0003020000, G06F0003023000, H04M0001230000, G06F0001160000, H01H0013840000	(71)**Name of Applicant :** **1)KUDAI SURESH THACHOLI** Address of Applicant :8-A/31, KRISHNA NAGAR, KHAIRAPADA, BOISAR, PALGHAR - 401501, MAHARASHTRA, INDIA. Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)KUDAI SURESH THACHOLI**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
1HKEYPAD is a one hand operated keypad, has 20 keys and programmed to be equivalent to a normal 84 keys QWERTY keyboard. 12 keys are arranged in two rows of 6 keys. First row 6 keys are NumLock, 4 input keys and ShiftLock. Second row 6 keys are CtrlLock, 4 input keys and AltLock. 4 modifier keys Command, AlphShift, RowShift and Function are arranged left side and right side of the keypad and are operated by left hand or right hand thump finger while operating the keypad with right hand or left hand. Each input key will function as 10 keys with 4 modifier keys, ShiftLock and NumLock. A new Calcu key added in the NumLock group will generate calculated output. When 8 input keys are in default mode will function as 40 keys. When RowShift is pressed 8 input keys will function as another 40 keys.



No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000221 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR ASSIGNING AND TRACKING PROGRESS OF ACTION ITEMS IN A REVIEW MEETING •

(51) International classification	:H04L0029080000, C07D0417140000, C07D0417060000, C07D0263320000, G03G0015000000	(71)**Name of Applicant :** **1)ZENSAR TECHNOLOGIES LIMITED** Address of Applicant :Zensar knowledge park, Plot # 4, MIDC, Kharadi, off Nagar road, Pune-411014, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Sandeep Kishore**
(33) Name of priority country	:NA	**2)Hari Eswar S M**
(86) International Application No	:NA	**3)Aishwarya Chaurasia**
Filing Date	:NA	**4)Richa Sawhney**
(87) International Publication No	: NA	**5)Shree Krishna Somani**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A method and system for assigning and tracking progress of action items in a review meeting comprises extracting action items from a meeting document during the review meeting once the review meeting is initiated between the reviewee and the reviewer. The method comprises identifying reviewee content and reviewer content by using feature extraction technique on audio snippets spoken by the reviewee and the reviewer during the review meeting. The method further comprises determining whether the review meeting is a first meeting or a subsequent meeting, between the reviewee and the reviewer, for discussing the action items extracted from the meeting document. Based on the determination, action items for reviewee and reviewer are assigned and the status of the previously assigned action items of reviewee and previously assigned action items of reviewer are tracked. [Figure 1]

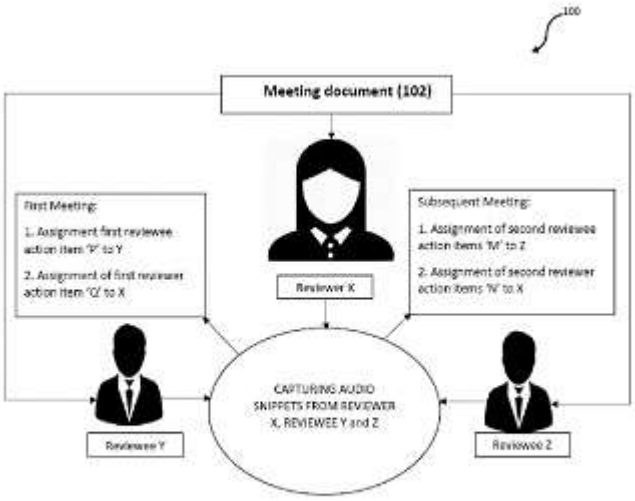


Figure 1

No. of Pages : 34 No. of Claims : 12

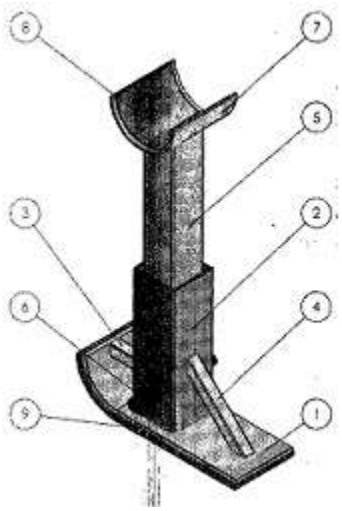
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000251 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ZERO HUMAN EFFORT MECHANISM FOR AUTOMOBILE LIFTING JACK

(51) International classification	:B66F0003120000, B60B0029000000, B66F0003080000, B66F0003300000, B66F0003020000	(71)**Name of Applicant :** **1)SHANTILAL SHAH ENGINEERING COLLEGE** Address of Applicant :NEW SIDSAR CAMPUS, POST : VARTEJ, SIDSAR, BHAVNAGAR - 364060, GUJARAT, INDIA. Gujarat India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)BALAS PRATIKKUMAR JENTIBHAI**
(33) Name of priority country	:NA	**2)MOKARIYA JAYSHREE KARASHANBHAI**
(86) International Application No	:NA	**3)VADERIYA VIRAL VINODBHAI**
Filing Date	:NA	**4)ZAPADIYA SHAILESH KANUBHAI**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A jack is a lifting device to lift the heavy loads of a vehicle, the normal jack required more human effort to raise the jack in same case the females and aged people cannot operate the manually operated jack. The quick load and unload mechanical jack is less effort or no effort mechanical jack. This jack shows the development of jack for emergency use without using hydraulic energy, pneumatic energy, and any form of energy. The concept of quick jack is same as centre stand of bike, in which we pull the bike in reverse direction and centre stand is run away. This jack will be tested and it be predicted to have enough power to lift and holding the vehicle as normal car jack. KEY WORDS: Vehicle lifting jack, maintenance tool, zero effort lifting jack, improved mechanical jack and quick lifting jack.



ITEM NO.	PART NUMBER	QTY.
1	BOTTOM_PLATE	1
2	OUTER_	1
3	FRONT_SUPPORT	1
4	BACK_SUPPORT	1
5	INNER_	1
6	ROD_	1
7	HALF_CIRCLE	1
8	AXLE_RUBBER	1
9	BOTTOM_RUBBER_PAD	1

No. of Pages : 19 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000297 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : HIGH TEMPERATURE ZINC COMPLEX GREASE

(51) International classification	:H05B0033140000, C10M0117040000, C10L0001160000, A61K0031315000, C10M0117020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Indian Oil Corporation Limited
Address of Applicant :G-9, Ali Yavar Jung Road, Bandra (East), Mumbai-400 051, India Maharashtra India
(72)**Name of Inventor :**
1)VENNAMPALLI, Manohar
2)POKHRIYAL, Naveen Kumar
3)KUMAR, Virender
4)BANSAL, Veena Rani
5)SAXENA, Deepak
6)RAMAKUMAR, Sankara Sri Venkata

(57) Abstract :
Zinc complex greases with different complexing acids having dropping points comparable to lithium greases and tailor-made dropping points can be made by processing at low temperature in open as well as close kettle process. The present invention discloses a process of manufacturing Zinc complex greases through reaction of fatty acid and complexing acid with zinc oxide in mineral oil to obtain zinc complex greases having high dropping points of 180 to 280 °C.

No. of Pages : 24 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000299 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TEMPERATURE-CONTROLLED APPARATUS FOR STORAGE

(51) International classification	:F25D0011020000, F25D0017060000, B01L0007000000, B64D0045000000, A61F0007000000	
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(71)**Name of Applicant :**
1)RAJENDRA VITHAL LADKAT
Address of Applicant :Sairaj, S.No.92/20 Shrikrishna Soc. Pune-Mundhwa Road, Pune 411036, Maharashtra, India. Maharashtra India
2)SHRAVANI RAJENDRA LADKAT
(72)**Name of Inventor :**
1)RAJENDRA VITHAL LADKAT
2)SHRAVANI RAJENDRA LADKAT

(57) Abstract :
A temperature-controlled apparatus is disclosed. The disclosed apparatus includes one or more storage compartments adapted for storage of items, an air supply means configured in a control room to supply air at a first temperature to the storage compartments, a duct configured to carry air from the air supply means to the storage compartments, the duct having openings through which air flow from the duct into the storage compartments, a first air damper configured with the duct, a set of second dampers configured with the storage compartments, and a third air damper configured with a water air cooler unit configured with the control room. The air supply means, the first air damper, the set of second dampers, the third air damper and the water air cooler unit are configured to maintain the stored items at specified temperature and humidity by using waste thermal energy from different sources.

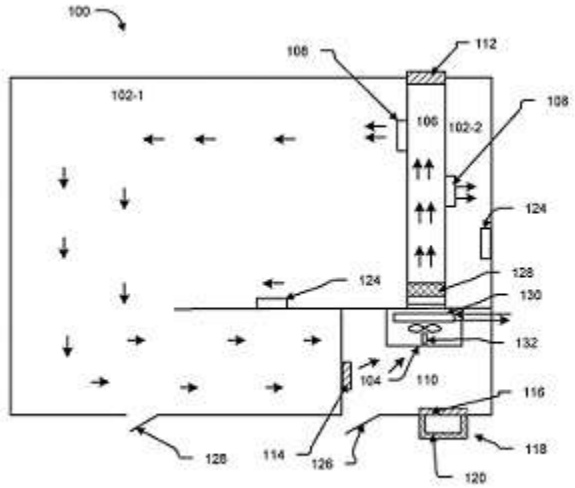


FIG. 1

No. of Pages : 26 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000321 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTELLIGENT STREET LIGHTING SYSTEM •

(51) International classification	:H05B0037020000, H04L0012280000, G06Q0010060000, G08B0021040000, H02B0001420000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Mr. Bhaskar Vijay Ajgaonkar**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system for intelligent lighting control and energy management system is disclosed. An intelligent lighting control and energy management system using GSM comprising of; server (database of the website) for user registration & other activities; display system showing the lights; micro controlled processed nodes with embedded sensors for sensing the analog data; and other nodes sends the data to master and the master collects the data and further sends to concentrator and server; wherein the data is monitored and on necessary alterations process it to switch On/Off the nodes devices.

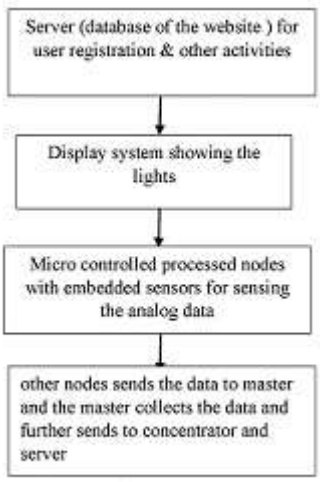


FIG 1

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000322 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART TOOTHBRUSH USING INTERNET OF THINGS (IOT) •

(51) International classification	:A61B0005000000, A46B0015000000, G06F0003041000, H04W0004800000, A61B0005080000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the smart toothbrush using Internet of Things (IoT). The smart toothbrush would have an electronic board with sensors and chipsets to communicate with Smart electronic device. It records the duration time of toothbrush use by the user and transfer the data to Smart electronic device. Number of sensors used to detect diseases from breath, saliva, oral cavity tissues of the person and also to detect temperature and pressure. And transferred data to Smart electronic device.

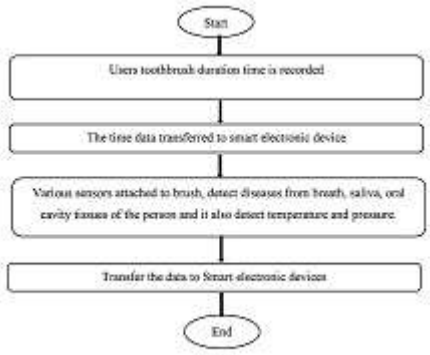


Fig. 1

No. of Pages : 10 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000323 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRAFFIC CONTROL AND WARNING SYSTEM USING IOT •

(51) International classification	:G08G0001095000, G08G0001070000, G08G0001010000, H04B0007185000, G08G0001096800	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system for traffic control and warning systems that optimize traffic flow based on traffic patterns and other factors is disclosed. The traffic control and warning systems that optimize traffic flow based on traffic patterns comprising of; GPS navigation for locating the vehicles place; Uploading the traffic report to the server; Decoding the information for controlling the signal through traffic light control system; Connecting traffic signal unit to control center ; and Internet connectivity such as Wi-Fi or internet or 3G SIM; 4G SIM;

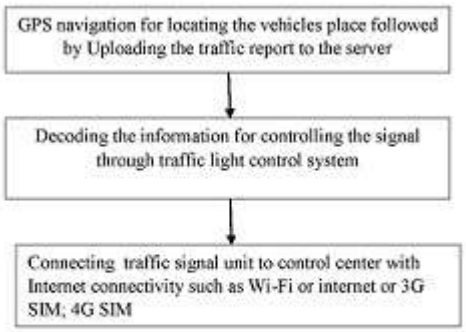


FIG 1

No. of Pages : 10 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000324 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART GARDENING USING INTERNET OF THINGS (IOT) •

(51) International classification	:A01G0027000000, G01N0033240000, A01G0009020000, H04W0004700000, A01G0025160000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the smart gardening more specifically water supply for plant in a pot using Internet of Things (IoT). The plant pot/container has installed moisture measured sensor, which sense moisture of soil. The sensor send data to Server via Internet of Things with help of Wi-Fi connectivity. User can see information from sensor on smart phone. And as per suggestion of application, further process is carried out by user.

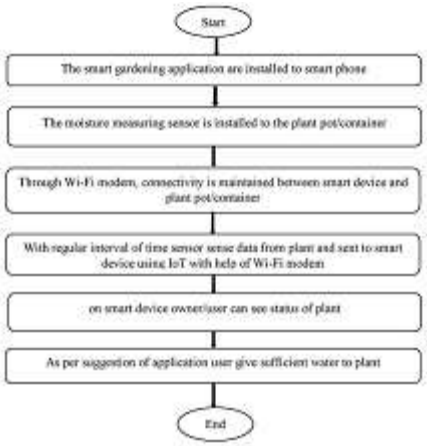


Fig. 1

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000325 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART REFRIGERATOR USING INTERNET OF THINGS (IOT) •

(51) International classification	:F25D0029000000, H04N0007180000, F25D0017040000, G06Q0050100000, B67D0003000000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the smart refrigerator using Internet of Things (IoT). The number of sensors and cameras are installed at inside of refrigerator. Cameras and sensors are installed to each tray and drawers of refrigerator. After particular periodic interval sensors and cameras send data to cloud server via wi-fi modem. At server, with help of images and sensors, it checks there is any leftover food or spoiled food. And send alert/SMS related to this to user/owner.

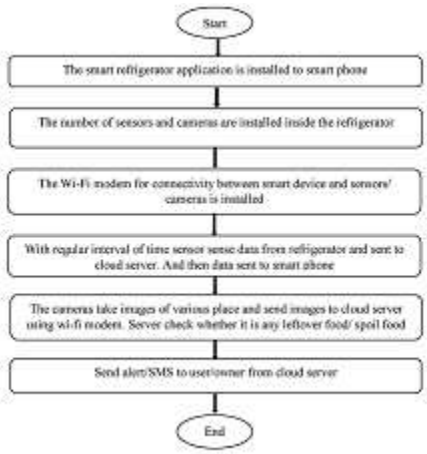


Fig. 1

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000326 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR MONITORING THE ENVIRONMENT USING ARTIFICIAL INTELLIGENCE •

(51) International classification	:G01N0033000000, G05D0001020000, G06N0003080000, G16H0050200000, G06T0007000000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system for monitoring the environment using artificial intelligence is disclosed. A system for monitoring the environment using artificial intelligence comprising of acquiring data followed by Combining data such as natural and manmade data; analyzing the information by analyzer unit present in the database of the website; reviewing the data followed by filtering the data; visioning system, wherein the data include Weather results data; Air Pollution Forecasting data; Flood Forecasting and river monitoring data.

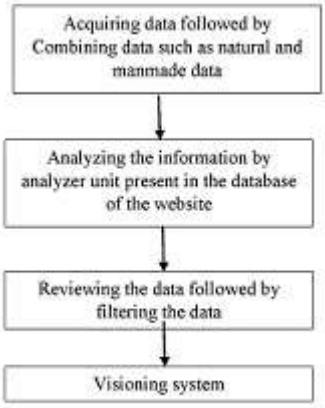


FIG 1

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000327 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DRAINAGE MONITORING SYSTEM USING IOT •

(51) International classification	:G08B0025100000, H04W0064000000, E02B0011000000, E03F0007000000, H04W0004020000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system which can handle underground drainage without human intervention and a smart and real-time Drainage and Manhole Monitoring System with the help of Internet of Things. A drainage monitoring system comprising of database of the website for user registration & sending location and other information of the drainage; sensor network for detecting blockage and clogging inside the drainage system, presence of harmful gases if any; transfers the appropriate sensed information about the blockage, harmful gases and conditions to detect elevated flow levels of drainage system to the base station, to the gateway, further to the database of the website; and creating an alert using alarm system.

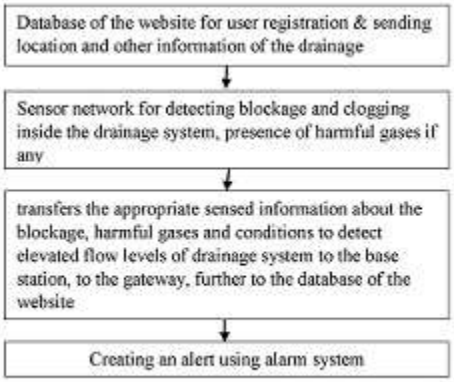


FIG 1

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000328 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART KITCHEN AND GROCERY MANAGEMENT SYSTEM BASED ON INTERNET OF THINGS (IOT) •

(51) International classification	:H04L0029080000, H04W0084180000, H04L0012280000, H04W0004700000, G05B0015020000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system for a kitchen and grocery management system using Internet of things (IOT) to collect and maintain the data about grocery level is disclosed. The system is having ultrasonic sensor, Arduino microcontroller, Wi-Fi module, Cloud, Mobile Application. The ultrasonic sensor is attached to each kitchen container containing grocery items in different forms. This forms the sensor node. Then the sensor nodes are connected to the Arduino microcontroller. The Wi-Fi is connected to the microcontroller. The grocery level information from the sensors are pushed into the cloud using the Wi-Fi module. In the cloud, the data is stored and analyzed. This analyzed result can be visualized using the mobile application.

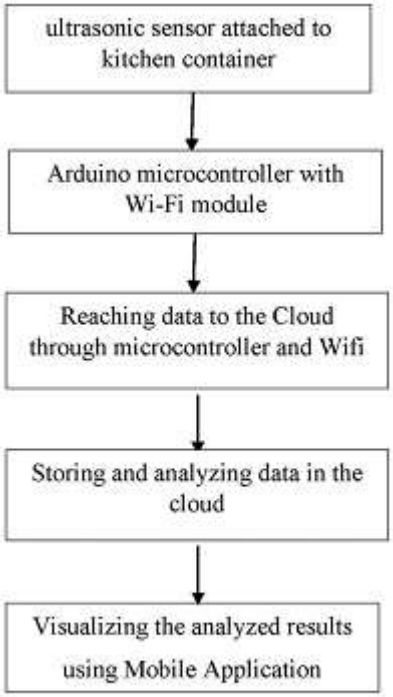


FIG 1

No. of Pages : 11 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000329 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IOT BASED CAR PARKING MANAGEMENT SYSTEM •

(51) International classification	:G08G0001140000, G06Q0020320000, G07B0015040000, G07C0009000000, G07B0015020000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a system for smart parking management system to enhance the customer experience comprising of ;A web server system controlling the user interface application, web server, gate access, and parking space; Detecting a vehicle through sensor network; Uploading of the status of the vehicle to the server (database of the website); determining the total available parking in the specified location through user interface (analyzer unit); reserving the available parking spot, along with entry and exit access codes to be used at the entrance gate;sending confirmation of the reservation to the specified user via SMS and email mobile number and registered email.

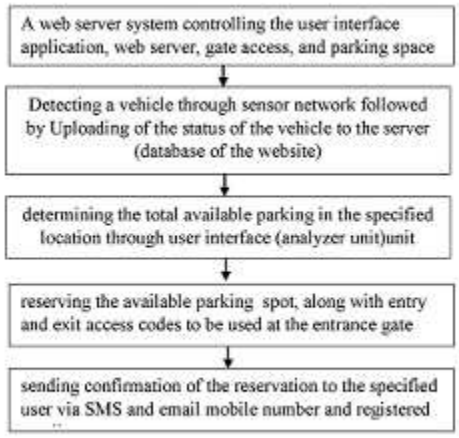


FIG 1

No. of Pages : 14 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000330 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART SHELVES FOR RETAILS USING INTERNET OF THINGS (IOT) •

(51) International classification	:G06Q0010080000, G06K0007140000, G05B0019418000, G06F0003010000, G06Q0030020000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the smart shelves for retails using Internet of Things (IoT). The smart shelves for retails would have various sensors arranging as mesh form have placed on bottom. Sensors sense data from sensors and transfer this data to product count values. And send this product count values to smart electronic device, which helps retailer to replenish the smart shelves.

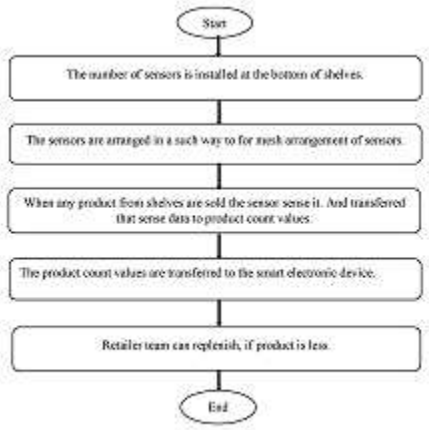


Fig. 1

No. of Pages : 8 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202021000331 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RESTAURANT ORDERING SYSTEM BASED ON INTERNET OF THINGS (IOT) •

(51) International classification	:G06Q0050120000, G09G0003360000, G06Q0030060000, G06F0003041000, H04L0029080000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a restaurant ordering system using IOT is disclosed. A restaurant ordering system based on internet of things (iot) comprising of; Selecting the desired food menu through a touchscreen panel with a LCD display; Reading the input from touch screen panel with the help of microcontroller and sending the data to LCD display; Sending the data to the wireless transmitter and displaying the bill on LCD; displaying customer order on computer interfacing and receiver unit for displaying order in particular format

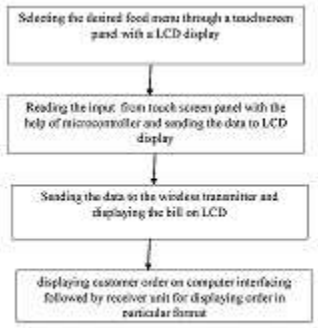


FIG 1

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2020
(21) Application No.202021000378 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : LINER TOILET

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)KOHLER CO.** Address of Applicant :444 HIGHLAND DRIVE, KOHLER, WI 53044, U.S.A. U.S.A.
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Yogesh Pansare**
(32) Priority Date	:NA	**2)Michael Luettgen**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
LINER TOILET An apparatus for a portable toilet includes a film storage compartment and a plurality of transport wheels. The film storage compartment is configured to store a liner having a tubular shape. The plurality of transport wheels is configured to transport the liner through a serpentine space. At least one of the plurality of transport wheels includes a high friction area and a hollow area.

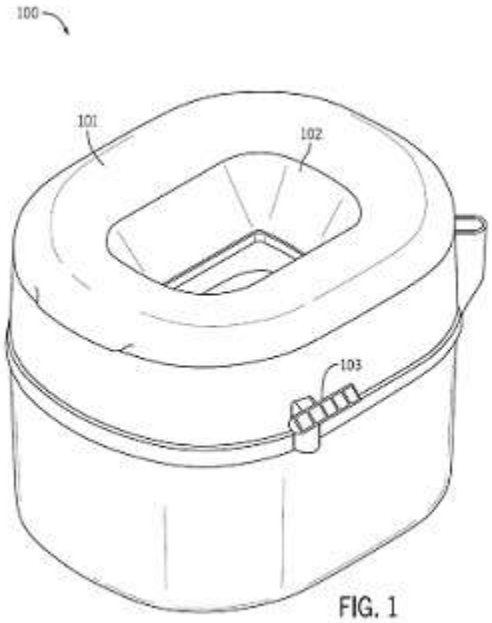


FIG. 1

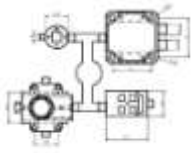
No. of Pages : 60 No. of Claims : 50

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000401 A
(19) INDIA
(22) Date of filing of Application :04/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DESIGN AND ANALYSIS OF DIE CASTING TOOL FOR THE PARTS OF CONCEALED LOCK ASSEMBLY

(51) International classification	:B29C0045760000, G06F0017500000, B22D0017220000, G06Q0030020000, B22D0017000000	(71)**Name of Applicant :** **1)GAURISH MAHABALESHWAR SAMANT** Address of Applicant :H NO 71 NEAR DATTA MANDIR TAMBOSEM PERNEM GOA 403512 Goa India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)GAURISH MAHABALESHWAR SAMANT**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Die casting industry is playing a vital role in the manufacturing industry in order to meet the requirements of automobile, petroleum, aerospace, electrical, mechanical and shipbuilding industries. The market share of die casting products are increasing as seen in the market survey in year 2015. In 2035 there will be high demand for die casting products as compare to the other casting processes. The die casting industry approximately holds about 900 billion dollars (approximately) with the continual growth of 6% annually . The demand for the concealed lock assemblies are also expected to grow relatively as compared to growth of die casting industries. The literature review have indicated reduction of defects in simple components by studying their melt flow pattern and prediction of air entrapment. The quantitative data regarding reduction of air entrapment using balanced runner system and comparison of the filling pattern with classic theories is lacking The concealed lock assembly has combination of total 14 parts out of which 4 parts are made up from die casting process. The four parts are of different sizes and shapes to be cast in the single run. The main objective of these studies is to design and analyze the die casting tool of balanced runner system in order to fill all the cavities at the same time without compromising the quality of parts. The design of the shot model was modeled according to theoretical calculations and by the help of SOLID EDGE modeling software. Analysis of design was carried out on new shot model in order to check the correctness of design by using PRO CAST software . Air entrapment analysis was carried out in order to study percentage of air entrapment in casting by using edge gate. Melt flow analysis were carried out in order to judge performance of the gates. Solidification analysis were performed in order to judge performance of both gates. Details drawings with dimension are generated using SOLID EDGE software. The filling pattern studied from melt flow analysis predicts that filling due to edge gates follows Formmer™s theory. The solid fraction analysis showed complete solidification of component was achieved. The shrinkage porosity of shot model was 13.66% which is within the tolerance limit. The designed shot model was found fulfilling the requirements of the process.



No. of Pages : 8 No. of Claims : 6

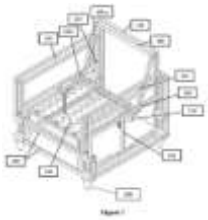
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202021000445 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MODULAR TOOL-LESS FURNITURE ASSEMBLY

(51) International classification	:B60N0002750000, F16B0012460000, A47B0047000000, A47C0013000000, A47B0096200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Satisfaction Products Pvt. Limited
Address of Applicant :4/1/1, K Gram Mundla Nayta, Nemawar Main Road, Near Jairam Tolkata, Indore Madhya Pradesh India
(72)**Name of Inventor :**
1)BAHETI, Apoorva

(57) Abstract :
Disclosed herein a tool-free modular furniture employed with a portable storage unit. The said furniture is assembled using complementary interlocking mechanism, wherein said complementary interlocking between the backrest and side armrest is performed centrally.



No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000505 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN APPARATUS FOR SMART AUTOMATION HIGH FREQUENCY GENERATOR DEVICE.

(51) International classification	:G06Q0030040000, G10L0021038000, F24F0011520000, F25B0027000000, C23G0005000000	(71)**Name of Applicant :**
(31) Priority Document No	:NA	**1)Ishita Dholakiya**
(32) Priority Date	:NA	Address of Applicant :A-305, Bakeri Swara, near Maneja Crossing Road City Vadodara State Gujarat Country INDIA Pin code 390013 Gujarat India
(33) Name of priority country	:NA	**2)Dimple Patel**
(86) International Application No	:NA	**3)Riddhi Pandya**
Filing Date	:NA	**4)Dr. Twinkle Vimal Doshi**
(87) International Publication No	: NA	**5)Dr. Hetal Mayur Pathak**
(61) Patent of Addition to Application Number	:NA	(72)**Name of Inventor :**
Filing Date	:NA	**1)Ishita Dholakiya**
(62) Divisional to Application Number	:NA	**2)Dimple Patel**
Filing Date	:NA	**3)Riddhi Pandya**
		4)Dr. Twinkle Vimal Doshi
		5)Dr. Hetal Mayur Pathak

(57) Abstract :
An apparatus for smart automation high frequency generator device provides such a sophisticated communication test signal source, which is cost effective reliable and can be explored at industry, commercial and at student level. An apparatus comprises the smart automation high frequency generator device generates high frequency signal from the low frequency signal wherein input data collects by means of input device. Moreover, the data transmit to a controller panel and the data encoding by means of controller panel, transmit to the smart automation frequency generator device. The smart automation frequency generator device initializes the data according to algorithm uploaded into the smart automation frequency generator device and generate high frequency range and display ion display unit and also give the output on output device. [Figure 1]

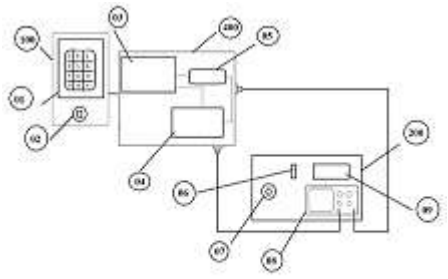


FIG 1

No. of Pages : 25 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000538 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : HYDROPHILIC GROWTH MEDIA COMPOSITE AND METHOD THEREOF

(51) International classification	:B32B0005020000, C08L0097020000, B29C0045000000, C08L0075040000, B29C0051100000	(71)**Name of Applicant :** **1)Ecogreen Landscape Technologies India Pvt. Ltd.** Address of Applicant :C 202, Anjor, Veerbhadra Nagar, Baner, Pune Maharashtra India (72)**Name of Inventor :** **1)BARPANDE, Pradeep** **2)BARPANDE, Anuradha**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Disclosed herein an improved plant growth media composite manufactured employing waste material, structural matrix of said growth media and method thereof. The growth media compo-site comprises of a heterogeneous matrix, binding agent, viscosity reducing agent, an aqueous solution, wherein said hydrophilic plant growth media composite is having a structure formed by a wire, pipe sleeve and mesh inserted into the heterogeneous matrix during the preparation of the growth media enabling the formation of rigid and stabilized structure and providing means for the uniform aeration and capillary action within the media composite. A method for the prepara-tion of the hydrophilic plant growth media is also disclosed, enabling the reduction of the quantity of binding agent to be used initially for reinforcing the formation of the stabilized structure. A hy-drophilic plant growth media composite prepared by the above method is also disclosed in this invention.

No. of Pages : 29 No. of Claims : 34

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000545 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR MATERIAL MANAGEMENT FOR CONSTRUCTION SITE USING INTERNET OF THINGS (IOT) •

(51) International classification	:H04L0029080000, G06Q0030020000, G06Q0010060000, H04L0009320000, G06Q0010080000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the system and method of material management in construction using internet of things (IoT) technology. The material management application is installed at backend server. At very initial stage, each and every material is attached to IoT enabled tag. Number of sensors are installed at construction site to form network which cover all construction site in under network. When material location changed, the new location of material is sent to cloud with the help of IoT. IoT then send new location of material to backend server.

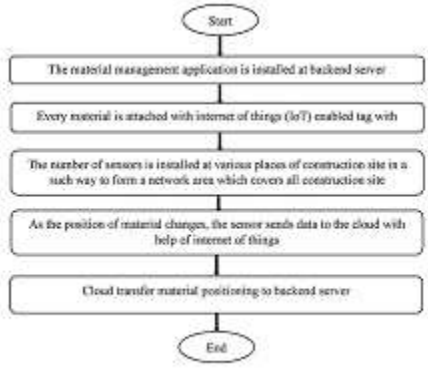


Fig. 1

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000546 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR TRACKING THE LOCATION OF WORKER IN CONSTRUCTION SITE WITH THE HELP OF HELMET USING INTERNET OF THINGS (IOT) •

(51) International classification	:H04L0029080000, G06Q0010060000, H04L0009320000, H04W0012040000, G08B0021020000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Mr. Bhaskar Vijay Ajgaonkar**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the system and method for tracking location of worker in construction site with the help of helmet by using internet of things (IoT) technology. The location tracking application is installed at backend server. At very initial stage, each and every helmet is attached to IoT enabled tag. Number of sensors are installed at construction site to form network which cover all construction site in under network. When worker location changed, the new location of worker is sent to cloud with the help of IoT. IoT then send new location of worker to backend server.

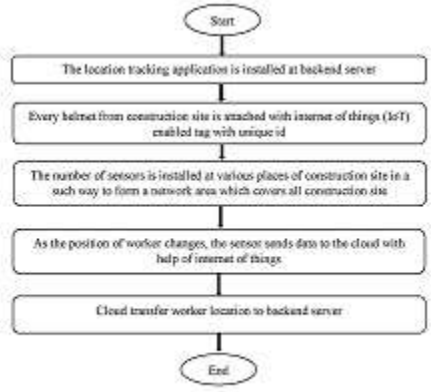


Fig. 1

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000547 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRACKING THE SHELVES FOR WAREHOUSE USING AUGMENTED REALITY TECHNOLOGY •

(51) International classification	:G06Q0030060000, G06T0019000000, G06F0003048400, G06K0009000000, H04W0012080000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the tracking of shelves for warehouse using Augmented Reality (AR) technology. The application is installed at AR enabled device. User start application or wear AR enabled device. User can see shelves with empty space. Then user can go directly to particular shelf and placed item on it.

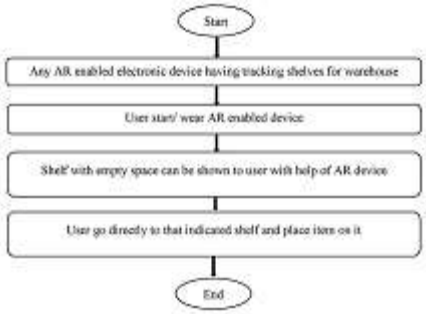


Fig. 1

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000548 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BLOOD BANK MANGEMENT SYSTEM WITH THE HELP OF IOT •

(51) International classification	:A61B0005150000, A61M0001340000, A61K0035140000, A23J0001060000, F02B0075220000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a blood bank management system with the help of IOT is disclosed. A blood bank management system with the help of IOT comprising of; Collecting the blood from various people, transferring it to blood banks, resources; maintaining server(database of the website) for donar registration and receptor requests; processing, testing of the blood followed by distribution of blood to hospitals, receptors; cross matching the blood groups to verify the compatibility with each particular patient; and transfusing the blood for treatment.

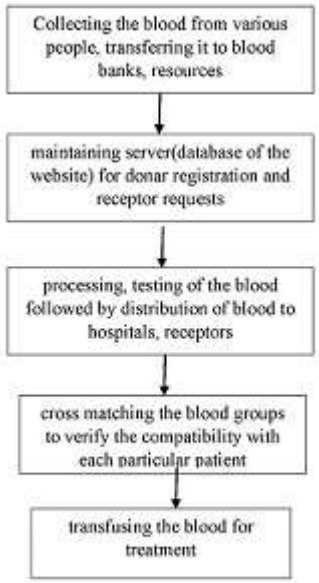


FIG 1

No. of Pages : 10 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000549 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEMS AND METHODS FOR OVERSEEING ACCESS TO ACCOUNT IN BLOCKCHAIN •

(51) International classification	:H04L0009320000, G06F0003120000, G06Q0030020000, G06F0016220000, B41J0002355000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The system for methods, gadgets, and mechanical assemblies, including PC programs put away on PC intelligible media for overseeing access to a record in a blockchain system. One of the methods incorporates getting, from a first record of the blockchain system, a solicitation for getting to a second record of the blockchain system and deciding a record level of the primary record dependent on the solicitation; deciding a record level of the subsequent record deciding if the record level of the main record fulfils a record condition dependent on the record level of the subsequent record; and allowing the solicitation for getting to the subsequent record dependent on an assurance that the record level of the principal account fulfils the record condition.

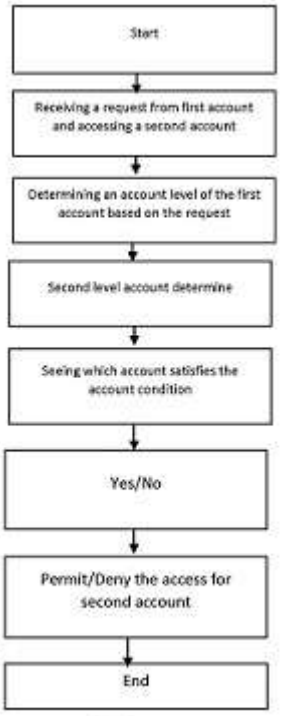


Fig: 1

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000550 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART AIR MONITOR FOR DETECTING POLLUTANTS EMITTED FROM VEHICLES USING INTERNET OF THINGS (IOT) •

(51) International classification	:H04L0029080000, H04N0007180000, G06Q0050100000, H04W0012120000, G06F0016958000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the smart air monitor for detecting pollutants emitted from vehicles using Internet of Things (IoT). The number of sensors and cameras are installed at various places of particular area. Cameras and sensors senses data and send to cloud server. Cloud server compare new data to store old data. And resulted data sent to display screen.

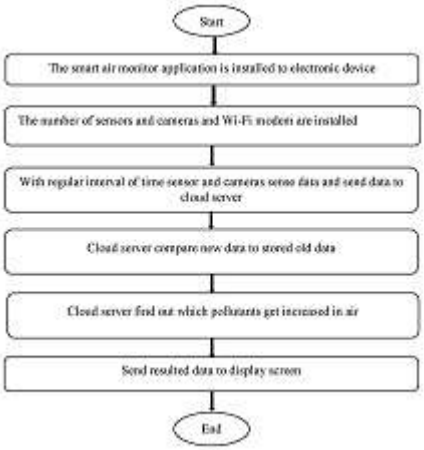


Fig. 1

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000551 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : WAREHOUSE SHELVES MANAGEMENT USING INTERNET OF THINGS (IOT) •

(51) International classification	:G06Q0010080000, G06K0007140000, H04W0004350000, G06Q0090000000, A63F0013218000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses the warehouse shelves management using Internet of Things (IoT). The shelves would have various sensors arranging as mesh form have placed on bottom. Sensors sense data from sensors and transfer this data to product count values. And send this product count values to backend server. Which helps warehouse team to replenish the smart shelves.

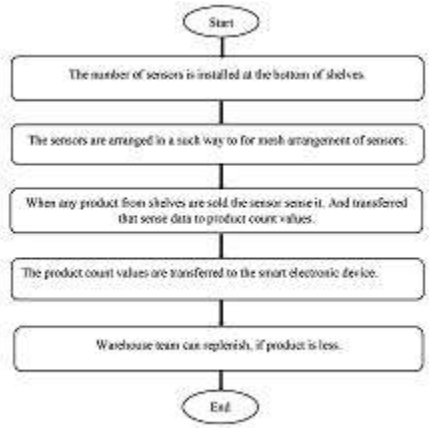


Fig. 1

No. of Pages : 8 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000552 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SMART KITCHEN IOT BASED SYSTEM •

(51) International classification	:H04L0029080000, A61B0005110000, B60R0021015000, G10L0013000000, B60T0017220000	(71)**Name of Applicant :** **1)MESBRO TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat no C/904, Geomatrix Dev, Plot no 29, Sector 25, Kamothe, Raigarh-410209, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mr. Bhaskar Vijay Ajgaonkar**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Accordingly, a smart kitchen system using IOT is disclosed. A smart kitchen system using IOT comprising of; Sensors for detecting gas leakage interfaced with microcontroller; Monitoring the kitchen with the help of sensors monitored by microcontroller; reduction in the weight of the gas, water tank and buckets below the threshold value is sensed by the weight sensor; sending message to the user and also the value is stored in the database; delivering output by the sensing unit in response to gas at the input, the outputs at both the sensors are conditioned and fed to the microcontroller and sending another signal after receiving signal followed by sending message.

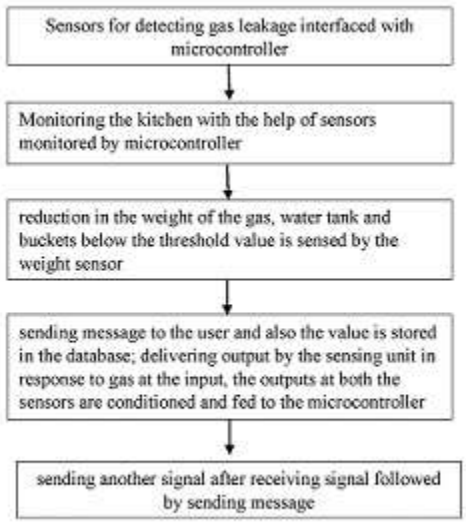


FIG 1

No. of Pages : 9 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000556 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR ONLINE ESTIMATION OF SOH AND RUL OF A BATTERY

(51) International classification	:G01R0031392000, H02J0007000000, G01R0031367000, H01M0010480000, H01M0010420000	(71)**Name of Applicant :** **1)Tata Consultancy Services Limited** Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)DESAI, Saurabh Jaywant**
(32) Priority Date	:NA	**2)AGARWAL, Shashank**
(33) Name of priority country	:NA	**3)RUNKANA, Venkataramana**
(86) International Application No	:NA	**4)PAREEK, Aditya**
Filing Date	:NA	**5)RAMANUJAM, Muralikrishnan**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Performance and lifespan of batteries deteriorate with time due to various factors. Existing systems for battery management use different approaches for the battery management, and also rely on static value of parameters for State of Health (SOH) and Remaining Useful Life (RUL) estimation, thereby failing to consider current condition of the battery. The disclosure herein generally relates to battery management, and, more particularly, to a method and system for online battery management involving real-time estimation of State of Health (SOH) and Remaining Useful Life (RUL) of a battery, based on real-time data collected from the battery. The system determines state of the battery as one of charging, discharging, and rest. Further, corresponding to the determined state, the system determines values of one or more parameters, and processes the determined values with a battery performance model for online determination of the SOH and RUL

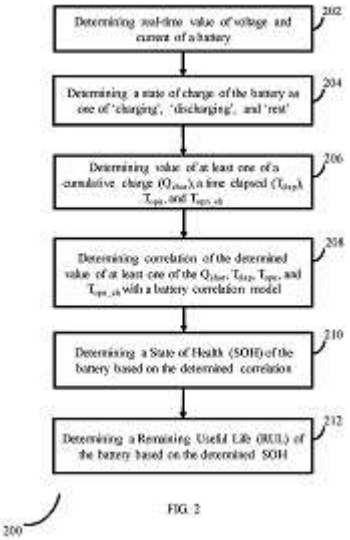


FIG. 2

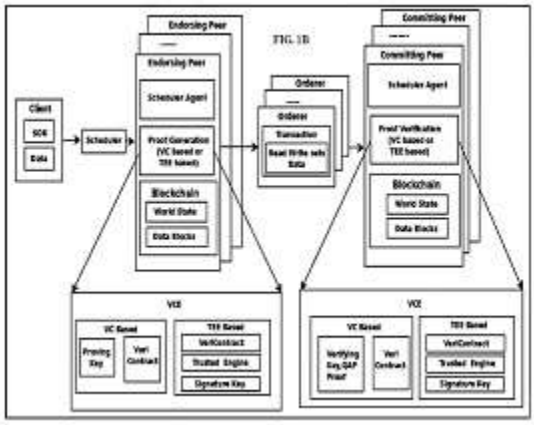
No. of Pages : 32 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000567 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR PROCESSING TRANSACTIONS IN A BLOCKCHAIN NETWORK

(51) International classification	:H04L0009320000, G06Q0020060000, G06Q0020380000, G06Q0020200000, G06Q0020360000	(71)**Name of Applicant :** **1)Tata Consultancy Services Limited** Address of Applicant :Nirmal Building, 9th Floor, Nariman Point Mumbai 400021 Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)SINGH DILIP THAKUR, Meena**
(32) Priority Date	:NA	**2)MADDALI, Lakshmi Padmaja**
(33) Name of priority country	:NA	**3)RAMACHANDRAN, Vigneswaran**
(86) International Application No	:NA	**4)BHATTACHAR, Rajan Mindigal Alasingara**
Filing Date	:NA	**5)KANCHANAPALLI, Srujana**
(87) International Publication No	: NA	**6)DAS, Batsayan**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Transaction executions/commits in a blockchain network need to be fast, robust and secure and thus calls for minimal latency in transaction commits. In an execute-order-commit blockchain network, latency is high due to smart contracts been executed at every endorsing node of the blockchain network. A method and system for processing transactions in the blockchain network is disclosed. The system discloses a veriblock architecture, which enables processing a transaction request by executing an associated smart contract along with a proof of correctness of execution of smart contract using only one endorser. Further, enables verifying the smart contract by multiple endorsers. The smart contract associated with the proof, referred herein as a vericontract, is executed to generate an output and the proof using one of a) Verifiable Computing (VC) approach, b) a TEE approach and c) a hybrid approach (combination of VC and TEE). [To be published with FIG. 1B]



No. of Pages : 76 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202021000591 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR BREATH-BASED BIOMARKER DETECTION AND ANALYSIS

(51) International classification	:G01N0021552000, G01N0001400000, C07K0016400000, A61B0005020000, G01N0035000000	(71)**Name of Applicant :** **1)VIRTUAL SENSE GLOBAL TECHNOLOGIES PRIVATE LIMITED** Address of Applicant :Flat No 101, Building Golden Guild-K, Golden Square, Sunder Nagar, Santacruz, Mumbai, Maharashtra 400055 Maharashtra India
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)SUNU ENGINEER**
(86) International Application No	:NA	**2)SANJAY PHADKE**
Filing Date	:NA	**3)Prasanna Gandhi**
(87) International Publication No	: NA	**4)Girish Arabale**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention provides a device for non-invasive monitoring and/or detection of diabetes in a subject based on detection of volatile organic compounds (VOCs) in the exhaled breath of a subject. The device comprises a functionalized carbon nanotube-based array sensor which can reversibly bind VOCs, which alters the electrical conductivity of the sensor array, which can be interpreted to monitor and/or diagnose diabetes. Figure 1

Figure 6

No. of Pages : 25 No. of Claims : 11

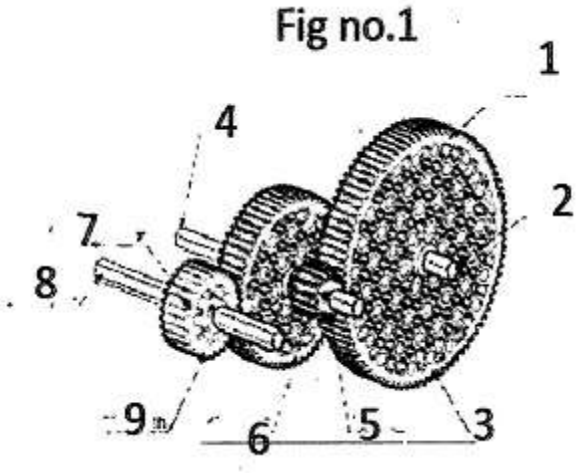
(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000629 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : RECHARGEABLE PROCESS OF BATTERY IN LIFE TIME USE ON THREE/FOUR WHEELER CAR

(51) International classification	:G06F0003010000, G06Q0010060000, G06Q0010100000, A61B0090000000, A61M0016060000	(71)**Name of Applicant :** **1)KALE SURAJ DATTA** Address of Applicant :AT POST : BABUDRI GHUMAT, TAL & DIST. A.NAGAR, AHMEDNAGAR,MAHARASHTRA,INDIA, PIN CODE: 414006 Maharashtra India
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :** **1)KALE SURAJ DATTA**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
This Project are very easy and simple . This vehicle are made than after dose not required External power source. Than the project are very use full in E-vehicle. This project are four step 1] collect the wheel power 2] Installed the magic box 3] Connect the proper connection on the ckt diagram 4] Testig IS A VERY BEST SYSTEM IN MY MIND VERY USE FULL IN MY COUNTRY

Fig no.1



No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202021000644 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOZZLE ASSEMBLY

(51) International classification	:B01J0019260000, F04D0029400000, B41J0002165000, F01N0003025000, H05H0001340000	(71)**Name of Applicant :** **1)DEERE & COMPANY** Address of Applicant :ONE JOHN DEERE PLACE, MOLINE, ILLINOIS, USA, PIN CODE: 61265 U.S.A.
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)ANUPAM MUKHOPADHYAY**
(33) Name of priority country	:NA	**2)RAJASEKAR SIDDHESHWARAN**
(86) International Application No	:NA	**3)NANDULAL GAVALI**
Filing Date	:NA	**4)INDRAJIT MALVADE**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention discloses a nozzle assembly comprises an electrode (14), a nozzle body (12), an atomizer (16), an electrode (14). The electrode (14) has an inner wall (18a) and an outer wall (18b). The inner wall (18a) defines a hollow space (19). The nozzle body (12) cooperates with the electrode (14). The nozzle body (12) is disposed between the electrode (14) and a fluid source (13). An insulating material (20) is disposed on the outer wall (18b) of the nozzle (12). The nozzle assembly helps maintaining a constant polarity and charge level.

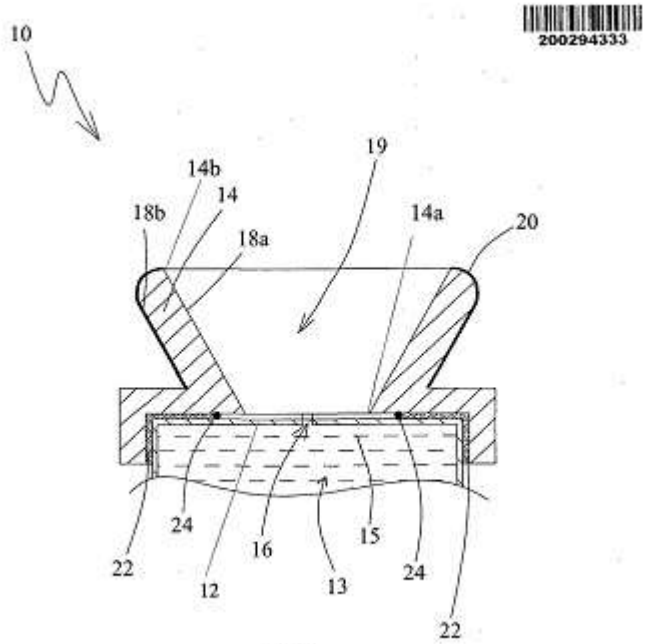


Fig. 1

No. of Pages : 11 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202021000673 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND DEVICE FOR MONITORING BLOOD GLUCOSE LEVEL IN A HUMAN BODY

(51) International classification	:A61B0005145000, A61B0005145500, A61B0005000000, A61B0005053000, A61B0005110000	(71)**Name of Applicant :** **1)SONKAR, Anil Vishwanath** Address of Applicant :Uchit Ventures, A/502, Synchronicity Bldg, Chandivali, Powai, Mumbai - 400072, Maharashtra, India Maharashtra India **2)KOTNIS, Anil Yuvaraj**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :**
(33) Name of priority country	:NA	**1)SONKAR, Anil Vishwanath**
(86) International Application No	:NA	**2)KOTNIS, Anil Yuvaraj**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present subject matter discloses a device (102) for monitoring blood glucose level in a human body. The device (102) comprises a unit (226) for inducing a sweat sample from a body part of a user. The unit (226) is maintained in contact with human skin. The device (102) further comprises a control unit (228) configured to control each of a pressure, temperature and humidity of the sweat sample to a predefined value. The device (102) further comprises a spectroscopy set-up (230) for conducting a spectroscopy over an evaporated sweat sample for generating a spectral signature of the sweat sample. The device (102) further comprises a processing unit (232) connected to the spectroscopy set-up for measuring blood glucose level from the spectral signature by measuring one or more parameters from the spectral signature.

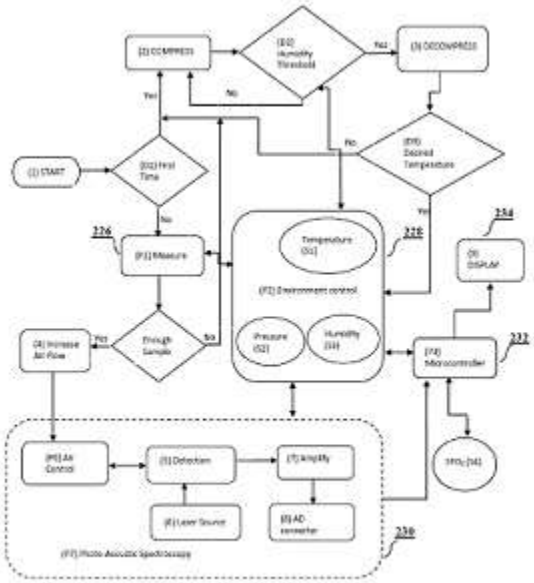


FIGURE 3

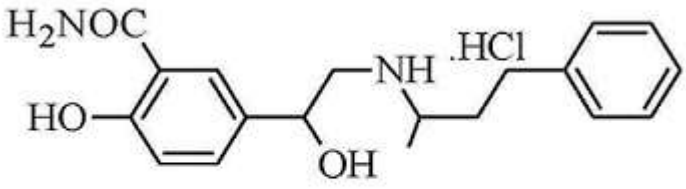
No. of Pages : 21 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000684 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR THE PREPARATION OF LABETALOL HYDROCHLORIDE

(51) International classification	:C07D0487040000, A61K0031166000, C07D0223160000, C07D0333200000, C07D0471040000	(71)**Name of Applicant :** **1)CADILA PHARMACEUTICALS LIMITED** Address of Applicant :Cadila Pharmaceuticals Ltd., Cadila Corporate Campus • , Sarkhej Dholka Road, Bhat, Ahmedabad 382210 Gujarat India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Mahesh Ramsing Rajput**
(33) Name of priority country	:NA	**2)Vijay Dagadu Patil**
(86) International Application No	:NA	**3)Sanjay Muktawat**
Filing Date	:NA	**4)Anil Chowdhary**
(87) International Publication No	: NA	**5)Bakulesh Mafatlal Khamar**
(61) Patent of Addition to Application Number	:NA	**6)Rajiv Indravadan Modi**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
An improved process for the preparation of pure Labetalol hydrochloride of formula (I), substantially free from 3-Bromo Labetalol impurity or having 3-Bromo Labetalol impurity < 0.05% by HPLC.



Formula (I)

No. of Pages : 22 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202021000692 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AUDIO ENABLED TRANSACTION STATUS VERIFICATION SYSTEM

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)SARVATRA TECHNOLOGIES PVT. LTD.** Address of Applicant :SIDD ICON, SURVEY NO 1/1, 3RD FLOOR, BANER ROAD, BANER, PUNE 411045, MAHARASHTRA, INDIA Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)MANDAR AGASHE**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT AN AUDIO ENABLED TRANSACTION STATUS VERIFICATION SYSTEM AND A METHOD THEREOF The present disclosure relates to the field of field of Point of Sale (PoS) payment systems. The audio enabled transaction status verification system (100) comprises a Point of Sale (POS) device (102) and a server (104). The Point of Sale (POS) device (102) is configured to facilitate a user to provide at least one input for making a transaction. The POS device (102) is coupled with an electronic financial transaction switch (EFTS) (118) to verify the inputs, transmit a wrong pin message to the POS device (102) if the inputs are not verified or on successful verification, and generate a success command or a failure command of the transaction. The server (104), communicatively coupled with the POS device (102), is configured to verify a status of the transaction and generate an audio output indicative of the verification status of the transaction.

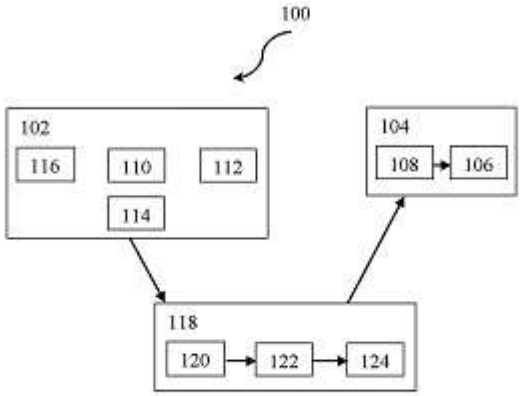


Figure 1

No. of Pages : 18 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000702 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL COMPOSITION FOR SELECTIVE SEPERATION OF BENZENE

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)UNIPHOS ENVIROTRONICS PRIVATE LIMITED** Address of Applicant :P.O. Nahuli, Tal. Umbergaon, Vapi, Dist. Valsad, Gujarat 396108, India Gujarat India (72)**Name of Inventor :** **1)NAIK, Ramakrishna Chickayya**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention provides a composition for selective separation of benzene, comprising a predetermined amount of silica gel; a predetermined amount of cerium sulphate; a predetermined amount of selenium dioxide and a predetermined amount of concentrated sulfuric acid. The present invention also includes a prefilter tube for photoionization detectors, comprising a pre-column; an oxidizing column comprising a composition for selective separation of benzene from a mixture of hydrocarbon gases and other Volatile Organic Compounds; a post-column; and a plug material, wherein the composition comprises silica gel, cerium sulphate, selenium dioxide and concentrated sulfuric acid. A method for preparing such pre-filter tube is also provided. The present invention also provides method of determining benzene concentration using a PID instrument having the prefilter tube of the present invention.

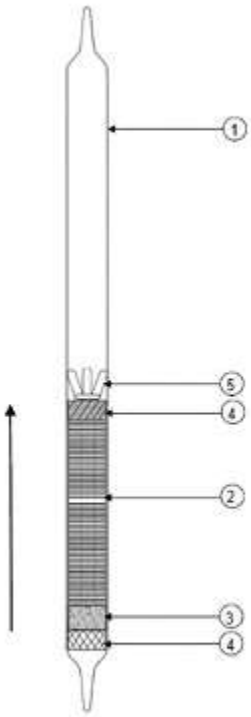


Figure 1

No. of Pages : 21 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202021000854 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AUTOMOTIVE AIRFLOW MANAGEMENT SYSTEM TO MAINTAIN AIR FLOW RATE OF AIR VENTS

(51) International classification	:B60H0001000000, F04D0027000000, B60H0001340000, H05K0007200000, H04R0001100000	(71)**Name of Applicant :** **1)TATA MOTORS LIMITED** Address of Applicant :Bombay House, 24 Homi Mody Street, Hutatma Chowk, Mumbai 400 001, Maharashtra, India. Maharashtra India
(31) Priority Document No	:NA	**2)TATA MOTORS EUROPEAN TECHNICAL CENTRE Plc**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	(72)**Name of Inventor :**
(86) International Application No	:NA	**1)Pravin Tilekar**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Embodiments herein provide an automotive airflow management system (100) and method thereof for maintaining air flow rate of air vents. The automotive airflow management system (100) at least one air vent flap sensor (1) to detect whether a change in a position of a flap of at least one air vent (2), a blower unit (3) determines a blower operating point and a blower duty of the at least one air vent (2) in response to detecting the change in the position of the flap of the least one air vent (2), and a blower control unit (4) receives the determined blower operating point and the determined blower duty of the at least one air vent from the blower unit (3). FIG. 2

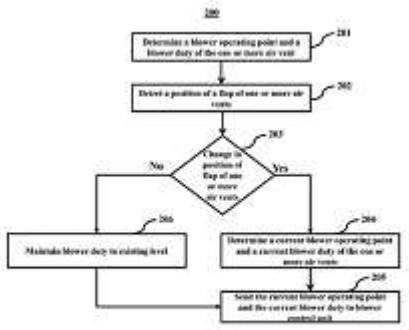


FIG. 2

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000859 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PHARMACEUTICAL FORMULATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF)-SPECIFIC FUSION PROTEIN AND PREPARATION THEREOF •

(51) International classification	:C07K0014520000, A61K0038180000, A61K0047220000, C07K0016000000, A61K0047020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)CADILA HEALTHCARE LIMITED
Address of Applicant :Zydus Corporate Park, Scheme No. 63, Survey No. 536, Khoraj (Gandhinagar), Nr. Vaishnodevi Circle, Sarkhej Gandhinagar Highway, Ahmedabad 382481, Gujarat, India Gujarat India
(72)**Name of Inventor :**
1)MENDIRATTA, Sanjeev Kumar
2)BANDYOPADHYAY, Sanjay
3)PATEL, Chintan
4)BHATT, Chandresh
5)PATEL, Tushar

(57) Abstract :
ABSTRACT Pharmaceutical formulation of vascular endothelial growth factor (VEGF)-specific fusion protein and preparation thereof • The present invention provides novel stable pharmaceutical formulation of VEGF-specific fusion protein, preferably aflibercept comprising buffer, salt and / or carbohydrate. The formulation prepared according to the present invention is formulated in the presence of 40 mM to 75 mM of buffer and / or in the presence of 0 mM to 30 mM of salt. Preferred aspects of the present invention provides novel stable pharmaceutical formulation of VEGF-specific fusion protein, preferably aflibercept comprising aflibercept, phosphate buffer, inorganic salt and carbohydrate wherein said formulation comprises amount of phosphate buffer between 40 mM to 75 mM or said formulation comprises amount of salt between 0 mM to 30 mM. In one of the aspects, the present invention provides liquid or lyophilized or frozen pharmaceutical formulation of VEGF-specific fusion protein, preferably aflibercept. Other aspect of the present invention includes method of making pharmaceutical formulation of VEGF-specific fusion protein, preferably aflibercept.

No. of Pages : 46 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202021000861 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR BIOMETRIC VERIFICATION

(51) International classification	:H04L0009000000, G06K0009620000, G06K0009000000, G06F0021320000, H04L0029060000	(71)**Name of Applicant :** **1)Tata Consultancy Services Limited** Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)JINDAL, Arun Kumar**
(33) Name of priority country	:NA	**2)KUMARI, Vasudha**
(86) International Application No	:NA	**3)SHAIK, Imtiyazuddin**
Filing Date	:NA	**4)CHALAMALA, Srinivasa Rao**
(87) International Publication No	: NA	**5)BHATTACHAR, Rajan Mindigal Alasingara**
(61) Patent of Addition to Application Number	:NA	**6)LODHA, Sachin Premsukh**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
This disclosure relates generally to a method and system for biometric verification. Conventional biometric verification method and system performs one or more computations in non-encrypted domain, thereby leading to security threats. The disclosed method includes performing computations such as enrollment and verification feature vector computation, dimensionality reduction of said feature vectors, and comparison of dimensionally reduced encrypted feature vectors to obtain matching scores indicating the extent of match therebetween between in encrypted domain using fully homomorphic encryption, thereby leading to secure biometric verification.

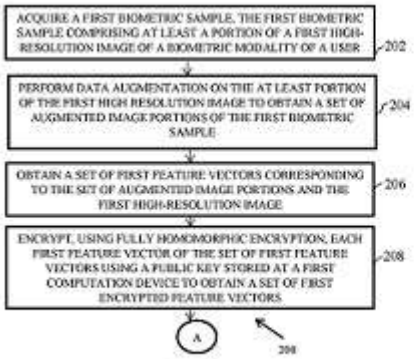


FIG. 2A

FIG. 2B

No. of Pages : 36 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202021000863 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : REGISTRATION AND VERIFICATION OF BIOMETRIC MODALITIES USING ENCRYPTION TECHNIQUES IN A DEEP NEURAL NETWORK

(51) International classification	:G06N0003080000, G06K0009000000, G06N0003040000, G06K0009620000, G06F0021320000	(71)**Name of Applicant :** **1)Tata Consultancy Services Limited** Address of Applicant :Nirmal Building, 9th Floor, Nariman Point, Mumbai - 400021, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)JINDAL, Arun Kumar**
(32) Priority Date	:NA	**2)SHAIK, Imtiyazuddin**
(33) Name of priority country	:NA	**3)NARUMANCHI, Harika**
(86) International Application No	:NA	**4)KUMARI, Vasudha**
Filing Date	:NA	**5)CHALAMALA, Srinivasa Rao**
(87) International Publication No	: NA	**6)BHATTACHAR, Rajan Mindigal Alasingara**
(61) Patent of Addition to Application Number	:NA	**7)LODHA, Sachin Premsukh**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Conventionally, biometric template protection has been achieved to improve matching performance with high levels of security by use of deep convolution neural network models. However, such attempts have prominent security limitations mapping information of images to binary codes is stored in an unprotected form. Given this model and access to the stolen protected templates, the adversary can exploit the False Accept Rate (FAR) of the system. Secondly, once the server system is compromised all the users need to be re-enrolled again. Unlike conventional systems and approaches, present disclosure provides systems and methods that implement encrypted deep neural network(s) for biometric template protection for enrollment and verification wherein the encrypted deep neural network(s) is utilized for mapping feature vectors to a randomly generated binary code and a deep neural network model learnt is encrypted thus achieving security and privacy for data protection.

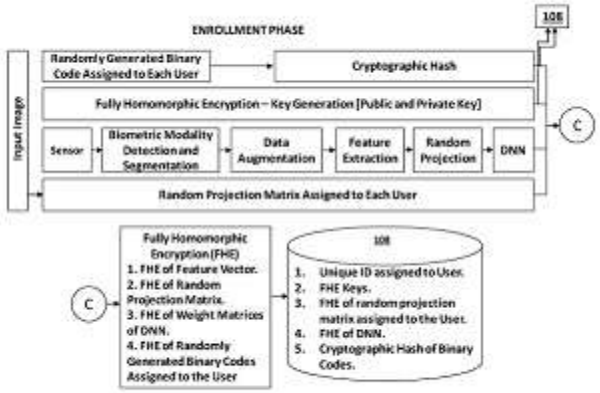


FIG. 2A

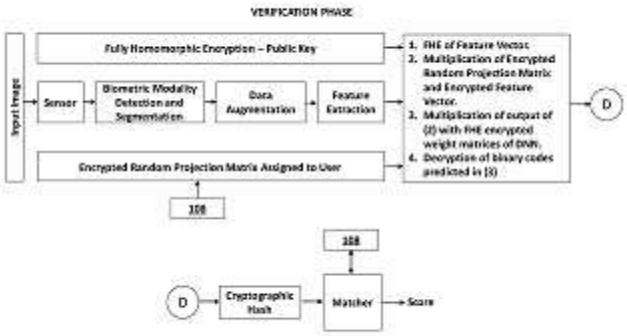


FIG. 2B

No. of Pages : 42 No. of Claims : 10

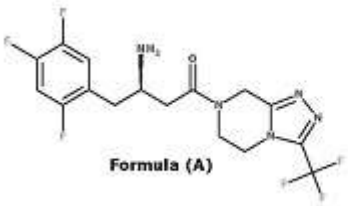
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

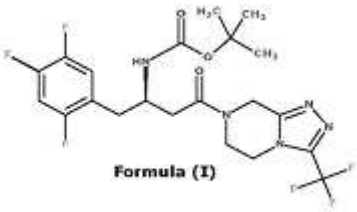
(21) Application No.202021000880 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMPROVED PROCESS FOR SYNTHESIS OF SITAGLIPTIN AND INTERMEDIATES THEREOF

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000	(71)**Name of Applicant :** **1)Aarti Industries Limited** Address of Applicant :71, Udyog kshetra, 2nd Floor, Mulund Goregaon Link Road, Mulund (W), Mumbai- 400080, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Parimal Hasmukhlal Desai**
(33) Name of priority country	:NA	**2)Subramanian Seetharaman**
(86) International Application No	:NA	**3)Vikas Hiraman Nikam**
Filing Date	:NA	**4)Santosh Shivaji Bhalekar**
(87) International Publication No	: NA	**5)Aniket Anil Chilekar**
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The invention relates to a process for preparation of sitagliptin (Formula (A)) and salts thereof, comprising, reacting a compound of Formula (I) with a first acid and a substituted alcohol having electron withdrawing groups. The invention also relates to a process for preparation of compound of Formula (I).


Formula (A)


Formula (I)

No. of Pages : 24 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/12/2020
(21) Application No.202024056648 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HOME DEVICE CAPABLE OF GAS DETECTION

(51) International classification	:G01N0033000000, A61B0005080000, G01N0033497000, G08B0021140000, F02M0021020000
(31) Priority Document No	:109100667
(32) Priority Date	:08/01/2020
(33) Name of priority country /region	:Taiwan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MICROJET TECHNOLOGY CO., LTD.
Address of Applicant :NO. 28, R&D 2ND RD., SCIENCE-BASED INDUSTRIAL PARK, HSINCHU, TAIWAN
(72)**Name of Inventor :**
1)Hao-Jan Mou
2)Yung-Lung Han
3)Chi-Feng Huang
4)Chun-Yi Kuo
5)Yi-Ting Lu
6)Chang-Yen Tsai
7)Wei-Ming Lee

(57) Abstract :
The home device (100) capable of gas detection is provided and includes a main body (1) and a gas detection module (3). The main body (1) has at least one inlet (11), at least one outlet (12) and a gas flowing channel (13) disposed between the at least one inlet (11) and the at least one outlet (12). The gas detection module (3) is disposed in the gas flowing channel (13) of the main body (1) and includes a piezoelectric actuator (32) and at least one sensor. Gas is inhaled into the gas flowing channel (13) through the inlet (11) by the piezoelectric actuator (32), is discharged out through the outlet (12), and is transported to the at least one sensor to be detected so as to obtain gas information.

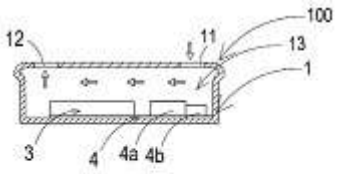


FIG. 1

No. of Pages : 46 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202122022245 A
(19) INDIA
(22) Date of filing of Application :18/05/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : PHARMACEUTICAL COMPOSITION COMPRISING DAPAGLIFLOZIN

(51) International classification	:A61K0009200000, A61K0031700000, A61K0009160000, A61K0031155000, A61K0031315000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:IN201721009146
Filed on	:16/03/2017

(71)**Name of Applicant :**
1)Inventia Healthcare Limited
Address of Applicant :Unit 703 & 704, 7th floor, Hubtown Solaris, N S Phadke Marg, Andheri (East), Mumbai - 400069, Maharashtra, India Maharashtra India
(72)**Name of Inventor :**
1)Shah Vaibhavi Ankur
2)Redasani Vijayendrakumar Virendrakumarji
3)Ghongade Anant Mahadev

(57) Abstract :
The present invention relates to solid oral pharmaceutical compositions comprising amorphous dapagliflozin. The invention further relates to a process for the preparation of the said pharmaceutical compositions. The said compositions are administered orally for the treatment of diabetes mellitus. The said compositions provide the desired immediate release of dapagliflozin and were found to be stable under accelerated conditions.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/06/2021

(21) Application No.202122024758 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ANTICANCER COMPOUNDS

(51) International classification	:A61K0031402500, C07C0001000000, C07D0317500000, C07D0311480000, C07D0317560000	(71)**Name of Applicant :** **1)Godavari Biorefineries Limited** Address of Applicant :45-47, Somaiya Bhavan, Mahatma Gandhi Road, Fort, Mumbai 400 001, Maharashtra, India Maharashtra India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Vitthal Yadav**
(33) Name of priority country	:NA	**2)Maithili Athavale**
(86) International Application No	:NA	**3)Prashant Kharkar**
Filing Date	:NA	**4)Sangeeta Srivastava**
(87) International Publication No	: NA	**5)Samir Somaiya**
(61) Patent of Addition to Application Number	:NA	**6)Smera Satish**
Filing Date	:NA	**7)Sandip Gavade**
(62) Divisional to Application Number	:201621035967	
Filed on	:20/04/2017	

(57) Abstract :
The present invention discloses compounds for inhibition of uncontrolled cell proliferation particularly in cancer stem cells. Particularly, the invention relates to compounds of Formula III to XIV for the treatment of cancer, such as breast and prostate cancer.

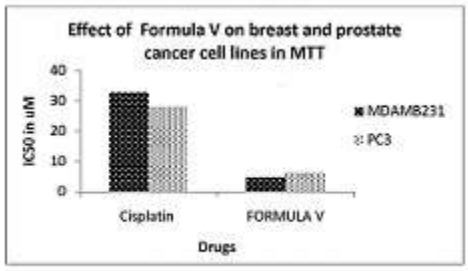


FIGURE 1

No. of Pages : 122 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/03/2021
(21) Application No.202125012998 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : LIGHT BLOCKING SHEET, IMAGING LENS MODULE AND ELECTRONIC APPARATUS

(51) International classification	:G03B0011040000, C09D0005000000, H01L0031160000, C09D0001000000, G02B0005000000
(31) Priority Document No	:105137120
(32) Priority Date	:14/11/2016
(33) Name of priority country/region	:Taiwan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201724020664
Filed on	:13/06/2017

(71)**Name of Applicant :**
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Address of Applicant :No.11, Jingke Rd., Nantun Dist., Taichung City 408, Taiwan,
(72)**Name of Inventor :**
1)Chih-Wen HSU
2)Chih-Wei CHENG
3)Ming-Ta CHOU

(57) Abstract :
A light blocking sheet includes a first outer layer, a second outer layer, an inner substrate layer and a central axis. The first outer layer includes a first opening. The second outer layer includes a second opening. The inner substrate layer is disposed between the first outer layer and the second outer layer. The inner substrate layer connects the first outer layer to the second outer layer, and the inner substrate layer includes a substrate opening. The central axis is coaxial with the first opening, the second opening and the substrate opening.

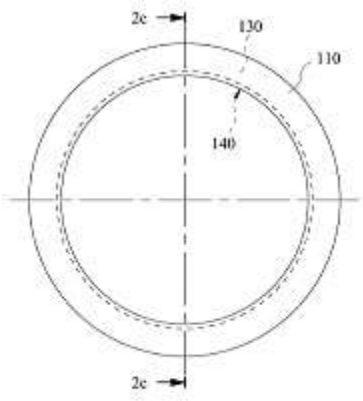

Fig. 2A

No. of Pages : 68 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/04/2021

(21) Application No.202125018212 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FILTER ELEMENT AND FILTER ARRANGEMENT

(51) International classification	:B01D0046240000, B01D0046000000, F02M0035024000, B01D0046520000, F02M0035020000	(71)**Name of Applicant :** **1)MANN+HUMMEL GmbH** Address of Applicant :Schwieberdinger Str. 126, 71636 Ludwigsburg, Germany Germany
(31) Priority Document No	:102015004380.3	(72)**Name of Inventor :** **1)Dennis Stark**
(32) Priority Date	:10/04/2015	**2)Beate Brandt**
(33) Name of priority country	:Germany	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:201624008048	
Filed on	:08/03/2016	

(57) Abstract :
A filter element (3), which has an oval cross-section in a longitudinal direction (LR) thereof and comprises a circumferential sealing device (10) for, in particular, radially sealing the filter element (3) off from a filter holder (2) for the filter element (3), wherein the sealing device (3) has two first curvature sections (35, 36) arranged one facing the other and two second curvature sections (38, 39) arranged one facing the other, wherein the first curvature sections (35, 36) each have a first radius of curvature (R35, R36) and the second curvature sections (38, 39) each have a second radius of curvature (R38, R39), and wherein the first radius of curvature (R35, R36) differs from the second radius of curvature (R38, R39). Figure 16

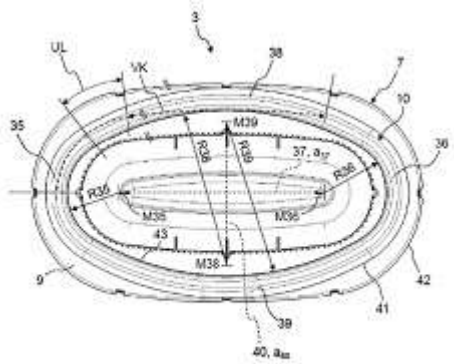

Fig. 16

No. of Pages : 72 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2021

(21) Application No.202127007824 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POSITION-IDENTIFYING DEVICE, POSITION-IDENTIFYING SYSTEM, POSITION-IDENTIFYING METHOD, AND POSITION-IDENTIFYING PROGRAM

(51) International classification	:G06Q0010080000, H04N0001320000, H04W0048180000, H04W0084120000, G02B0021360000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/JP2018/033306
Filing Date	:07/09/2018
(87) International Publication No	:WO 2020/049741
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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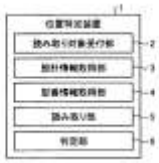
Address of Applicant :7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 1008310 Japan
(72)**Name of Inventor :**
1)TAKEUCHI, Takeshi
2)TATSUMI, Shogo

(57) Abstract :
The present invention comprises: a scanning target receiving unit (2) for receiving the designation of a scanning range for identifier tags, which store unit information that identifies devices attached to the cars of a train and are adhered to the devices; a design information acquiring unit (3) for acquiring a model number indicating the type of a device in the scanning range, and design information indicating the positions of the cars of the train at which the devices of each model number are attached; a model number information acquiring unit (4) for acquiring model number information indicating the relationship between a model number and the unit information; a scanning unit (5) for scanning, from at least one identifier tag, the unit information stored in said identifier tag; and an assessing unit (6) that uses the model number information to identify the model number of the device to which the unit information scanned by the scanning unit (5) belongs, uses the design information to assess whether the device identified using the model number is a device present in the scanning range, and, if the device is present in the scanning range, associates the attachment position indicated by the design information and the unit information of the device for which the model number was identified.



No. of Pages : 30 No. of Claims : 11

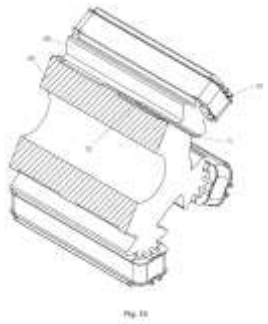
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2021
(21) Application No.202127007839 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ROTOR WITH HYBRID POLES FOR A ROTATING ELECTRICAL MACHINE WITH SALIENT POLES AND ELECTRICAL MACHINE USING SAME

(51) International classification	:H02K0015000000, H02K0001270000, E04G0007320000, H02K0003520000, H02G0003140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/BR2018/050312
Filing Date	:31/08/2018
(87) International Publication No	:WO 2020/041845
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)WEG EQUIPAMENTOS ELETRICOS SA - MOTORES
Address of Applicant :Av. Prefeito Waldemar Grubba, 3000 - Vila Lalau 82956-900 Jaragua Do Sul Brazil
(72)**Name of Inventor :**
1)GOMES FONCATTI, Lucas

(57) Abstract :
The invention relates to a rotor with hybrid poles for a rotating electrical machine with salient poles, consisting of poles (30) that are radially arranged around a packet (10) of the polar wheel (60), wherein integrated poles (31) alternate with removable poles (32). The removable poles (32) are reversibly fixed in cavities (50) of the polar wheel (60) or packet (10) by means of wedge and counter-wedge assemblies (70) which each comprise at least one upper wedge (71) and at least one lower wedge (72). The present invention further relates to a rotating electrical machine provided with a rotor with hybrid poles according to the invention.



No. of Pages : 12 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2021

(21) Application No.202127007841 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RANDOM ACCESS METHOD AND DEVICE, AND COMPUTER STORAGE MEDIUM

(51) International classification	:H04W0074080000, H04W0074000000, H04W0072040000, G06K0017000000, H04W0076110000
(31) Priority Document No	:201810866886.6
(32) Priority Date	:01/08/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/081996
Filing Date	:10/04/2019
(87) International Publication No	:WO 2020/024614
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
Address of Applicant :No. 18, Haibin Road, Wusha, Chang'an, Dongguan, Guangdong 523860 China
(72)**Name of Inventor :**
1)SHI, Cong
2)YOU, Xin
3)LU, Qianxi
4)XU, Weijie

(57) Abstract :
Disclosed are a random access method and device, and a computer storage medium. The method can comprise: receiving a random access response (RAR) message based on first identification information, wherein the RAR message carries second identification information; and detecting, within a pre-set time window, a physical downlink control channel (PDCCH) according to the second identification information or third identification information having an association relationship with the second identification information, wherein the PDCCH is scrambled by means of the second identification information or the third identification information.

图 3

No. of Pages : 30 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2021

(21) Application No.202127007843 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : THREADED JOINT FOR COUPLING TWO CONCENTRIC TUBES TO ONE TUBE

(51) International classification	:E21B0017042000, F16L0015000000, F16L0015040000, F16L0015060000, B29C0065000000	(71)**Name of Applicant :** **1)HALLIBURTON ENERGY SERVICES, INC.** Address of Applicant :3000 N. Sam Houston Parkway E. Houston, Texas 77032-3219 U.S.A.
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)VICK JR, James Dan**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT/US2018/067963	
Filing Date	:28/12/2018	
(87) International Publication No	:WO 2020/139383	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A threaded joint (200) provides for metal -to-metal sealing on the ends of concentrically positioned inner and outer tubes when joining the concentric tubes to a single tube (107). A threaded coupling (105) secures the inner and outer tubes and joins both tubes to a single tube. The threaded connection leverages metal-to-metal sealing on the ends of each tube. The inner tube (102) may differ in length from the outer tube (101) and contains a single thread (211) at its for receiving the threaded coupling. Threading the coupling onto the inner tube establishes four flexing metal-to-metal seals (209A-D) between the threaded joint components. The inner and outer tubes maintain contact at the internal shoulder (104) as a result of preloading. If the tubes are of varying thicknesses, a nut (307) is placed between the internal shoulder and the threaded coupling to preserve contact between the tubes at the internal shoulder.

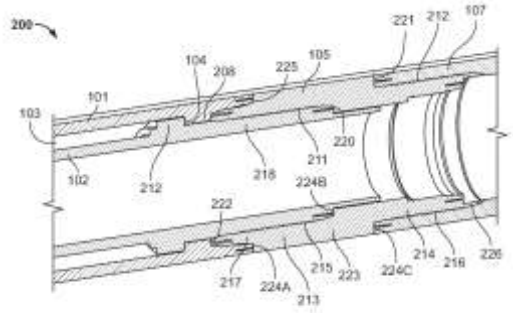


FIG. 2

No. of Pages : 11 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127007974 A
(19) INDIA
(22) Date of filing of Application :25/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : RANDOM ACCESS METHOD AND RELATED DEVICE

(51) International classification	:H04W0074080000, H04L0012240000, H04W0008200000, H04W0012020000, H04W0072040000	(71)**Name of Applicant :** **1)VIVO MOBILE COMMUNICATION CO.,LTD.** Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China
(31) Priority Document No	:201810835735.4	(72)**Name of Inventor :**
(32) Priority Date	:26/07/2018	**1)WU, Yumin**
(33) Name of priority country	:China	**2)MA, Yue**
(86) International Application No	:PCT/CN2019/097862	
Filing Date	:26/07/2019	
(87) International Publication No	:WO 2020/020333	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Provided by the present disclosure are a random access method and a related device, the method comprises: sending a first message to a network-side device; receiving a response message sent by the network side device and carrying target configuration information; there is a correlation between at least part of the target configuration information and relevant parameters, and the relevant parameters are parameters that can be learned before a terminal device receives the response message; and obtaining, according to the correlation, configuration information, in the target configuration information, related with a target relevant parameter of the terminal device.

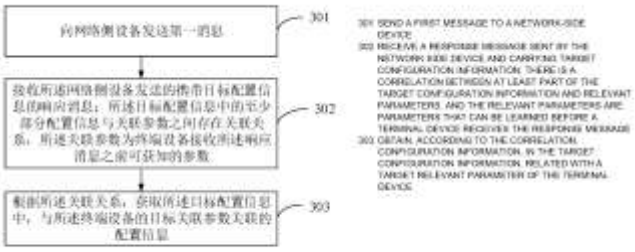


图 3

No. of Pages : 39 No. of Claims : 29

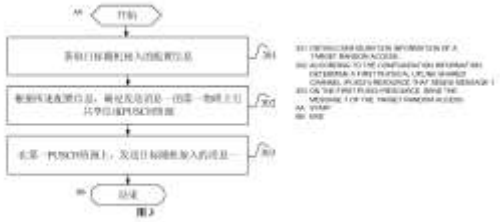
(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127008006 A
(19) INDIA
(22) Date of filing of Application :25/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : RANDOM ACCESS METHOD, TERMINAL, AND NETWORK DEVICE

(51) International classification	:H04W0074080000, H04W0072040000, H04W0074000000, H04W0074020000, H04W0072000000
(31) Priority Document No	:201810837903.3
(32) Priority Date	:26/07/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/097457
Filing Date	:24/07/2019
(87) International Publication No	:WO 2020/020212
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VIVO MOBILE COMMUNICATION CO., LTD.
Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China
(72)**Name of Inventor :**
1)ZHANG, Yanxia
2)WU, Yumin

(57) Abstract :
The present invention provides a random access method, a terminal, and a network device. The random access method is applied to the terminal and comprises: obtaining configuration information of a target random access; according to the configuration information, determining a first physical uplink shared channel (PUSCH) resource that sends message 1; and on the first PUSCH resource, sending the message 1 of the target random access.



No. of Pages : 27 No. of Claims : 21

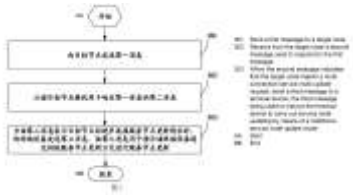
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/02/2021

(21) Application No.202127008011 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SERVICE NODE UPDATING METHOD AND DEVICE

(51) International classification	:H04W0036000000, H04L0012819000, G06F0016230000, G09G0003340000, H04W0060000000	(71)**Name of Applicant :** **1)VIVO MOBILE COMMUNICATION CO., LTD.** Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China (72)**Name of Inventor :** **1)ZHANG, Yanxia** **2)WU, Yumin**
(31) Priority Document No	:201810835732.0	
(32) Priority Date	:26/07/2018	
(33) Name of priority country	:China	
(86) International Application No	:PCT/CN2019/097476	
Filing Date	:24/07/2019	
(87) International Publication No	:WO 2020/020218	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Provided by the embodiments of the present disclosure are a service node updating method and device, the method comprising: sending a first message to a target node; receiving from the target node a second message used to respond to the first message; and when the second message indicates that the target node rejects a multi-connection service node update, sending a third message to a terminal device, the third message being used to instruct the terminal device to carry out service node updating by means of a traditional service node update mode.



No. of Pages : 40 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/02/2021

(21) Application No.202127008060 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR DUPLICATING FLAMMABLE GAS

(51) International classification	:A61K0008410000, C08K0003220000, G01N0033000000, C12N0005078300, B01J0035100000
(31) Priority Document No	:62/714479
(32) Priority Date	:03/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/045021
Filing Date	:03/08/2019
(87) International Publication No	:WO 2020/028888
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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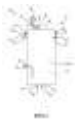
Address of Applicant :4311 Meadowview Place Encino, CA 91346 U.S.A.
2)FARAMARZI, Sabrina
3)FARAMARZI, Sandra
(72)**Name of Inventor :**
1)FARAMARZI, Faramaz, Fred
2)FARAMARZI, Sabrina
3)FARAMARZI, Sandra

(57) Abstract :
A system and method for duplicating a flammable gas (SDFG) that utilizes a specially engineered liquid in combination with a purpose-built container to duplicate the flammable gas is disclosed. There are three methods for the production of an engineered liquid for use in the system. In less than one hour, a single unit of any flammable or hydrocarbon gas will yield up to at least double the quantity of the same gas back.



No. of Pages : 13 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/02/2021

(21) Application No.202127008063 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : OUTDOOR UNIT, INDOOR UNIT, AND AIR CONDITIONER

(51) International classification	:F24F0001240000, F24F0001180000, F24F0001460000, F25B0049020000, F24F0001400000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/JP2018/037071
Filing Date	:03/10/2018
(87) International Publication No	:WO 2020/070833
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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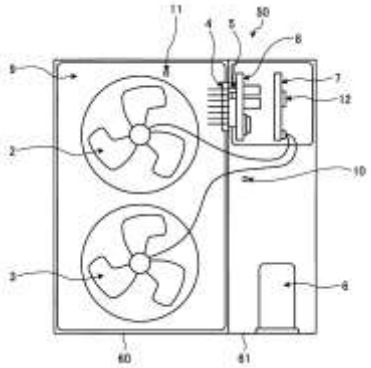
(72)**Name of Inventor :**
1)MATSUSHITA, Shinya

(57) Abstract :
An outdoor unit (50) according to the present invention is provided with: a heat exchanger (9) that exchanges heat between a refrigerant and air; a first blower (2) and a second blower (3) for blowing air to the heat exchanger (9); a compressor driving unit that is provided with a power element and that drives a compressor (6) for compressing the refrigerant; cooling fins (4) for cooling the power element; a cooling fin temperature detection unit (5) that detects the temperature of the cooling fins (4); and a position determination unit (12) that determines the positions of the first blower (2) and the second blower (3) by using the temperature of the cooling fins (4).



No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/02/2021
(21) Application No.202127008069 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRAIN DEVICE MANAGEMENT SYSTEM, INFORMATION COLLECTION DEVICE, GROUND SYSTEM, AND TRAIN DEVICE MANAGEMENT METHOD

(51) International classification	:G06F0003060000, H04L0029080000, H04W0004440000, G05B0019418000, G07C0005080000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/JP2018/033304
Filing Date	:07/09/2018
(87) International Publication No	:WO 2020/049739
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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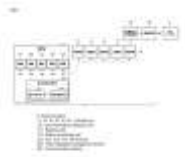
(72)**Name of Inventor :**
1)TAKEUCHI, Takeshi
2)KAEDE, Satoshi

(57) Abstract :
Provided is: an information collection device (1) that collects individual identification numbers that identify a device from an identification tag affixed to the device that has been installed in a train, collects operational information indicating the operational status of each device, transmits, for each device, to a ground system (2) an individual identification number, operation information, a car number identifying the car to which each device is attached, and a unit number identifying the train; and the ground system (2) that manages the unit number, the car number, and the operation information in association with the individual identification number of each device.



No. of Pages : 41 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/02/2021

(21) Application No.202127008084 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RANDOM ACCESS METHOD, TERMINAL DEVICE AND NETWORK DEVICE

(51) International classification	:H04W0074080000, H04L0001000000, H04W0074000000, H04W0076110000, H04W0052360000
(31) Priority Document No	:201810858499.8
(32) Priority Date	:31/07/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/096505
Filing Date	:18/07/2019
(87) International Publication No	:WO 2020/024801
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)CHEN, Xiaohang
2)PAN, Xueming

(57) Abstract :
Provided in the present disclosure are a random access method, a terminal device and a network device, the random access method comprising: sending a random access message 1, the random access message 1 carrying a load part, and the load part being obtained by carrying out modulation coding according to a target modulation and coding scheme (MCS).

No. of Pages : 27 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008110 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AQUEOUS COMPOSITIONS OF TOPRAMEZONE

(51) International classification	:A01N0043800000, A01N0025280000, A01N0025060000, A01N0047380000, A61K0039390000
(31) Priority Document No	:62/723033
(32) Priority Date	:27/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/EP2019/071527
Filing Date	:12/08/2019
(87) International Publication No	:WO 2020/043470
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BASF SE
Address of Applicant :Carl-Bosch-Strasse 38 67056 Ludwigshafen am Rhein Germany
(72)**Name of Inventor :**
1)DICKESS, Shawn
2)OESTER, Dean A

(57) Abstract :
The present invention relates to an aqueous herbicidal composition comprising topramezone. The present invention particularly relates to an aqueous solution of topramezone in a buffer solution with or without adjuvants. The present invention also relates to the use of these compositions for controlling undesirable vegetation, in crops and non-crops.

No. of Pages : 29 No. of Claims : 23

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008112 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : THERMOPLASTIC MOLDING MATERIAL

(51) International classification	:C08G0069180000, C08F0002440000, C08L0059020000, C08L0023100000, G02B0001040000
(31) Priority Document No	:18189401.5
(32) Priority Date	:16/08/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/071608
Filing Date	:12/08/2019
(87) International Publication No	:WO 2020/035455
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BASF SE
Address of Applicant :Carl-Bosch-Str. 38 67056 Ludwigshafen am Rhein Germany
(72)**Name of Inventor :**
1)SPIES, Patrick
2)SIMON, Jasmina
3)ALLINGER, Sebastian
4)WEBER, Martin

(57) Abstract :
The use of copolyamides c) produced by polymerization of the components A') 15% to 84% by weight of at least one lactam, B') 16% to 85% by weight of a monomer mixture (M) comprising the components B1') at least one C32-C40-dimer acid and B2') at least one C4-C12-diamine, wherein the percentages by weight of the components A') and B') are in each case based on the sum of the percentages byweight of the components A') and B'), to increase the impact strength and/or breaking elongation of molded articles made of molding materials comprising thermoplastic polyamides, which are different from copolyamides c).

No. of Pages : 30 No. of Claims : 13

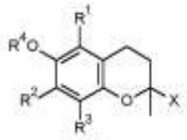
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

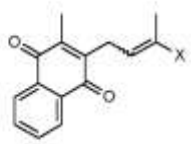
(21) Application No.202127008113 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYNTHESIS OF CHROMANOL AND 2-METHYL-1,4-NAPHTHOQUINONE DERIVATIVES

(51) International classification	:C04B0028020000, C07D0209880000, C07D0311220000, C07C0069240000, C09B0057000000	(71)**Name of Applicant :** **1)BASF SE** Address of Applicant :Carl-Bosch-Strasse 38 67056 Ludwigshafen am Rhein Germany (72)**Name of Inventor :** **1)WEINGARTEN, Melanie** **2)SIEGEL, Wolfgang** **3)PUHL, Michael**
(31) Priority Document No	:18189592.1	
(32) Priority Date	:17/08/2018	
(33) Name of priority country	:EPO	
(86) International Application No	:PCT/EP2019/072034	
Filing Date	:16/08/2019	
(87) International Publication No	:WO 2020/035601	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates to a process for the production of chromanol and 2-methyl-1,4-naphthoquinone derivatives, more specifically to a process for preparing a compound of the general formula (I) or (II) wherein the variables are as defined in the claims and the description.


(I)


(II)

No. of Pages : 72 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008114 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ORAL MOUSSE COMPOSITION

(51) International classification	:A61Q0011000000, A61K0008600000, A61K0008190000, A61K0008365000, A61K0008550000
(31) Priority Document No	:62/723089
(32) Priority Date	:27/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/042392
Filing Date	:18/07/2019
(87) International Publication No	:WO 2020/046490
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BASF SE
Address of Applicant :Carl Bosch Strasse 38 67056 Ludwigshafen am Rhein Germany
(72)**Name of Inventor :**
1)ONTUMI, Denis
2)GRIPP, Anna Anita
3)GUILIANO, Gina Marie
4)BASILAN, Joel

(57) Abstract :
Disclosed herein is a foam or a liquid oral care composition comprising an alkyl polyglycoside surfactant and a propellant, a method of using said oral care composition, method of its preparation, and a system comprising a pressurizable container enclosing the oral care composition.

No. of Pages : 20 No. of Claims : 38

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127008115 A
(19) INDIA
(22) Date of filing of Application :26/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : FOUR-WAY CONVERSION CATALYST FOR THE TREATMENT OF AN EXHAUST GAS STREAM

(51) International classification	:B01D0053940000, B01J0037020000, B01J0023630000, F01N0003035000, B01J0035040000
(31) Priority Document No	:18191953.1
(32) Priority Date	:31/08/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/073226
Filing Date	:30/08/2019
(87) International Publication No	:WO 2020/043885
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BASF CORPORATION
Address of Applicant :100 Park Avenue Florham Park, New Jersey 07932 U.S.A.
2)BASF SE
(72)**Name of Inventor :**
1)SCHLERETH, David
2)LI, Hao
3)SIEMUND, Stephan
4)SCHMITZ, Thomas
5)SIANI, Attilio
6)WALTZ, Florian

(57) Abstract :
The present invention relates to a four-way conversion catalyst for the treatment of an exhaust gas stream of a gasoline engine, the catalyst comprising a porous wall-flow filter substrate comprising an inlet end, an outlet end, a substrate axial length extending between the inlet end and the outlet end, and a plurality of passages defined by porous internal walls of the porous wallflow filter substrate, wherein the plurality of passages comprise inlet passages having an open inlet end and a closed outlet end, and outlet passages having a closed inlet end and an open outlet end, wherein the interface between the passages and the porous internal walls is defined by the surface of the internal walls; wherein the porous internal walls comprise pores which comprise an oxidic component comprising a first refractory metal oxide, said first refractory metal oxide comprising aluminum, said oxidic component having a platinum group metal content in the range of from 0 to 0.001 weight-% based on the total weight of the oxidic component; wherein the catalyst further comprises a first three-way conversion catalytic coating, at least weight-% thereof being comprised in the pores of the internal walls, said first three-way conversion catalytic coating comprising an oxygen storage compound and a platinum group metal supported on a second refractory metal oxide.

No. of Pages : 72 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127008149 A
(19) INDIA
(22) Date of filing of Application :26/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INFORMATION RECEIVING METHOD, INFORMATION TRANSMISSION METHOD, TERMINAL, AND NETWORK-SIDE DEVICE

(51) International classification	:H04W0052020000, H04W0072040000, H04L0005000000, H04W0004029000, G01N0033660000
(31) Priority Document No	:201810866195.6
(32) Priority Date	:01/08/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/097863
Filing Date	:26/07/2019
(87) International Publication No	:WO 2020/024876
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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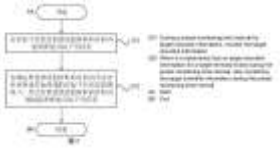
Address of Applicant :#283, BBK Road, Wusha,Chang'an Dongguan, Guangdong 523860 China
(72)**Name of Inventor :**
1)WU, Yumin
2)BAO, Wei

(57) Abstract :
The present disclosure provides an information receiving method, an information transmission method, a terminal, and a network-side device. The method comprises: during a preset monitoring time interval for target downlink information, monitoring the target downlink information; and when it is determined that no target downlink information for a target terminal exists during the preset monitoring time interval, stopping monitoring the target downlink information during the preset monitoring time interval.



No. of Pages : 25 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008168 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : EVENT CONTENT DELIVERY

(51) International classification	:H04L0029080000, H04L0012801000, H04L0029060000, G06F0016953500, H04L0012825000
(31) Priority Document No	:16/120138
(32) Priority Date	:31/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/048932
Filing Date	:29/08/2019
(87) International Publication No	:WO 2020/047335
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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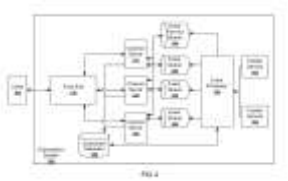
Address of Applicant :1355 Market Street, Suite 900 San Francisco, California 94103 U.S.A.
(72)**Name of Inventor :**
1)JIN, Jie
2)NORLANDER, Dustin

(57) Abstract :
Methods, systems, and apparatus, including computer programs encoded on computer storage media, for delivering event content. One of the methods includes initiating, for one or more client devices, a subscription to a topic; receiving an event relevant to a topic; determining a number of channel servers that correspond to the topic, wherein each channel server is associated with one or more client devices; determining that the number of channel servers that correspond to the topic is greater than a threshold number of channel servers; writing the received event from the event processor to an event fan-out queue, in response to the determination that the number of channel servers that correspond to the topic is greater than the threshold number of channel servers; reading the received event from the event fan out queue; and sending the received event to the one or more client devices associated with each respective channel server.



No. of Pages : 18 No. of Claims : 20

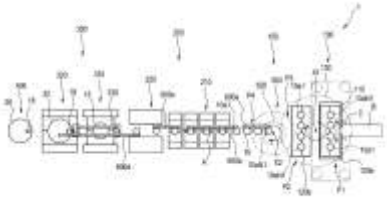
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008182 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR MANUFACTURING RESIN CONTAINER, AND DEVICE FOR MANUFACTURING RESIN CONTAINER

(51) International classification	:B29C0049060000, B29C0049420000, B29L0031000000, B29K0067000000, B29C0049640000
(31) Priority Document No	:2018-158912
(32) Priority Date	:28/08/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/033558
Filing Date	:27/08/2019
(87) International Publication No	:WO 2020/045451
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)NISSEI ASB MACHINE CO., LTD.
Address of Applicant :4586-3, Koo, Komoro-shi, Nagano 3848585 Japan
(72)**Name of Inventor :**
1)OGIHARA Shuichi

(57) Abstract :
This method for manufacturing a resin container includes an injection molding step (S1) of injection molding a plurality of preforms (10) in an arrangement direction (C), a temperature adjusting step (S2) of adjusting the temperature of the preforms (10), and a blow molding step (S3) of molding containers (20) from the preforms (10). The manufacturing method includes, between the injection molding step (S1) and the temperature adjusting step (S2), a changing step (S1.5) of changing the orientation of the preforms (10) aligned in the arrangement direction (C) to an orientation aligned in a conveying direction.



No. of Pages : 26 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008184 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : GEARLESS POWER CONVERSION SYSTEM EMPLOYING TWO ELECTRIC MACHINES

(51) International classification	:B60W0020000000, H02K0007180000, B60L0050160000, B60K0006520000, B62M0006450000	(71)**Name of Applicant :** **1)PLANET RIDER, LLC** Address of Applicant :2225 N Steves Blvd Flagstaff, AZ 86004 U.S.A. (72)**Name of Inventor :** **1)CALLEY, David** **2)PURCELL, Steve**
(31) Priority Document No	:62/712668	
(32) Priority Date	:31/07/2018	
(33) Name of priority country	:U.S.A.	
(86) International Application No	:PCT/US2019/044543	
Filing Date	:31/07/2019	
(87) International Publication No	:WO 2020/028588	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A human power conversion system incorporates two or more electric machines to aid in the powering of a vehicle through energy conversion, A first electric machine is coupled with the human powered input and acts as a generator when a human power input is not sufficient to produce electrical power that is provided to a second electric machine that propels the vehicle. The vehicle may be a bicycle and the first electric machine may be coupled to the crank. A bi-coupled electric machine including the first and second electric machines with a common rotor or stator may be employed and coupled to the crank and/or the driven wheel. Power produced by the first electric machine may be provided directly to the second machine or may be stored in a battery and used to propel the vehicle or power other electronic components.

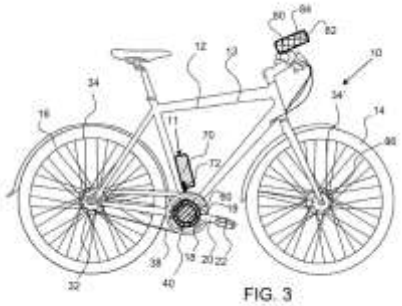


FIG. 3

No. of Pages : 26 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008210 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TEXT INPUT METHOD AND TERMINAL

(51) International classification	:G06F0003023000, G06F0003048800, G06F0003048100, G06F0003048300, G06F0040166000
(31) Priority Document No	:201810862769.2
(32) Priority Date	:01/08/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/096086
Filing Date	:16/07/2019
(87) International Publication No	:WO 2020/024788
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VIVO MOBILE COMMUNICATION CO., LTD.
Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China
(72)**Name of Inventor :**
1)LIN, Songjie

(57) Abstract :
Provided are a text input method and a terminal. The method comprises: when a trigger operation for triggering text input is detected, displaying a text editing interface, wherein the text editing interface comprises: an input operation area of at least two input methods and a text display area for displaying text input by the input method; and if a switching operation for switching one currently used input method of the at least two input methods to another input method is detected on a currently displayed text editing interface, maintaining display of the input operation area of the at least two input methods on the currently displayed text editing interface.

No. of Pages : 24 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008242 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RANDOM ACCESS METHOD, TERMINAL DEVICE, AND NETWORK DEVICE

(51) International classification	:H04W0074080000, H04W0076110000, H04W0074000000, C22C0038420000, H04W0004700000
(31) Priority Document No	:201810837896.7
(32) Priority Date	:26/07/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/097477
Filing Date	:24/07/2019
(87) International Publication No	:WO 2020/020219
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)ZHANG, Yanxia
2)WU, Yumin

(57) Abstract :
The present invention provides a random access method, a terminal device, and a network device. The random access method comprises: sending a two-step random access request message to the network device, a data part being carried in the two-step random access request message, and the data part being obtained by performing layer-two on layer-two configuration information.

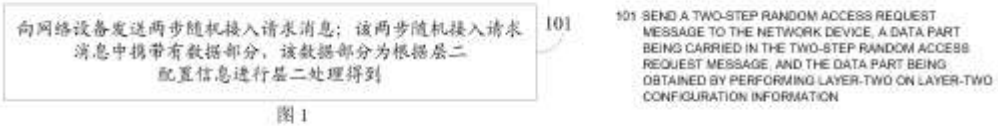

图 1

No. of Pages : 17 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008260 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HARQ FEEDBACK FOR MULTICAST/UNICAST

(51) International classification	:H04L0001180000, H04L0005140000, H04L0001000000, H04B0007260000, H04W0072040000
(31) Priority Document No	:62/738804
(32) Priority Date	:28/09/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/052438
Filing Date	:23/09/2019
(87) International Publication No	:WO 2020/068671
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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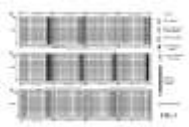
(72)**Name of Inventor :**
1)BHARADWAJ, Arjun
2)GULATI, Kapil
3)BAGHEL, Sudhir Kumar
4)PATIL, Shailesh
5)BHUSHAN, Naga

(57) Abstract :
In an aspect of the disclosure, a method, a computer-readable medium, and an apparatus are provided. The apparatus may be a UE. The apparatus may receive from a second device a first data packet in one or more receiving slots of a time division duplex frame that includes a plurality of slots. The apparatus may determine whether the first data packet is received incorrectly. The apparatus may wait until the end of the one or more receiving slots and may transmit to the second device a first NACK in a NACK feedback symbol in a configured slot after the end of the one or more receiving slots in response to determining that the first data packet was not received correctly.



No. of Pages : 56 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008268 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SIROLIMUS CONTAINING COMPOSITIONS

(51) International classification	:A61K0031436000, A61K0009000000, A61K0038130000, A61K0031474500, A61K0031470400
(31) Priority Document No	:62/724642
(32) Priority Date	:30/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/048951
Filing Date	:30/08/2019
(87) International Publication No	:WO 2020/047342
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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2)BRICHTA, Lars
(72)**Name of Inventor :**
1)BRICHTA, Lars

(57) Abstract :
Compositions and methods for treating skin lesions using topically administered antifungal agents such as cyclic peptides, including cyclosporine, tacrolimus, tresperimus, pimecrolimus, sirolimus (rapamycin), everolimus, laflunimus, laquinimod, imiquimod derivatives, esters, salts, and the like and combinations thereof.

No. of Pages : 19 No. of Claims : 15

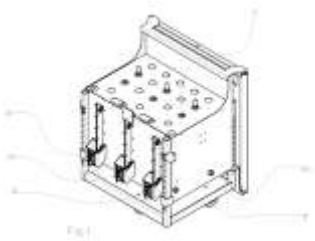
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008269 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MANAGEMENT SYSTEM FOR THE INK IN A PRINTING MACHINE

(51) International classification	:E02F0003360000, B41F0031020000, F16L0037340000, F16L0029040000, F16L0039000000
(31) Priority Document No	:102018000008812
(32) Priority Date	:21/09/2018
(33) Name of priority country	:Italy
(86) International Application No	:PCT/IB2019/057475
Filing Date	:05/09/2019
(87) International Publication No	:WO 2020/058793
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)SYSTEM CERAMICS S.P.A.
Address of Applicant :VIa Ghiarola Vecchia 73 41042 Fiorano Modenese (Modena) Italy
(72)**Name of Inventor :**
1)STEFANI, Franco

(57) Abstract :
Management system for the ink in a printing machine, comprising: one or more tanks (2), each of which is equipped with hydraulic connections (21) for quick coupling and an inner layer of insulation; a docking station (3), arranged to be placed in a printing machine, which comprises hydraulic connections (31) for quick coupling, intended to be connected to the hydraulic connections (21) of one or more tanks (2); motor means (4), associated with the docking station (3) and arranged to transfer a tank (2) between a standby position and an operating position within the docking station, and to produce the coupling of the hydraulic connections (21,31).



No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008270 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TOBACCO TRANSGENIC EVENT AND METHODS FOR DETECTION AND USE THEREOF

(51) International classification	:A01H0001040000, A01H0006820000, A01H0001020000, C12N0015820000, C07K0014415000
(31) Priority Document No	:62/712289
(32) Priority Date	:31/07/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/IL2019/050861
Filing Date	:31/07/2019
(87) International Publication No	:WO 2020/026241
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :4 Oppenheimer Street, 11th Floor 7670104 Rehovot Israel
(72)**Name of Inventor :**
1)SHOSEYOV, Oded
2)MICHAELI, Daphna
3)LUPO, Itamar

(57) Abstract :
Collagen producing plant events, DNA molecules for detecting same and uses thereof in plant breeding methods are provided.

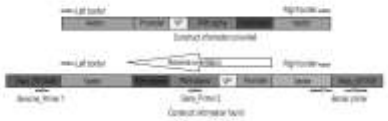
Figure 27

No. of Pages : 102 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127008271 A
(19) INDIA
(22) Date of filing of Application :26/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATICALLY PAIRING GPS DATA TO PLANNED TRAVEL ROUTES OF MOBILE OBJECTS

(51) International classification	:G01C0021340000, G08G0005000000, B60W0040090000, H04W0004029000, G01C0021200000
(31) Priority Document No	:62/747195
(32) Priority Date	:18/10/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/046167
Filing Date	:12/08/2019
(87) International Publication No	:WO 2020/081146
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :440 State Street Schenectady, New York 12305 U.S.A.
(72)**Name of Inventor :**
1)CIVITELLA, Antonio
2)MESSIA, Joseph

(57) Abstract :
GPS data is paired with planned travel routes for mobile objects including vehicles. A system obtains GPS data from a mobile object and compares the GPS data to planned travel routes. The comparison includes comparing GPS coordinates of the mobile object to the planned travel routes to determine if a specified level of GPS coordinates are within a specified distance or buffer distance from a planned travel route within a specified period of time, the mobile object is travelling in the same direction of a planned travel route, and the planned travel route is unique. If such conditions are met, the mobile object is assigned or matched to a planned travel route.

FIG 1

No. of Pages : 23 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021

(21) Application No.202127008273 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NUCLEIC ACID BASED DETECTION METHODS

(51) International classification	:C12Q0001682500, B01L0003000000, G01N0021470000, G01N0033580000, C12N0015620000
(31) Priority Document No	:1813789.3
(32) Priority Date	:23/08/2018
(33) Name of priority country	:U.K.
(86) International Application No	:PCT/GB2019/052361
Filing Date	:22/08/2019
(87) International Publication No	:WO 2020/039201
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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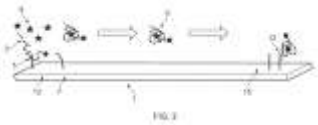
1)APTAMER DIAGNOSTICS LIMITED
Address of Applicant :Suite 2.80-2.87 Bio Centre Innovation Way Heslington York North Yorkshire YO10 5NY U.K.
(72)**Name of Inventor :**
1)TOLLEY, Arron Craig
2)BUNKA, David Harry John

(57) Abstract :
Embodiments of the present invention relate to apparatus and methods of detecting and/or quantifying a target moiety in a sample comprising the use of a nucleic-acid molecule based recapture event. Particularly although not exclusively certain embodiments of the present invention relate to apparatus and assays which comprise a displacement of an immobilised nucleic acid molecule to form a target-nucleic acid molecule complex and detection of a subsequent recapture event of either the target-nucleic acid complex or the nucleic acid molecule on its own. Other aspects and embodiments are described herein.



No. of Pages : 44 No. of Claims : 35

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/02/2021
(21) Application No.202127008274 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : WEAR RESISTANT CONCRETE FORMULATIONS AND METHODS FOR THEIR PREPARATION

(51) International classification	:C04B0040000000, C04B0028020000, C04B0014060000, C08K0003360000, C08F0002440000
(31) Priority Document No	:62/765597
(32) Priority Date	:01/09/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/000043
Filing Date	:03/09/2019
(87) International Publication No	:WO 2020/046409
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)HARTMAN, Dustin, A.
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2)SHETTERLEY, William, Archie Joseph
3)WOLFE, Chris
(72)**Name of Inventor :**
1)HARTMAN, Dustin, A.
2)SHETTERLEY, William, Archie Joseph
3)WOLFE, Chris

(57) Abstract :
A method for the preparation of concretes with improved wear resistance. The method involves the use of colloidal silica, which is added to a concrete mixture after mixing, in conjunction with a concrete cutter, which is added to the concrete mixture after the addition of the colloidal silica.

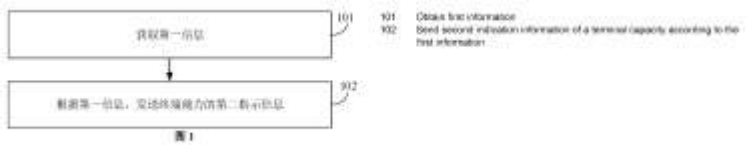
No. of Pages : 39 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202127008353 A
(19) INDIA
(22) Date of filing of Application :27/02/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CAPACITY INDICATION METHOD, AND TERMINAL AND NETWORK-SIDE NETWORK ELEMENT

(51) International classification	:H04W0072040000, H04L0005000000, H04W0084040000, H04W0036000000, H04W0036140000	(71)**Name of Applicant :** **1)VIVO MOBILE COMMUNICATION CO., LTD.** Address of Applicant :#283, BBK Road, Wusha, Chang'an Dongguan, Guangdong 523860 China (72)**Name of Inventor :** **1)KE, Xiaowan**
(31) Priority Document No	:201810866295.9	
(32) Priority Date	:01/08/2018	
(33) Name of priority country	:China	
(86) International Application No	:PCT/CN2019/098809	
Filing Date	:01/08/2019	
(87) International Publication No	:WO 2020/025015	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention provides a capacity indication method, and a terminal and a network-side network element. The capacity indication method comprises: obtaining first information, the first information comprising at least one of the following items: first indication information of a terminal capacity and terminal capacity information mapped by the first indication information; and sending second indication information of the terminal capacity according to the first information.



No. of Pages : 55 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/02/2021

(21) Application No.202127008356 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYNCHRONIZATION SIGNAL TRANSMISSION METHOD AND TERMINAL

(51) International classification	:H04W0056000000, H04L0027260000, H04L0005000000, H04J0011000000, H04W0052540000
(31) Priority Document No	:201810856303.1
(32) Priority Date	:27/07/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/096338
Filing Date	:17/07/2019
(87) International Publication No	:WO 2020/020031
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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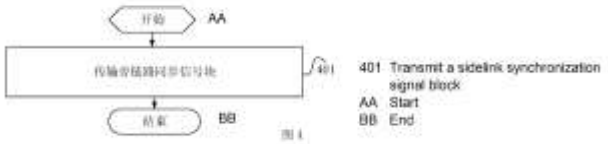
(72)**Name of Inventor :**
1)LIU, Siqi
2)JI, Zichao
3)WU, Kai

(57) Abstract :
The present invention relates to the technical field of communications, and provides a synchronization signal transmission method and a terminal. The synchronization signal transmission method is applied to a terminal, and comprises: transmitting a sidelink synchronization signal block, wherein the sidelink synchronization signal block comprises a primary sidelink synchronization signal (PSSS) and a secondary sidelink synchronization signal (SSSS), and the PSSS and the SSSS are distributed in an orthogonal frequency division multiplexing (OFDM) symbol occupied by the sidelink synchronization signal block.



No. of Pages : 38 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/02/2021

(21) Application No.202127008368 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR REMOVING CARBON DIOXIDE

(51) International classification	:H01M0008124000, H01M0008040890, E21B0043160000, H01M0008066800, H01M0008061200
(31) Priority Document No	:18186437.2
(32) Priority Date	:30/07/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/070560
Filing Date	:30/07/2019
(87) International Publication No	:WO 2020/025645
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)ITANI, Rachad
2)KOCH, Tobias
3)RAVAGNI, Alberto
4)BUCHELI, Olivier

(57) Abstract :
The method and system for removing CO2 from the atmosphere or the ocean comprising the steps of, feeding a solid oxide fuel cell (SOFC) system (2) with a gaseous hydrocarbon feed (100), converting the gaseous hydrocarbon feed (100) in the SOFC system (2) into an anode exhaust stream (101) comprising carbon dioxide CO2, the SOFC system (2) thereby producing electricity (6); injecting the anode exhaust stream (101) as an injection gas (105) into an underground coal bed (74); in the underground coal bed (74) the injection gas (105) causing coal bed methane (CBM) to desorb from the coal and CO2 to adsorb onto the coal; extracting the coal bed methane (CBM) from the underground coal bed (74); and discharging a production gas (108) comprising the coal bed methane (CBM) from the underground coal bed (74).

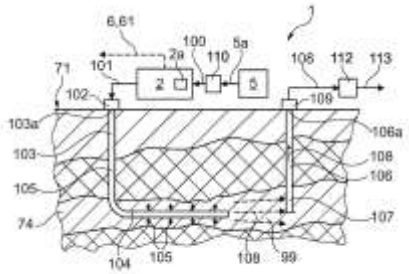

Fig. 1

No. of Pages : 24 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/02/2021

(21) Application No.202127008385 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POSITIONING REFERENCE SIGNAL GENERATION METHOD AND APPARATUS, COMMUNICATION SYSTEM, AND STORAGE MEDIUM

(51) International classification	:H04L0027260000, H04L0005000000, H04W0064000000, H04W0072040000, G01S0001040000
(31) Priority Document No	:201810852229.6
(32) Priority Date	:30/07/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2018/105683
Filing Date	:14/09/2018
(87) International Publication No	:WO 2020/024381
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)ZTE CORPORATION
Address of Applicant :ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan Shenzhen, Guangdong 518057 China
(72)**Name of Inventor :**
1)CHEN, Shijun
2)BI, Cheng
3)CHEN, Dawei
4)WANG, Yuanyuan

(57) Abstract :
Disclosed are a positioning reference signal generation method and apparatus, a communication system, and a storage medium. The method comprises: generating a positioning frequency domain sequence according to time frequency resource information and system configuration information, wherein the time frequency resource information comprises the number of continuous system symbols, Nslotprs, for an allocation time, and the system configuration information comprises a positioning subcarrier interval fprs; and generating, based on the positioning frequency domain sequence, continuous positioning time domain data within the time of the Nslotprs continuous system symbols.

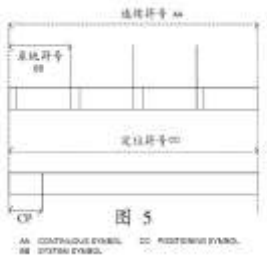

图 5

No. of Pages : 27 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/03/2021

(21) Application No.202127015397 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTERACTION GENERATION DEVICE

(51) International classification	:H04M0001570000, H04W0036000000, H04M0001274600, H04W0088060000, H04M0003420000	(71)**Name of Applicant :** **1)LAIK, Philippe** Address of Applicant :14 Quai Antoine 1er 98000 Monaco Monaco (72)**Name of Inventor :** **1)LAIK, Philippe**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT/IB2018/057070	
Filing Date	:14/09/2018	
(87) International Publication No	:WO 2020/053632	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Techniques for determining a communication platform for establishing a communication with a contact, an activity list comprising a list of activity for engaging the contact, and a place list for organizing meeting with the contact is described. In an example implementation of the present subject matter, a contact from an address book is determined for establishing communication. Thereafter, selection parameters are determined for the contact. In an example, the selection parameters may be psychological factors, sociological factors, environmental factors, etc. Based on the selection parameters, the user is provided with a list of communication platforms that allows the user to establish communication with the contact. Similarly, based on the selection parameters, the activity list and the place list are also generated and provided to the user.

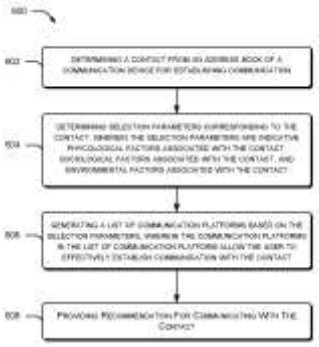

Figure 6

No. of Pages : 18 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000083 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD OF CRYOGENICALLY TREATING COPPER ALLOY ELECTRODE FOR MACHINING PROCESS

(51) International classification	:B23Q0017090000, C21D0006040000, C23C0030000000, B24B0001000000, G05B0019406500
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Dr. SIDDHI JAILANI H.
3)Dr. RASOOL MOHIDEEN S
(72)**Name of Inventor :**
1)DR. PERVAZ AHMED M.
2)Dr. SIDDHI JAILANI H.
3)Dr. RASOOL MOHIDEEN S

(57) Abstract :
A method of cryogenically treating Cu 2 wt. % Be alloy electrode for machining process is disclosed. The method comprises the steps of: ramping down the temperature of a cryogenic chamber loaded with a sample; maintaining the cryogenic chamber's temperature for 10 hours; and ramping up the temperature of the cryogenic chamber. The MRR of the cryogenically-treated tool electrodes is about 100% to 200% greater than untreated electrodes (for the same input parameters). The TWR of the untreated tool electrode is higher than that of the cryogenically-treated tool electrodes for all input currents and duty factors.

No. of Pages : 17 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020
(21) Application No.202041000111 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED AND PORTABLE AMNIOTIC FLUID DETECTOR

(51) International classification	:G01N0033680000, G06F0013400000, A61B0005000000, A61B0010000000, G09B0019000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)Dr. R. V. Shalini

(57) Abstract :
The patent disclosure covers a novel device that is portable and automatically detect the amniotic fluid level of the uterus and encourages common people to measure and self-monitor the fluid level without the involvement of technicians. The device is cost efficient to measure amniotic fluid index value without affecting the stable condition df.both mother and foetus. This can help pregnant women in rural areas where no modern facilities are accessible. Also, no skilled professional will be required to perform the diagnosis process using this device. According to the survey of WHO, it has been mentioned that 12% of total maternal death is due to amniotic fluid embolism or amniotic fluid deficiency. Thus, the portable device will help in continuous monitoring of fluid index value. The value of Amniotic Fluid Index that is diagnosed at the early stage can make far better effect on the wellbeing of foetus and mother. Our device aims in eliminating the pregnancy stress of the mother regarding the stable nature of the foetus.

No. of Pages : 4 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202041000113 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DATA LEAK PREVENTION USING USER AND DEVICE CONTEXTS

(51) International classification	:G06F0003160000, G10L0013000000, H04R0003000000, G10L0015260000, G10L0025480000	
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(71)**Name of Applicant :**
1)VMWARE, INC.
Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA-94304 U.S.A.
(72)**Name of Inventor :**
1)ROHIT PRADEEP SHETTY
2)ERICH PETER STUNTEBECK
3)RAMANI PANCHAPAKESAN
4)SUMAN ALUVALA
5)CHAOTING XUAN

(57) Abstract :
Disclosed are various examples for audio data leak prevention using user and device contexts. In some examples, a voice assistant device can be connected to a remote service that provides enterprise data to be audibly emitted by the voice assistant device. In response to a request for the enterprise data being received from the voice assistant device, an audio signal can be generated that audibly broadcasts the enterprise data. The audio signal can be generated to audibly redact at least a portion of the enterprise data based at least in part on a mode of operation of the voice assistant device. The voice assistant device can be directed to emit the enterprise data through a playback of the audio signal. [FIG. 1]

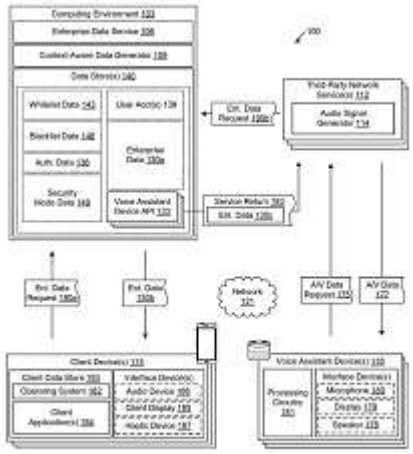

FIG. 1

No. of Pages : 37 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202041000114 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SERVICE AUTHENTICATION THROUGH A VOICE ASSISTANT

(51) International classification	:H04L0029060000, H04R0003000000, G10L0025510000, G06F0003160000, G10L0015220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA-94304 U.S.A.
(72)**Name of Inventor :**
1)ROHIT PRADEEP SHETTY

(57) Abstract :
Disclosed are various approaches for authenticating a user through a voice assistant device and creating an association between the device and a user account. The request is associated with a network or federated service. The user can use a client device, such as a smartphone, to initiate an authentication flow. A passphrase is provided to the client device can captured by the client device and a voice assistant device. Audio captured by the client device and voice assistant device can be sent to an assistant connection service. The passphrase and an audio signature calculated from the audio can be validated. An association between the user account and the voice assistant device can then be created. [FIG. 1]

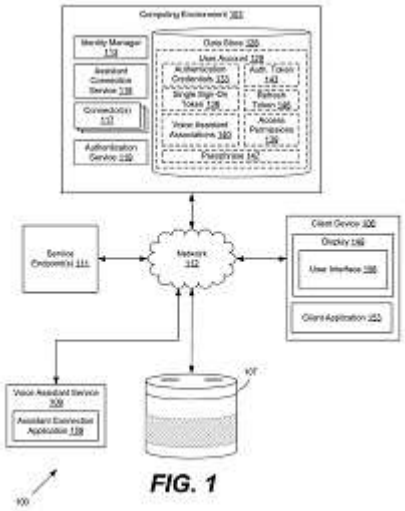

FIG. 1

No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202041000116 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : USER PROFILE DISTRIBUTION AND DEPLOYMENT SYSTEMS AND METHODS

(51) International classification	:H04L0029080000, H04L0029060000, H04L0009320000, H04W0004120000, H04L0009140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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5)PAVAN RAJKUMAR RANGAIN
6)ERICH PETER STUNTEBECK

(57) Abstract :
A first server can generate user profiles and receive requests from user devices for enrollment in a first server-managed system that includes user groups. The first server can provide a unique key to a user device during an enrolment process based on a user group the user device is assigned to. The first server can include an enrollment notification for the user device in a first notification transmitted to a messaging service. The messaging service can transmit a second notification to the user device, and the user device can request a user profile from a second server based on second server access information included in the second notification. The second server can use the unique key to access user profile information which it transmits to the user device based on the request. The user device can access the user profile from the profile information using the unique key. Fig. 1

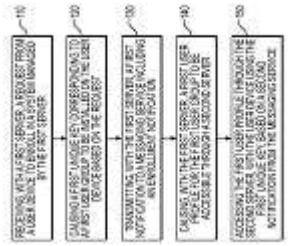

FIG. 1

No. of Pages : 43 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000125 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF LOW COST WIRELESS BIOSIGNAL ACQUISITION SYSTEM FOR ECG, EMG AND EOG

(51) International classification	:A61B0005000000, A61B0005048800, A61B0005040000, A61B0005049600, A61B0005049200
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Mr. Santhosh Kumar R
4)Mr. Sri Venkatesh J
5)Mr. Adhitya R
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4)Mr. Sri Venkatesh J
5)Mr. Adhitya R

(57) Abstract :
A biosignal is a human body variable that can be measured and monitored continuously and provide information about the health status. Among them well known bioelectrical signals are Electrocardiograph (ECG), Electromyography (EMG), Electroencephalogram (EEG) and Electrooculogram (EOG). These signals are useful for different applications like disease diagnosis, human machine interface, entertainment. This paper presents a low cost, wireless biosignal acquisition system specialized for ECG, EMG and EOG. In this system, Arduino Uno was used and an application is developed for visualizing and storing the signal in real-time. In this system, biosignal is transferred by Wifi serial communication, which provides many advantages such as it may be used as both wireless and wired communication (i.e) ethernet and also it has long range about 300 feet which helps to transfer the biosignal efficiently. This system can be used, in either Windows, Linux, Mac OS and suitable for both laptop and desktop computer.

No. of Pages : 5 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000153 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESS FOR DIFFERENCE BASED DATA AGGREGATION AND RECOVERY

(51) International classification	:G06F0011140000, G05B0015020000, G01C0021320000, H04B0001382700, G06F0016310000	(71)**Name of Applicant :** **1)Arun Avinash Chauhan** Address of Applicant :6-122, PRASHANTH NAGAR COLONY, BANDLAGUDA JAGIR, Rajendranagar, Rangareddi 500086, Telangana, India Telangana India **2)Dr. Siba Kumar Udgata**
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Arun Avinash Chauhan**
(33) Name of priority country	:NA	**2)Dr. Siba Kumar Udgata**
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Process relates to difference based data aggregation and recovery. An example controller can aggregate and send data contents to end user in the form of reference data and difference data with respect to reference data. The end user can recover entire data from aggregated contents using reference data and difference data. Process implemented on minimum configuration yielded an 85% to 88.5% savings in the amount of data transmitted and 85% to 88.5% reduction in transmission energy.

No. of Pages : 9 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000179 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD OF SHARING EDGE COMPUTING RESOURCES

(51) International classification	:H04L0029080000, G06F0009500000, G06F0016958000, G06Q0040020000, G06F0016176000	(71)**Name of Applicant :** **1)WIPRO LIMITED** Address of Applicant :Doddakannelli, Sarjapur Road, Bangalore 560035, Karnataka, India. Karnataka India (72)**Name of Inventor :** **1)SAJI THOPPIL**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A method (400) and a system (100) of sharing an edge computing resource is disclosed. in an embodiment, the method (400) may include receiving (402) from one or more lessor edge computing resources (104), one or more first requests for presenting an availability of the one or more lessor edge computing resources (104), and receiving (404) from a lessee edge computing resource (106), a second request for availing at least one lessor edge computing resource (104). The method (400) may further include, upon receiving the second request, presenting (406) the one or more first requests corresponding to the one or more lessor edge computing resources (104), to the lessee edge computing resource (106). The method (400) may further include receiving (410) from the lessee edge computing resource (106), a selection of a first request from the one or more first requests, and creating (412) a connection between the lessee edge computing resource (106) and the lessor edge computing resource (104) corresponding to the received selection. [To be published with Fig. 1]

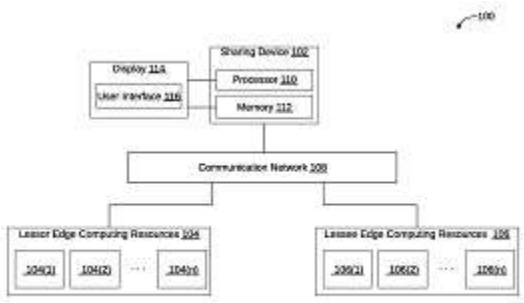

FIG. 1

No. of Pages : 41 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/01/2020

(21) Application No.202041000194 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM FOR RECOGNISING THE SIMILARITY BETWEEN PRODUCT DESIGN AND EXISTING PROPRIETARY DESIGN IN INTANGIBLE SUPPLY CHAIN

(51) International classification	:G06F0017500000, G06Q0030060000, G06T0011600000, B41J0011000000, G06Q0010000000	
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

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(72)**Name of Inventor :**
1)ANAND VAIDYANATHAN

(57) Abstract :
SYSTEM FOR RECOGNISING THE SIMILARITY BETWEEN PRODUCT DESIGN AND EXISTING PROPRIETARY DESIGN IN INTANGIBLE SUPPLY CHAIN A system including a server (104) for determining a similarity between a product design and existing proprietary designs is provided. The server (104) 5 includes a processor that is configured to (i) receive the product design from at least one of a scanner or a user device (102); (ii) compare the product design and the plurality of proprietary design that is stored in the database (202); (iii) determine a similarity between the product design and any of the proprietary designs that is stored in the database (202) based on the comparison; (iv) automatically add a patent 10 holder™s royalty or licensing charges as determined by the creator in the total cost of product/service for the product design if the product design that is received matches with any of the proprietary designs; and (v) provide the product design associated with the order product to a 3D printer (106) for printing the product. Fig 1.

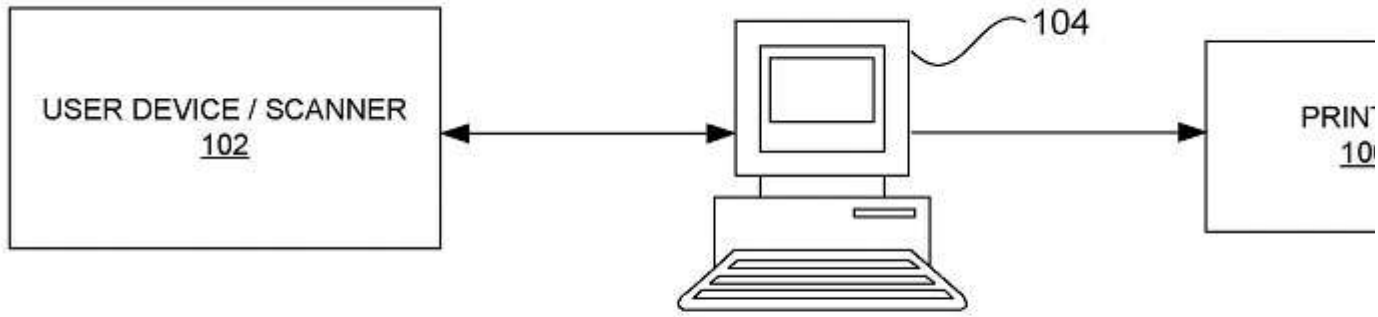

FIG. 1

No. of Pages : 19 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020
(21) Application No.202041000227 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR DETECTION AND QUANTITATION OF NON-IONIC SURFACTANT IN A THERAPEUTIC PREPARATION

(51) International classification	:C11D0001720000, C11D0001660000, H04L0025030000, C11D0001722000, C07K0001140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
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2)Murali Jayaraman

(57) Abstract :
ABSTRACT TITLE OF INVENTION: METHOD FOR DETECTION AND QUANTITATION OF NON-IONIC SURFACTANT IN A THERAPEUTIC PREPARATION • The present invention discloses a method for detecting and quantifying a non-ionic surfactant in a solution. The method uses mixed mode anion exchange chromatography with reversed phase column for separation and aerosol detector for quantification of the non-ionic surfactants in a solution. The present invention is further helpful to study thermal stability and quality of the non-ionic surfactant stored at different temperature conditions over time with sensitivity as low as 0.1µg in biotherapeutic preparations.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202041000263 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A POLYMER DOPED LIQUID CRYSTAL COMPOSITION AND METHOD THEREOF

(51) International classification	:C09K0019300000, C09K0019040000, C09K0019540000, C09K0019320000, C09K0019420000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Srividhya Parthasarathi
3)Pragnya Satpathy
4)D.S. Shankar Rao

(57) Abstract :
Abstract: The invention relates to novel polymer stabilized liquid crystal composition, wherein the polymer is the biopolymer cellulose nanocrystal (CNC) being extracted from a plant product, method of preparation of said polymer stabilized liquid crystal composition and the embodied device (CNC-LC) device that switches between opaque and transparent states upon application of voltage.The invention also provides a user-friendly method for incorporating cellulose at several compositions ranging over an order of magnitude from 1% to 10% by weight. The invention provides enhanced biocompatibility and faster time response without altering the threshold voltage (Vth).

No. of Pages : 23 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020

(21) Application No.202041000278 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : Method and network entity for handling KPI PM data

(51) International classification	:H04W0024020000, G06Q0010060000, G06F0016220000, H04W0024040000, G02B0006420000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Abhishek Chaturvedi

(57) Abstract :
ABSTRACT Method and network entity for handling KPI PM data • The embodiments herein provide a method for reducing KPI data. The proposed technique is used to reduce insignificant KPI data generated by NEs (100a) like Radio Access Network (RAN) or EMS (100b)/NMS (100c). Further, the method includes determining a threshold value for each KPI data to determine significance of the KPI data and uses the threshold value to reduce the KPI data in a file. Further, the method includes utilizing a network bandwidth (i.e. control plane traffic load) and a storage space in the EMS (100a)/OSS (200) efficiently and helps operators of the EMS (100b)/OSS (200) to identify a network KPI deterioration in near real time. FIG. 2

No. of Pages : 43 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000280 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AUTOMATED FOODBOARD ACCIDENT PREVENTION SYSTEM FOR PASSENGERS

(51) International classification	:G08G0001123000, A61B0005000000, B60R0021020000, A43B0007320000, B60R0021000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A major portion of the population relies on the public transport for their day-to-day travel. This results in fatal accidents of the passengers especially during travelling in the footboard of the public transports. Therefore, there is a need for an automatic footboard accident prevention system in public transports for ensuring the passenger safety. The present work, design and development of automatic footboard accident prevention system is carried out to ensure the safety of the passengers from accidents during travelling in the public transports. The automated footboard accident prevention system for passengers is designed to prevent accidents while travelling in public transports on footboard. It is done by using the voice alerting and controlling the fuel ignition. The aim of this invention is prevention and made safe travel for the passenger those who are using the public transports.

No. of Pages : 5 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020
(21) Application No.202041000312 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POLYMORHIC FORMS OF GLECAPREVIR

(51) International classification	:A61K0009140000, C23C0014280000, A23P0010200000, C07D0405140000, A23L0007126000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)Ataharoddin Khaja
3)Dr. Jagadeeshwar Rao
4)Dr. Sureshbabu Jayachandra

(57) Abstract :
POLYMORPHIC FORMS OF GLECAPREVIR The present disclosure relates to novel crystalline and amorphous forms of Glecaprevir and their preparation thereof.

No. of Pages : 15 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020
(21) Application No.202041000336 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONTROL OF SEARCH AND/OR MEASUREMENT PROCESSES BASED ON FREQUENCY RANGE PREFERENCE

(51) International classification :H04R0001260000, F24F0011620000, H04L0029080000, H04W0008000000, H03J0007180000
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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4)VENKATARAMAN, Vijay
5)LIM, Jungsung
6)JI, Zhu
7)SEBENI, Johnson O.
8)WANG, Yu-Lin
9)MOHIUDDIN, Galib A.
10)SUBRAMANIAN, Sriram
11)NARRA, Shiva Krishna
12)SHANBHAG, Madhukar K.
13)BALASUBRAMANIAN, Sanjeevi
14)WEST, Daniel A.
15)MATOLIA, Rohit R.

(57) Abstract :
A user equipment (UE) supports communication over a first (lower) frequency range and a second (higher) frequency range. The UE determines an extent of preference of the second frequency range over the first frequency range, e.g., based on one or more of the following: sensor measurements; physical channel measurements; battery conditions; weather conditions; voice call activity; indoor/outdoor/in-car status; learned relationships between previous location-time conditions and performance on the second frequency range; etc. The UE device may control search activity and/or measurement activity on the second frequency range based on the preference extent, e.g., by controlling rates of repetition of search and/or measurement on the second frequency range, or by adding a measurement bias to a measurement reporting threshold, or by adding a delay to a measurement reporting time for a measurement, or by disabling search and measurement on the second frequency range.

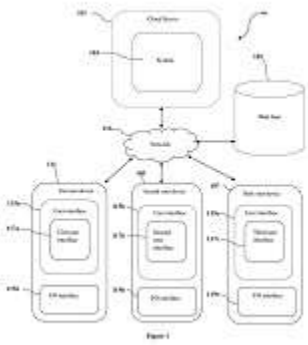
No. of Pages : 66 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000350 A
(19) INDIA
(22) Date of filing of Application :03/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR CONNECTING PLURALITY OF BUSINESS ENTITIES THROUGH AN AUTHORIZED PARTNER

(51) International classification	:G06F0021310000, G06Q0020100000, H04L0029060000, G06T0013400000, H04L0029080000	(71)**Name of Applicant :** **1)Hosur Venkateshappa Janardana** Address of Applicant :I-202, Springfields Apartments, Sarjapur Road, Bengaluru Karnataka India 560102 Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Hosur Venkateshappa Janardana**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A system and method for connecting plurality of business entities through an authorized partner [0035] The present invention discloses a system and method for connecting plurality of business entities through an authorized partner. The system (103) comprises a memory (203) to store instructions. The processor (201) is configured to execute the instructions to receive a first user profile from a first user (117a), a second user profile from a second user (117b), and a third user profile from a third user (117c). The second user profile of the second user (117b) is verified by signing partner agreement. The system enables the second user (117b) to authenticate at least one of the first user profile of the first user (117a) and the third user profile of the third user (107c). The system (103) is used to generate the invoices automatically based on the successful transaction. (Figure 1)



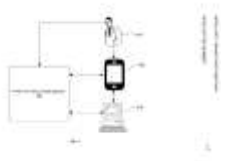
No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000362 A
(19) INDIA
(22) Date of filing of Application :04/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MULTI MODAL POINT OF SALE (POS) DEVICE FOR AUTHENTICATING A PAYMENT REQUEST OVER MULTIPLE COMBINATIONS OF AUTHENTICATION MODES

(51) International classification	:G06Q0020200000, G06Q0020400000, G06Q0020340000, G06K0019077000, G06Q0020320000	(71)**Name of Applicant :** **1)ANAND VAIDYANATHAN** Address of Applicant :New no.51, old no.28, MGR road, Kalakshetra colony, Besant nagar, Chennai-600 090, Tamilnadu, India Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)ANAND VAIDYANATHAN**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A MULTI MODAL POINT OF SALE (POS) DEVICE FOR AUTHENTICATING A PAYMENT REQUEST OVER MULTIPLE COMBINATIONS OF AUTHENTICATION MODES A Point of Sale (PoS) device 102 for authenticating 5 a payment request over multiple authentication modes is provided. The PoS device 102 is connected to a billing system to obtain billing details of an item purchased by a user 104 for generating the payment request. The PoS device 102 includes a camera 202, a card chip reader 204, a listening device 206 and a processor 208. The camera 202 captures a facial or an iris biometric of the user 104 for authenticating the 10 user 104 of a card. The card chip reader 204 reads a chip embedded in the card while authenticating the payment request. The processor 208 authenticates the user 104 of the card if the captured biometric (e.g. facial or iris) of the user 104 matches with the biometric of the user 104 and provides authentication methods to the user 104 for authenticating the payment request. FIG. 1



No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2020
(21) Application No.202041000391 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF HYBRID POLYMER COMPOSITES REINFORCED WITH PROSOPIS JULIFLORA BARK FIBERS, PHOENIX PUSILLA LEAF FIBERS, GLASS FABRICS AND CARBON FABRICS

(51) International classification	:B32B0005260000, B32B0005020000, B29C0070080000, B32B0018000000, G06F0017500000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)Pradeep S
4)Dr. Sanjay M R
5)Dr. Mohit H
6)Dr. Yogesha B
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3)Pradeep S
4)Dr. Sanjay M R
5)Dr. Mohit H
6)Dr. Yogesha B

(57) Abstract :
Development of hybrid polymer composites reinforced with prosopis juliflora bark fibers, phoenix pusilla leaf fibers, glass fabrics and carbon fabrics aims to evaluate the effect of stacking sequence on impact properties of polymer hybrid composites comprising randomly oriented Prosopis juliflora fibers (PJFs), Phoenix pusilla leaf fibers (PPFs), woven E-glass and carbon fabrics. The fibers were treated with 6% (w/v) NaOH solution for a period of 45 mins. The composite laminates are produced through manual hand lay-up method by arranging treated PJFs, PPFs, E-glass and carbon fabrics in different layering sequences and physical, tensile, flexural, impact and inter-laminar shear strength properties along with micro-hardness properties were evaluated. The results showed that hybrid composites with carbon as outer layers exhibit an noteworthy improvement in density, void fraction, tensile properties, flexural properties, micro-hardness properties impact and an inter-laminar strength property as compared to remaining hybrid laminates.

No. of Pages : 17 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/01/2020
(21) Application No.202041000406 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TECHNO NOTE PAD

(51) International classification	:B42D0005000000, H04N0001600000, H04W0016140000, B32B0027100000, F21V0023020000	(71)**Name of Applicant :** **1)UDAYA RAJA B A** Address of Applicant :NO. 7, ANTONY MOOPANAR STREET, KAMARAJAR SALAI, MADURAI - 625009, TAMIL NADU. Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)UDAYA RAJA B A**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present disclosure is directed to a light weight and eco friendly techno note pad (50) equipped with a refilling technology to eliminate wastage of unused papers or additional plastic or laminated paper wrappers. The techno note pad (50) is provided with a clipping mechanism that achieves refilling and replacing ability of used notepad or bunch of papers used with new ones.

No. of Pages : 12 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000408 A
(19) INDIA
(22) Date of filing of Application :05/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR PROCESSING A PAYMENT TRANSACTION ASSOCIATED WITH A PRODUCT

(51) International classification	:G06Q0030020000, G06Q0020400000, G06K0009460000, G06Q0020220000, G06Q0020200000	(71)**Name of Applicant :** **1)Mr. Sharath Reddy Tarapuram** Address of Applicant :41-30, O.C Colony, Palthur, Vidapanakal Mandalam-515 870, Andhra Pradesh, India Andhra Pradesh India **2)Ms. Sahana D S**
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Mr. Sharath Reddy Tarapuram** **2)Ms. Sahana D S**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A system and method for processing a payment transaction associated with a product [0060] The invention provides system and method for processing a payment transaction associated with a product. The method includes receiving an image associated with the product, captured by an image capturing device. The method may further include extract first information associated with the product, based on the received image. The method may further include extract first information associated with the product, based on the received image. The method further includes determine second information associated with the product and price associated with the product, based on the first information. The method may further include identify, a payment procedure, based on the price associated with the product. The method further includes process the payment transaction associated with the product, based on the identified payment procedure. (Figure 1)

No. of Pages : 25 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000413 A
(19) INDIA
(22) Date of filing of Application :05/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A MOTOR VEHICLE AND A BRAKING SYSTEM THEREOF

(51) International classification	:B60T0011040000, B60T0007100000, B25J0019000000, B60T0011060000, B60T0013740000	(71)**Name of Applicant :** **1)TVS Motor Company Limited** Address of Applicant :TVS Motor Company Limited Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai 600 006. Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)SHANMUGAM MOHAN**
(33) Name of priority country	:NA	**2)SHANMUGASUNDARAM GOWRISANKAR**
(86) International Application No	:NA	**3)KARNAM VENKATA MANGA RAJU**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present subject matter provides a motor vehicle comprising one or more wheels. A wheel-brake system (102) corresponding to each of said one or more wheels is provided. The wheel-brake system (102) includes a cam lever (118) and one or more brake cables (112, 116) are connected thereto. Each of one or more protective cover members (202) is provided on and covering at least a portion of corresponding elastic return member (132, 134). The protective cover member (202, 204) comprises a holding portion (222, 242) having an axial length being greater than a maximum traversal distance (Y11, Y21) of corresponding brake cable (112, 116) about the cam lever (118). The protective cover members (202, 204) have a folding portion (224, 244), which maintain desired clearance even in hard braking condition of any of the brakes.

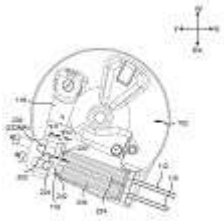


Fig.8

No. of Pages : 29 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

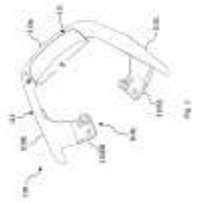
(21) Application No.202041000415 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HANDLE GRIP FOR A SADDLE TYPE VEHICLE

(51) International classification	:B62K0021260000, E05B0085160000, G05G0001040000, B62D0001040000, B62K0011140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)TVS Motor Company Limited
Address of Applicant :TVS Motor Company Limited, Chaitanya • , No.12 Khader Nawaz Khan Road, Nungambakkam, Chennai, 600 006 Tamil Nadu India
(72)**Name of Inventor :**
1)Yogesh Chandrakant Kotnis
2)Ramanathan Anantha Narayanan
3)Burra Tirumala Srikar
4)Kandasamy Malarkodi
5)Monalisha Maharana

(57) Abstract :
The present subject-matter provides a handle grip for a saddle type vehicle. The handle grip includes a first member and a second member attached with each other. The first member includes a left grip, a right grip, and a rear end. The rear end integrally joins the left grip and the right grip. The second member is attached to at least a portion of the rear end of the first member.



No. of Pages : 11 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000435 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : FINGOLIMOD EXTENDED RELEASE INJECTABLE SUSPENSION

(51) International classification	:A61K0031137000, A61K0009160000, A61K0009000000, C07C0215280000, A61K0009480000	(71)**Name of Applicant :** **1)SHILPA MEDICARE LIMITED** Address of Applicant :#12-6-214/A1, Hyderabad Road, Raichur-584135, Karnataka. Karnataka India (72)**Name of Inventor :** **1)KIRAN KRISHNAPPA JADHAV** **2)SREENIVASA REDDY**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
[091] The present invention relates to an injectable composition for extended release of fingolimod comprising a suspension of at least about 0.5 mg/ml of fingolimod, wherein fingolimod release is for at least 7 days and the process for preparation thereof.

No. of Pages : 28 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000439 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR TRANSACTION MANAGEMENT IN PROJECT RESOURCING

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Infosys Limited
Address of Applicant :44 Electronics City Hosur Road Bangalore 560100 Karnataka India
(72)**Name of Inventor :**
1)ROHINI TREHAN
2)GOPIKRISHNAN KONNANATH

(57) Abstract :
METHOD AND SYSTEM FOR DECENTRALIZED TRANSACTION MANAGEMENT IN PROJECT RESOURCING • ABSTRACT A method and system for decentralized transaction management in project resourcing is provided that ensures transparent and decentralized tracking of data across all stakeholders. It also provides ease of compliance for organizations on one hand, and ease of monitoring for the administrators on the other. Multiple beneficiaries and benefactors are registered with a primary administrator. Each beneficiary has a list of projects listed (201). A benefactor identifies a project which he wants to resource (203). The benefactor virtually transfers a unit of resource to a secondary administrator (202), for the identified project and receives credit points in exchange of the units of resource. The benefactor approves transfers of credit points to the identified project of a beneficiary (204). The beneficiary redeems the required credit points with the resource units (205). The secondary administrator will also validate the resources received by the beneficiary in exchange for the credit points (208). Fig. 1

No. of Pages : 26 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000449 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : ENHANCING SECURITY FOR VEHICLE TRACKING SYSTEM

(51) International classification	:B60R0025102000, H04W0088020000, G06Q0050300000, B60K0028060000, G08G0001000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)S.RAMESH
Address of Applicant :DEPARTMENT OF INFORMATION TECHNOLOGY,Sri VENKATESWARA COLLEGE OF ENGINEERING(AUTONOUMOS), PENNALUR, SRIPERUMBUDUR NEAR CHENNAI, TAMIL NADU, INDIA-602117. Tamil Nadu India
2)Dr.C.YAASHUWANTH
3)PRATHIBANANDHI.K
(72)**Name of Inventor :**
1)S.RAMESH
2)Dr.C.YAASHUWANTH
3)PRATHIBANANDHI.K

(57) Abstract :
ABSTRACT As the usage of vehicles is increasing drastically, the hazards due to vehicles is also increased. The main cause for accidents is high speed, drunk and drive, diverting minds, over stress and due to electronic gadgets. This project deals with accident detection system that occurs due to carelessness of the person who is driving the vehicle. This introduces accident alerting system which alerts the person who is driving the vehicle. If the person is not in a position to control the vehicle then the accident occurs. This project explores direct phone-to-phone communication between the driver's phone & the owner's phone to support mobile sensing applications. Direct communication between driver's phone & owner's phone is an important in improving data collection efficiency and sharing participatory sensing information in an inexpensive manner. We design a practical and optimized communication mechanism for direct phone-to-phone data transfer to the driver's phone that strategically enables phone-fo-phone communication. This project makes use of the DTMF technology available on mobile phones to control the vehicle activities. We employ various sensors in the vehicle which sends us the information about the vehicle activities. In case of occurrence of any abnormalities in the functioning of vehicle, the sensors immediately detect these abnormalities & a message is sent to the vehicle owner. By the use of the DTMF technology in the mobile phone, the owner can control these abnormalities from a remote place.

No. of Pages : 38 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202041000472 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR PREDICTING USEFULNESS OF A USER FOR CONDUCTING AN ONLINE SURVEY

(51) International classification	:G06Q0030020000, G06Q0010000000, G06Q0020100000, A63F0013577000, H04B0015000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)INMOBI PTE LTD.
Address of Applicant :#25-01, OCBC Center, 65 Chulia Street, Singapore 049513 Singapore
(72)**Name of Inventor :**
1)KHARE, Amil
2)BENDALE, Amit Arun

(57) Abstract :
The present disclosure relates to predicting the usefulness of a user as a respondent for conducting an online survey is disclosed. In accordance with an embodiment, a method includes receiving current data pertaining to at least one target location, a quota, and a plurality of features for conducting the online survey; determining, for the user, a response probability and a completion probability based on a one or more learned models, the current data, and a data corresponding to a plurality of derived features; assigning a weighted score, for the user, based on the response probability and the completion probability; and predicting the usefulness for the user based on the assigned weighted score. <>

No. of Pages : 28 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020

(21) Application No.202041000478 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VOICE SKILL SESSION LIFETIME MANAGEMENT

(51) International classification	:H04L0029060000, H04M0003580000, G01V0001440000, H04W0004100000, H04W0076100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VMWARE, INC.
Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA U.S.A.
(72)**Name of Inventor :**
1)ROHIT PRADEEP SHETTY
2)SUMAN ALUVALA

(57) Abstract :
Disclosed are various aspects of voice skill session lifetime management. In some examples, a session extension request is received. The session extension request extends a voice skill session of a voice-activated device. A personal client device is identified based on the session extension request. A command to emit an ultrasonic pulse is transmitted to the personal client device. [FIG. 1]

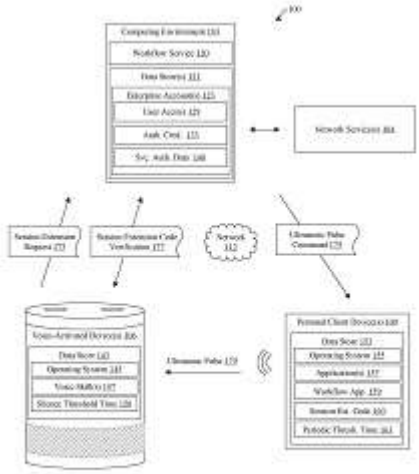


FIG. 1

No. of Pages : 43 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202041000479 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SKILL REDIRECTIONS IN A VOICE ASSISTANT

(51) International classification	:H04M0001725000, A63B0071060000, G06F0003160000, A61B0005020500, H04M0001050000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VMWARE, INC.
Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA-94304 U.S.A.
(72)**Name of Inventor :**
1)ROHIT PRADEEP SHETTY
2)CHAOTING XUAN
3)RAMANI PANCHAPAKESAN

(57) Abstract :
SKILL REDIRECTIONS IN A VOICE ASSISTANT ABSTRACT Disclosed are various approaches for assisting a user with skill or application discovery in a voice assistant device. By assisting the user in this way, avoiding the launching of malicious skills or applications can also be avoided. Additionally, restricting launching of applications to particular users or particular voice assistant devices can also be accomplished. [FIG. 1]

No. of Pages : 34 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000518 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : INFLUENCE OF MENSTRUAL CYCLE ON PHARMACOKINETICS OF AMOXICILLIN COMPOSITION

(51) International classification	:G01N0033680000, A61K0045060000, A61K0038240000, A61K0031430000, A61K0031419600
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Sandhya Rani Guggilla
Address of Applicant :University College of Pharmaceutical Sciences, Kakatiya University Telangana India
(72)**Name of Inventor :**
1)Sandhya Rani Guggilla
2)Middela Karthik
3)Pogula Swetha
4)Jooluru Bharath Kumar
5)Bhoini Shailendra

(57) Abstract :
The aim of our research work is to study the influence of menstrual cycle on the pharmacokinetic parameters of the Amoxicillin in patients with infections. Salivary samples were collected from 20 female patients on long term oral Amoxicillinmonotherapy (not less than two years) with prescribed dosage regimen dose at the time points of 0, 1, 2, 3, 4, 6, 8 &12 hours after dosing and analysed for drug content by HPLC method. Mean C-max of Amoxicillin was decreased by 20% in the ovulatory phase compared to that of follicular phase. The AUC0-8 of Amoxicillini.e, bioavailability was decreased in luteal phase by 20% than follicular phase. Volume of distribution of Amoxicillin was significantly lower in follicular and luteal phases compared to ovulatory phase. Amoxicillin half-life was decreased and clearance was increased in luteal phase compared to follicular phase. Except Vd/f and Vss/f, menstrual cycle phases did not significantly affect the pharmacokinetic profile of Amoxicillin in terms of Cmax, Tmax, AUC0-8, AUMC0-8, t1/2, MRT, clearance and absorption rate constant. From the above observations it can be concluded that, menstrual hormonal changes influenced Amoxicillin pharmacokinetics to a lesser extent and Vd/f and Vss/f were significantly altered. Mean salivary concentrations of Amoxicillin were higher in follicular phase than in ovulatory and luteal phases.

No. of Pages : 13 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202041000554 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR ENHANCING IMAGES TO DETECT AND COUNT OBJECTS

(51) International classification	:G06T0005000000, G06K0009000000, G06T0007000000, G06T0007136000, G06T0007120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE
Address of Applicant :Kanuru, Vijayawada-520007, Andhra Pradesh, India. Andhra Pradesh India
(72)**Name of Inventor :**
1)Dr. KONERU SUVARNA VANI
2)ARUL RAJ M
3)PADMAJA M
4)PRAVEEN KUMAR KOLLU

(57) Abstract :
Exemplary embodiments of the present disclosure are directed towards a system for enhancing images to detect and count objects, comprising: a first computing device connected with a second computing device via a network to accomplish the personal assistance services for users by an image enhancing module, the image enhancing module is configured to perform various enhancement techniques for better view of satellite images, the image enhancing module is also configured to perform segmentation of the plurality of satellite images and detection of objects on the satellite images, and a cloud server is configured to provide the satellite images to the image enhancing module installed in the first computing device and the second computing device, the first computing device, and the second computing device enable the image enhancing module to count the objects depends on the pixels by using a threshold technique.

No. of Pages : 23 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000592 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : ISOLATION, PHENOTYPIC AND GENOTYPIC CHARACTERIZATION OF NON TUBERCULOUS MYCOBACTERIA ISOLATED FROM CLINICAL SPECIMENS

(51) International classification	:C12Q0001689000, G01N0033569000, G01N0033680000, C07K0014350000, C12Q0001040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
Address of Applicant :173, Agharam Road, Selaiyur, Chennai 600 073 Tamil Nadu India
(72)**Name of Inventor :**
1)V.Praveen Kumar
2)Dr.V.Sreenivasulu Reddy

(57) Abstract :
ABSTRACT Isolation, Phenotypic and Genotypic Characterization of Non Tuberculous Mycobacteria Isolated from Clinical Specimens Non tuberculous mycobacteriais an opportunistic pathogen reported in the recent years among both immunodeficient and immunocompetent hosts. The aim of this study is to know the incidence of NTM species in pulmonary and extrapulmonary tuberculosis cases in a tertiary care hospital in Pondicherry and to evaluate different phenotypic and genotypic methods in identifying NTM and finally to determine their DST patterns. Overall rapid isolation and differentiation to the level of species using molecular techniques had guided in targeted therapy and management of diseases with NTM.

No. of Pages : 24 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202041000594 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTEGRATED METERING AND PROTECTION PANEL FOR DISTRIBUTION TRANSFORMER

(51) International classification	:G06F0003045000, H02S0040340000, B60L0053660000, G01R0022060000, H04J0014020000	(71)**Name of Applicant :** **1)Bangalore Electricity Supply Company (BESCOM)** Address of Applicant :Corporate Office, BESCOM, K.R.Circle, Bangalore - 560001, Karnataka, India. Karnataka India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Anil Kumar Dsouza**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
As attached

No. of Pages : 22 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000605 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : GREEN MANUFACTURING OF PHARMACEUTICAL INTERMEDIATES USING ENZYME

(51) International classification	:C12P0035000000, C12P0007260000, C12P0019260000, C07K0016300000, C12P0019560000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)Rajkumar Rajagopal
2)Vasu Vinayagam

(57) Abstract :
The current invention discloses the development of recombinant deacetylase enzyme for manufacturing process. The enzyme thus produced is used as a processing aid to shift the existing chemical process, which generates pollution to an enzymatic process that is greener and safer. The present invention relates to a mutant deacetylase with increased activity towards7-methoxy cefalotin derivatives for the production of 7-methoxy-3-desacetyl cefalotin derivatives, which carries one or more amino acid modification at specific residue positions when compared with the wild type deacetylase. The invention further provides a process for the preparation of 7-methoxy-3-desacetyl cefalotin from the corresponding 7-methoxy cefalotin using an enzyme of the present invention. The invention also provides the method for producing and processing of such enzymes.

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000615 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD TO MAINTAIN A PLATFORM ASSOCIATED WITH A JEWEL INDUSTRY

(51) International classification	:G06Q0030080000, G06Q0030060000, H01Q0001180000, G06Q0020200000, G06K0001120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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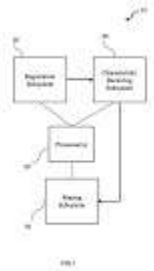
Address of Applicant :SALARPURIA SENORITA, D-604, KAIKONDRAHALLI, OPP WIPRO CORP OFC, SARJAPUR MAIN RD, BANGALORE- 560035, KARNATAKA, INDIA Karnataka India
(72)**Name of Inventor :**
1)RAKESH SHAH
2)SANDIP KOTHARI

(57) Abstract :
A system and a method to maintain a platform associated with a jewel industry is disclosed. The system also includes a registration subsystem configured to register a plurality of sellers on the platform; to register a plurality of buyers on the platform, a characteristic receiving subsystem configured to receive one or more characteristics associated with one or more corresponding jewels from the plurality of sellers on the platform, a sharing subsystem configured to generate an information card based on one or more received characteristics of the one or more corresponding jewels; to share a generated information card of the one or more corresponding jewels by the plurality of sellers to the plurality of buyers on the platform for guiding the plurality of buyers to buy the jewel. FIG. 1



No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000647 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMPROVED PROCESS FOR THE PREPARATION 2-AMINO-9--D-ARABINOFURANOSYL-6-METHOXY-9H-PURINE •

(51) International classification	:F23N0005000000, C07D0503000000, C07K0014000000, C25D0005000000, D01F0006220000	(71)**Name of Applicant :** **1)Biophore India pharmaceuticals Pvt. Ltd** Address of Applicant :Plot#92; 1-98/2/92, Kavuri Hills Phase II, Jubilee Hills, Hyderabad, Telangana India-500033. Telangana India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Manik Reddy Pullagurla**
(33) Name of priority country	:NA	**2)Bhaskar Reddy Pitta**
(86) International Application No	:NA	**3)Suresh Babu Namana**
Filing Date	:NA	**4)Jagadeesh Babu Rangisetty**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
attahced

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000660 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PEER-TO-PEER NOTIFICATION SYSTEM

(51) International classification	:H04L0029060000, H04L0009320000, H04W0012060000, H04W0008000000, H04M0003540000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VMWARE, INC.
Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA-94304 U.S.A.
(72)**Name of Inventor :**
1)RAMANANDAN NAMBANNOR KUNNATH
2)ASHISH MAAN

(57) Abstract :
ABSTRACT OF THE DISCLOSURE A first user device can receive a communication certificate associated with a user of the first user device. The communication certificate can allow the first user device to exchange certain information with a second user device that also possesses the communication certificate. The first user device can receive a notification. The first user device can also determine that a second user device associated with the user did not receive the notification. The first user device can initiate a direct connection with the second user device. The first use device can verify that the second device possesses the communication certificate. After verification, the first user device can send the notification to the second user device.

No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000662 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DYNAMIC RECONFIGURATION OF VIRTUAL DEVICES FOR MIGRATION ACROSS DEVICE GENERATIONS

(51) International classification	:G06F0009455000, G11B0020100000, H04N0005765000, H04L0029080000, G06F0008710000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VMWARE, INC.
Address of Applicant :3401 Hillview Avenue, Palo Alto, California USA U.S.A.
(72)**Name of Inventor :**
1)RADU RUGINA
2)VIVEK MOHAN THAMPI

(57) Abstract :
A method of migrating a virtual machine having a virtual device that is backed by direct passthrough hardware, from a source host to a destination host, includes the steps of determining whether or not the destination host has direct passthrough hardware that can back the virtual device, and upon determining that the destination host has direct passthrough hardware that can back the virtual device, determining if a version of the direct passthrough hardware at the source host matches a version of the direct passthrough hardware at the destination host. If the versions do not match, the steps further include quiescing the virtual device, deleting data structures relating to the virtual device, and then migrating the virtual machine from the source host to the destination host. If the versions match, the virtual machine is migrated without quiescing the virtual device and without deleting the data structures relating to the virtual device.

No. of Pages : 30 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000663 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TECHNIQUES FOR VIRTUALIZING PF-VF MAILBOX COMMUNICATIONIN SR-IOV DEVICES

(51) International classification	:G06F0009455000, G06F0012100900, G06F0013100000, A47G0029120000, G06F0009540000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)VMWARE, INC.
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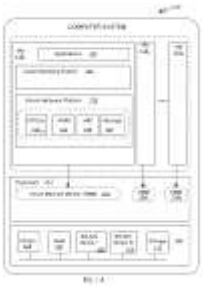
(72)**Name of Inventor :**
1)RADU RUGINA
2)Vivek Mohan Thampi

(57) Abstract :
A virtual machine (VM) has direct access to an I/O device having physical and virtual functions and a mailbox register, and includes a guest driver for controlling the virtual functions. The VM runs on system software that includes a physical driver for controlling the physical function (PF) and maintains VM page tables, which include an entry that references a memory space into which the mailbox register is mapped. The system software registers a callback function with the physical driver, which the physical driver invokes upon receiving a trigger for communication with the guest driver. In response, the system software alters the page tables so that access to the mailbox register causes a PF intercept, and the callback function handles the communication with the guest driver. After completion of the communication, the system software alters the page tables so that access to the mailbox register does not cause a PF intercept.



No. of Pages : 37 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000664 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVICE FOR REPAIRING A PUNCTURED TYRE TUBE

(51) International classification	:B29C0073160000, H03M0013000000, B60C0017020000, B29D0030060000, A61B0017340000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)K.RAJALASHMI
Address of Applicant :DEPARTMENT OF ELECTRICAL & ELECTRONICS,ENGINEERING, BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM, ERODE(DT),TAMILNADU-638401,INDIA. Tamil Nadu India
2)S.VIGNESH
(72)**Name of Inventor :**
1)S.VIGNESH
2)K.RAJALASHMI
3)R.NAVIN KUMAR

(57) Abstract :
The repairing device has an adjustable clamping mechanism to hold the air-filled punctured tyre tube of various diameters. The servo motor rotates and stops the air-filled punctured tyre tube to identify the defect in the tyre tube. The robotic arm tends to fix the puncture with the use of adhesive substance and rubber patches in the tyre tube.

No. of Pages : 3 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000670 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESS FOR PREPARATION OF [1,4,5]-OXADIAZEPANE OR ITS SALTS

(51) International classification	:C07C0067000000, C07C0041090000, C07D0249120000, H01B0001120000, C07C0001320000	(71)**Name of Applicant :** **1)Bhagiradha Chemicals & Industries Limited** Address of Applicant :Plot No.:3, Sagar Society, Road No-2, Banjara Hills, Hyderabad-500 034, Telangana , INDIA Telangana India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)S. Chandrasekhar**
(33) Name of priority country	:NA	**2)B. Punith**
(86) International Application No	:NA	**3)B. Sivarami Reddy**
Filing Date	:NA	**4)A Arvind Kumar**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT: PROCESS FOR PREPARATION OF [1,4,5]-OXADIAZEPANE OR ITS SALTS Compound of formula(I) can be prepared by reaction of azodiformate diesters with bis-2-chloroethyl ether in suitable polar solvent which include DMF (N,N-dimethyl formamide), DMAC (N,N-dimethyl acetamide), NMP (N-methyl pyrrolidone), DMSO (Dimethyl sulfoxide) or any polar solvent whose boiling point is 100oC or more. The reaction is carried out in presence of bases like hydroxides or carbonates of alkali metals, such as sodium or potassium hydroxides or carbonates. Usage of phase transfer catalyst like quaternary ammonium salts such as TBAB (Tetrabutyl ammonium bromide), TBAC(Tetrabutyl ammonium chloride), TMAC (Tetramethyl ammonium chloride) or quaternary phosphonium salts tend to enhance the rate of reaction. To, The Patent Office, Chennai Branch

No. of Pages : 9 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000696 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NOVEL CRYSTALLINE FORM OF 1-(2,2-DIFLUORO-2H-1,3BENZODIOXOL-5-YL)-N-{1-[(2R)-2,3-DIHYDROXYPROPYL]-6-FLUORO-2-(1-HYDROXY-2-METHYL PROPAN-2-YL)-1H-INDOL-5-YL}CYCLOPROPANE-1-CARBOXAMIDE AND ITS PROCESS FOR THE PREPARATION THEREOF

(51) International classification	:C07D0405040000, C07D0405120000, C07D0263200000, C07C0309190000, A61K0031404000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MSN Laboratories Private Limited, R&D Center
Address of Applicant :MSN Laboratories Private Limited, R&D Center; Plot No. 12, Phase-IV, Sy.No: 119 to 140, 258, 275 to 280, IDA, Pashamylaram (Vil), Patancheru (Mdl), Sangareddy (Dist) Telangana India
(72)**Name of Inventor :**
1)Srinivasan Thirumalai Rajan
2)Sajja Eswaraiah
3)Vijayavitthal T. Mathad
4)Saladi Venkata Narasayya

(57) Abstract :
Abstract Title of the invention: Novel crystalline form of 1-(2,2-difluoro-2H-1,3-benzo dioxol-5-yl)-N-{1-[(2R)-2,3-dihydroxypropyl]-6-fluoro-2-(1-hydroxy-2-methyl propan-2-yl)-1H-indol-5-yl}cyclopropane-1-carboxamide and its process for the preparation thereof The present application relates to novel crystalline form of 1-(2,2-difluoro-2H-1,3benzodioxol-5-yl)-N-{1-[(2R)-2,3-dihydroxypropyl]-6-fluoro-2-(1-hydroxy-2-methylpropan-2-yl)-1H-indol-5-yl}cyclopropane-1-carboxamide compound of formula-1 and its process for the preparation thereof. Formula-1.

No. of Pages : 12 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000697 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN IMPROVED PROCESS FOR THE PREPARATION OF CYSTEAMINE BITARTRATE

(51) International classification	:C07C0315040000, C07H0015203000, C07H0015040000, C07D0473040000, C07D0413060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MSN Laboratories Private Limited, R&D Center
Address of Applicant :MSN Laboratories Private Limited, R&D Center; Plot No. 12, Phase-IV, Sy.No: 119 to 140, 258, 275 to 280, IDA, Pashamylaram (Vil), Patancheru (Mdl), Sangareddy (Dist), Telangana, India 502307 Telangana India
(72)**Name of Inventor :**
1)Srinivasan Thirumalai Rajan
2)Sajja Eswaraiah
3)Revu Satyanarayana
4)Velishala Praveen

(57) Abstract :
Abstract Title: An improved process for the preparation of Cysteamine Bitartrate The present invention relates to an improved process for the preparation of 2-aminoethanethiol bitartrate which is represented by the following structural formula-1a. Formula-1a The present invention also provides an improved process for the preparation of crystalline form of the compound of formula-1a herein after designated as crystalline form-M.

No. of Pages : 20 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000698 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NOVEL POLYMORPH OF (10R)-7-AMINO-12-FLUORO-2,10,16-TRIMETHYL-15-OXO-10,15,16,17-TETRAHYDRO-2H-4,8-METHENOPYRAZOLO[4,3-H][2,5,11]BENZOXADIAZACYCLO TETRADECINE-3-CARBONITRILE AND ITS PROCESS FOR THE PREPARATION THEREOF

(51) International classification	:C07D0498180000, C07D0277280000, C07C0255230000, D06L0004621000, C08G0077600000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :MSN Laboratories Private Limited, R&D Center; Plot No. 12, Phase-IV, Sy.No: 119 to 140, 258, 275 to 280, IDA, Pashamylaram (Vil), Patancheru (Mdl), Sangareddy (Dist), Telangana, India 502307 Telangana India
(72)**Name of Inventor :**
1)Srinivasan Thirumalai Rajan
2)Sajja Eswaraiah
3)Vijayavitthal T. Mathad
4)Saladi Venkata Narasayya

(57) Abstract :
Abstract Title: Novel polymorph of (10R)-7-amino-12-fluoro-2,10,16-trimethyl-15-oxo-10,15,16,17-tetrahydro-2H-4,8-methenopyrazolo[4,3-h][2,5,11]Benzoxadiazacyclo tetradecine-3-carbonitrile and its process for the preparation thereof The present invention relates to a novel crystalline polymorph of (10R)-7-amino-12-fluoro-2,10,16-trimethyl-15-oxo-10,15,16,17-tetrahydro-2H-4,8-methenopyrazolo[4,3h] [2,5,11] benzoxadiazacyclotetradecine-3-carbonitrile represented by following structural formula- 1 and its process for the preparation. Formula-1.

No. of Pages : 11 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000699 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESS FOR THE PREPARATION OF 5-[2-[4-(1,2-BENZISOTHIAZOL-3-YL)-1-PIPERAZINYL]ETHYL]-6-CHLORO-1,3DIHYDRO-2H-INDOL-2-ONE, METHANESULFONATE, TRIHYDRATE

(51) International classification	:C07D0417120000, C07D0209340000, C07D0403040000, C07D0487100000, C07D0277600000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MSN Laboratories Private Limited, R&D Center
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(72)**Name of Inventor :**
1)Srinivasan Thirumalai Rajan
2)Sajja Eswaraiah
3)Vijayavitthal T. Mathad
4)Bandla Pavan Kumar Reddy

(57) Abstract :
Abstract Title of the invention: Process for the preparation of 5-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-6-chloro-1,3-dihydro-2H-indol-2-one, methanesulfonate, trihydrate The present invention relates to the processes for the preparation 5-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-6-chloro-1,3dihydro-2H-indol-2-one, methanesulfonate, trihydrate which is represented by the following structural formula-1a. Formula-1a.

No. of Pages : 11 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202041000704 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR CONTROLLING EXHAUST GAS RECIRCULATION IN AN ENGINE

(51) International classification	:F02D0041000000, F02D0041140000, F02M0026010000, F02M0026000000, F02B0037000000	(71)**Name of Applicant :** **1)Mahindra & Mahindra Limited** Address of Applicant :Mahindra & Mahindra Limited Mahindra Research Valley, Mahindra World City Plot No:41/1, Anjur P.O. Chengalpattu, Tamilnadu, India. Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Ashwin S Raj**
(33) Name of priority country	:NA	**2)NAGARAJAN VIGNESHWARAN**
(86) International Application No	:NA	**3)RAJAMANI PARTHIBAN**
Filing Date	:NA	**4)Govindaraju Karthikeyan**
(87) International Publication No	: NA	**5)RAVINDRA S K**
(61) Patent of Addition to Application Number	:NA	**6)NISSANGI JOYKUMAR**
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
System (100) and method (200) for controlling exhaust gas re-circulation in an engine. The system (100) includes a controller unit (102), an EGR control valve (104), an exhaust gas temperature sensor (106) and an engine speed sensor (108). The controller unit (102) is adapted to determine the operating load of the engine based on the measured exhaust gas temperature and accordingly the controller unit (102) controls the EGR control valve (104) to control exhaust gas recirculation to the engine based on the operating load and operating speed of the engine. The system (100) accurately re-circulates exhaust gas to the engine based on operating load and speed of the engine to reduce nitrous oxide (NOx) and hydrocarbon (HC) emissions from the engine. Fig. 1

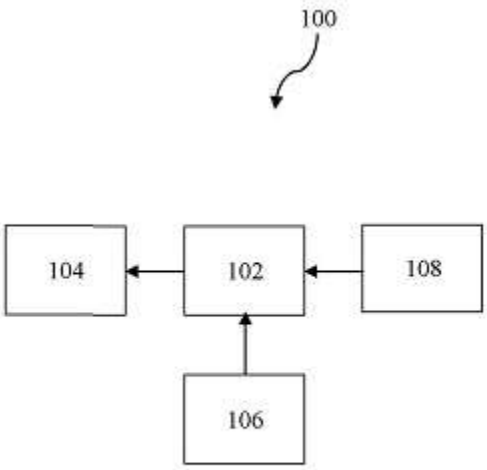

Fig. 1

No. of Pages : 16 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202041000734 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEMS AND METHODS FOR MULTIMODAL CONTENT GENERATION

(51) International classification	:G06F0003010000, G06F0009451000, G06F0017240000, H04M0003493000, G06F0016432000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea Republic of Korea
(72)**Name of Inventor :**
1)KANDUR RAJA, Barath Raj
2)KUMAR, Sumit
3)TRIPURAMALLU, Sanjana
4)AGARWAL, Vibhav
5)AGARWAL, Ankur
6)ANAND, Chinmay
7)AMARVAJ, Likhith
8)SRIRAM, Shashank
9)ARORA, Himanshu
10)VACHHANI, Jayesh Rajkumar
11)CHALAMALASETTI, Kranti
12)KHURANA, Rishabh
13)SREEVATSA, Dwaraka Bhamidipati
14)DIXIT, Raju Suresh

(57) Abstract :
A method and system for multimodal content generation within an application, based on user input. The method includes receiving an input from a user within an application. Further, the method includes detecting a modality and a plurality of features from the input. Then, the method includes identifying intent of the input from the detected modality and the detected plurality of features. The method includes retrieving information for multimodal content generation and generating the multimodal content based on the detected modality, the detected plurality of features and the retrieved information. The method includes generating one or more layout templates and mapping the retrieved information to the one or more layout templates. The method also includes receiving a semi structured data and storing it in a structured form in the received order and mapping it to the one or more layout templates. Lastly, the method includes rendering the at least one multimodal content to the user within the application for selection.

No. of Pages : 57 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000754 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESSES FOR THE PREPARATION OF HIGHLY PURE CRYSTALLINE FORM II OF CARVEDILOL

(51) International classification	:C12N0007020000, C07C0051410000, C07C0215540000, H01L0051000000, A61K0031403000	(71)**Name of Applicant :** **1)SYMED LABS LIMITED** Address of Applicant :8-2-293/174/3, Beside B.N. Reddy Colony, Road No.14, Banjara Hills, Hyderabad Telangana India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)MOHAN RAO DODDA** **2)PRAKASH TARNIKANTI**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Disclosed herein is a consistently reproducible process for the production of highly pure and stable crystalline Form II of Carvedilol essentially free of other polymorphic forms.

No. of Pages : 24 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202041000761 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOVEL PROCESS OF SYNTHESIZING COIR DOOR MATS HAVING LOWER THICKNESS

(51) International classification	:H01F0027280000, B32B0027060000, H02K0003280000, B32B0003260000, H05B0003140000	(71)**Name of Applicant :** **1)M/s United Coir Factories** Address of Applicant :P.B#2611 A.S ROAD KOMMADY ALLEPPEY-688007 Kerala India (72)**Name of Inventor :** **1)VISHNURAJ BHOOPATHY**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention relates a method of synthesizing coir mats having variable thickness and backing layer. According to the present invention, two mats can be produced at a time thus making the cost of manufacture cheaper. The mats can be produced having variable thickness. The coir mats are produced having a lower thickness as compared to the coir mats produced conventionally

No. of Pages : 9 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202041000765 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR PREVENTING FRAUD IN TRUSTED NETWORK, AND SYSTEM THEREOF

(51) International classification	:G06Q0020400000, H04L0029060000, G06Q0040020000, G06Q0030060000, H04W0012120000	(71)**Name of Applicant :** **1)WIPRO LIMITED** Address of Applicant :Doddakannelli, Sarjapur Road, Bangalore 560035, Karnataka, India. Karnataka India (72)**Name of Inventor :** **1)VINOD RAMACHANDRA PANICKER** **2)SUMOD RAJAN GEORGE**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
METHOD FOR PREVENTING FRAUD IN TRUSTED NETWORK, AND SYSTEM THEREOF ABSTRACT The present disclosure relates to a method for preventing fraud in a trusted network (100). An information related to a plurality of fraudulent transactions are received from a plurality of entities (1011, 1012, ¦., 101N) in the trusted network (100). Each of the plurality of entities (1011, 1012, ¦., 101N) provides a consent for sharing the information related to corresponding plurality of fraudulent transactions. Indicators of Fraudulent Transactions (IOFT) metadata are generated based on one or more patterns in the information related to the plurality of fraudulent transactions. One or more IOFT data elements comprising transaction details associated with the plurality of fraudulent transactions and excluding confidential details are identified from the IOFT metadata. One or more IOFT data elements are transmitted in an encrypted format to the plurality of entities (1011, 1012, ¦., 101N) over the trusted network (100) to prevent the fraud in the trusted network (100). Figure 4

FIGURE 4

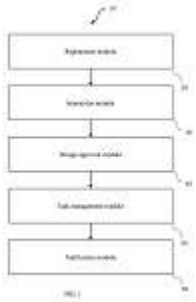
No. of Pages : 33 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000774 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD TO MANAGE AN INTERIOR DESIGN PROJECT

(51) International classification	:G06Q0010060000, G06Q0010100000, G06F0021620000, G06Q0050120000, G06F0021320000	(71)**Name of Applicant :** **1)BONITO DESIGNS PVT. LTD.** Address of Applicant :FLOOR 2, BUILDING NO, 1182, 5TH MAIN RD, OPPOSITE SHANMUKHA RESTAURANT, 7TH SECTOR, HSR LAYOUT, BENGALURU- 560102, KARNATAKA, INDIA Karnataka India
(31) Priority Document No	:NA	
(32) Priority Date	:NA	(72)**Name of Inventor :** **1)PRADEEP S BHAT**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A system to manage an interior design project is disclosed. The system includes a registration module operable by one or more processor, configured to register one or more customers and a plurality of workers. The system includes an interaction module operable by the one or more processor, configured to provide interaction between each of one or more registered customers and plurality of registered workers in relation to one or more factors of the interior design project. The system includes a design approval module, configured to finalise the interior design project after interaction between each of the one or more registered customers and the plurality of registered workers. The system includes a task management module operable by the one or more processors, configured to manage task execution of each of the plurality of registered workers in real time by an analysing technique. FIG. 1



No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202041000777 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : VIRAL VACCINE COMPOSITIONS AND METHODS OF PREPARATIONS THEREOF

(51) International classification	:A61K0039000000, A61K0039120000, A61K0039102000, A61K0039080000, A61K0039050000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :Genome Valley, Turkapally, Shameerpet, Hyderabad - 500078, Telangana, India. Telangana India
(72)**Name of Inventor :**
1)RAYCHAUDHURI, Mithu

(57) Abstract :
The present invention relates to vaccine composition comprising inactivated rotavirus antigen, methods of inactivation and preparation of vaccine composition thereof. The present invention also discloses a combination vaccine comprising inactivated rotavirus antigen and norovirus antigen, and vaccine preparations thereof.

No. of Pages : 57 No. of Claims : 40

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000826 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : OBSERVATIONS ON EFFECTS OF ECLIPTA ALBA ON LIVER OF OBESE ALBINO RATS INDUCED BY HIGH FAT DIET

(51) International classification	:A61K0036280000, A61K0049000000, A23L0033105000, G01N0033500000, A61K0031192000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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(72)**Name of Inventor :**
1)K SATHEESH NAIK
2)DR.M. GURUSHANTHAIAH

(57) Abstract :
ABSTRACT OBSERVATIONS ON EFFECTS OF ECLIPTA ALBA ON LIVER OF OBESE ALBINO RATS INDUCED BY HIGH FAT DIET Hyperlipidemia is characterized by an elevation of lipid profile in the blood. We have utilized 30 adult albino rats of Wistar strain weighing 165-215 grams to study the possible therapeutic role of Eclipta Alba on the reversal of alteration induced by High fat diet-induced hyperlipidemia in hepatocellular degeneration. The rats divided into 5 groups, and each group consists of 6 animals. The control group was given standard rat chow and the experimental groups Fed with High fat diet for 8 weeks and treated with Eclipta Alba for 1, 2 and 3 weeks. All the animals were sacrificed on the last day of the experiment to study lipid profile and Liver function test, morphometry and histopathological changes in the liver. High fat diet followed by Eclipta Alba treated group animals showed less fat deposition and regeneration in the liver.

No. of Pages : 23 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000851 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND ELECTRONIC DEVICE FOR BUILDING COMPREHENSIVE GENOME SCALE METABOLIC MODEL

(51) International classification	:G06F0016903000, G01N0033680000, G06N0020000000, G06Q0050000000, G06F0016245700	(71)**Name of Applicant :** **1)Samsung Electronics Co., Ltd** Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi- do 443-742, Republic of Korea Republic of Korea
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)RAJASEKHARA REDDY DUVVURU MUNI**
(33) Name of priority country	:NA	**2)TADI VENKATA SIVA KUMAR**
(86) International Application No	:NA	**3)TAEYONG, KIM**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
ABSTRACT Method and electronic device for building comprehensive genome scale metabolic model • Accordingly, embodiments herein disclose a method for building a comprehensive genome scale metabolic model. The method includes determining that at least one of a hypothetical profile annotation and an uncharacterized profile annotation is available in a profile annotation associated with a protein. Further, the method includes performing a machine learning procedure on at least one of the hypothetical profile annotation and the uncharacterized hypothetical profile annotation after the fuzzy string matching and ranking procedure. Further, the method includes obtaining all the possible protein annotations based on a fuzzy string matching procedure. Further, the method includes performing a rank procedure on at least one of the hypothetical profile annotation and the uncharacterized profile alternative annotation. Further, the method includes identifying all possible metabolic reaction for the protein annotation by the fuzzy string matching procedure. Further, the method includes ranking the protein annotation based on the metabolic reaction. FIG. 4

No. of Pages : 32 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202041000852 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IDENTIFYING CO-EVOLVING SITES AND SUBSTITUENT AMINO ACID RESIDUES

(51) International classification	:A61K0038000000, G01N0033680000, C12N0015620000, C07K0014500000, C12N0009540000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Samsung Electronics Co., Ltd.
Address of Applicant :129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi- do, 443-742 Republic of Korea
(72)**Name of Inventor :**
1)RAJASEKHARA REDDY DUVVURU MUNI
2)TADI VENKATA SIVA KUMAR
3)PRIYADARSHINI PANEMANGALORE PAI
4)GARIMA AGARWAL
5)TAEYONG KIM

(57) Abstract :
Embodiments herein disclose a method for identifying co-evolving sites and and at least one substituent amino acid residues. The method includes obtaining a current state of a protein and an ancestral state of the protein. Further, the method includes determining at least one amino acid substitution along with at least one co-evolving site associated with the protein based on the current state of the protein and the ancestral state of the protein. Further, the method includes accessing the at least one amino acid substitution as a function of a nucleotide substitution in the protein. Further, the method includes accessing at least one co-evolving site substitution based on the at least one accessed amino acid substitution. Further, the method includes identifying the co-evolving sites and at least one substituent amino acid residues. FIG. 12

No. of Pages : 34 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020

(21) Application No.202041000896 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PARKING FACILITY WITH INTEGRATED ADVERTISING FACILITY

(51) International classification	:G06Q0030020000, G08G0001140000, E04H0006420000, E04H0006220000, E04H0001120000	(71)**Name of Applicant :** **1)Lookman Electroplast Industries Limited** Address of Applicant :Old No. 9, New No. 15, 2nd Street Extn, 3rd Main Rd, CIT Nagar, Nandanam, Chennai - 600035, Tamil Nadu, India. Tamil Nadu India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)Juzer Saifuddin Bharmal**
(33) Name of priority country	:NA	**2)Amar Saifuddin Bharmal**
(86) International Application No	:NA	**3)Shabbir Saifuddin Bharmal**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
As attached

No. of Pages : 27 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202041000899 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROCESS OF INDUCING TRANSLATIONAL READTHROUGH ACROSS PRE-MATURE STOP CODON

(51) International classification	:A61Q0019000000, C07H0015230000, C12N0015670000, C07D0209460000, A61K0038460000	(71)**Name of Applicant :** **1)INDIAN INSTITUTE OF SCIENCE** Address of Applicant :Indian Institute of Science, Bangalore, Karnataka 560012, India Karnataka India (72)**Name of Inventor :** **1)ESWARAPPA, Sandeep Muthanegere** **2)KAR, Debaleena** **3)SOM, Saubhik**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
AS ATTACHED

No. of Pages : 36 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :17/07/2020
(21) Application No.202044030604 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SPEECH INTERACTION METHOD AND APPARATUS, DEVICE AND STORAGE MEDIUM

(51) International classification	:G06F0009480000, G10L0015220000, G10L0015180000, G10L0013047000, G10L0013040000
(31) Priority Document No	:202010017436.7
(32) Priority Date	:08/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Beijing Xiaomi Pinecone Electronics Co., Ltd.
Address of Applicant :Unit C, Building C, No. 66, Zhufang Road, Qinghe Street, Haidian District, Beijing 100085, China China

(72)**Name of Inventor :**
1)GAO, Luyu
2)SUN, Tianwei
3)MA, Baiming

(57) Abstract :
The present disclosure provides a speech interaction method and apparatus, a device and a storage medium. The method includes that: speech information of a user is acquired (202); a task list corresponding to the speech information is determined (204), the task list including at least two ordered tasks; and for each task in the at least two ordered tasks, responsive to that a next task of a present task is a question-answer task, response information of the next task is queried and sent to a user terminal before execution time of the next task arrives (206), such that the user terminal outputs the response information when the execution time of the next task arrives.

No. of Pages : 46 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202044038242 A
(19) INDIA
(22) Date of filing of Application :04/09/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHODS, SYSTEMS, AND MEDIA FOR GENERATING COMPRESSED IMAGES

(51) International classification	:G06F0017210000, G06F0017240000, G06F0016930000, B41M0003140000, G06F0017220000
(31) Priority Document No	:16/736,469
(32) Priority Date	:07/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Google LLC
Address of Applicant :1600 Amphitheatre Parkway, Mountain View, California 94043 U.S.A.
(72)**Name of Inventor :**
1)Overbeck, Ryan

(57) Abstract :
Methods, systems, and media for generating compressed images are provided. In some embodiments, the method comprises: identifying a multi-plane image (MPI) that represents a three-dimensional image; splitting the MPI into a plurality of sub-volumes; calculating, for each sub-volume of the MPI, a depthmap; converting each depthmap to a mesh, wherein each mesh corresponds to a layer of a plurality of layers associated with a multi-depth image (MDI) to be rendered; calculating, for each layer of the plurality of layers, an image that indicates a color and a transmittance of each voxel included in the layer; storing the meshes corresponding to the plurality of layers of the MDI and the images corresponding to the plurality of layers of the MDI as the MDI; and, in response to receiving a request for the three-dimensional image from a user device, transmitting the MDI to the user device, wherein the user device is configured to render the MDI by mapping, for each layer of the MDI, the image corresponding to the layer as a texture on the mesh corresponding to the layer.

No. of Pages : 33 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202044039195 A
(19) INDIA
(22) Date of filing of Application :10/09/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : TECHNIQUES TO COUPLE HIGH BANDWIDTH MEMORY DEVICE ON SILICON SUBSTRATE AND PACKAGE SUBSTRATE

(51) International classification :G06F0013160000, H01L0025160000, G11C0007100000, H01L0027120000, G08B0005360000
(31) Priority Document No :16/737,666
(32) Priority Date :08/01/2020
(33) Name of priority country :U.S.A.
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number:NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
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Address of Applicant :2200 Mission College Boulevard, Santa Clara, California 95054, USA U.S.A.
(72)**Name of Inventor :**
1)Chong J. ZHAO
2)James A. McCALL
3)Shigeki TOMISHIMA
4)George VERGIS
5)Kuljit S. BAINS

(57) Abstract :
Techniques to couple a high bandwidth memory device on a silicon substrate and a package substrate are disclosed. Examples include selectively activating input/out (I/O) or command and address (CA) contacts on a bottom side of a logic layer for the high bandwidth device based on a mode of operation. The I/O and CA contacts are for accessing one or more memory devices include in the high bandwidth memory device via one or more data channels.

No. of Pages : 48 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/10/2020
(21) Application No.202044044563 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AQUATIC VEHICLE INCLUDING AMUSEMENT EQUIPMENT AND OPERATING METHOD THEREOF

(51) International classification	:A63G0031000000, B63B0035000000, A63G0027000000, B60R0011000000, A63G0031160000
(31) Priority Document No	:202010016520.7
(32) Priority Date	:08/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Steve Geeking Hsu
Address of Applicant :10F, The Sun™s Group Centre, 200 Gloucester Road, Wanchai, Hong Kong, China. China
(72)**Name of Inventor :**
1)Steve Geeking Hsu

(57) Abstract :
The present invention discloses an aquatic vehicle including an amusement equipment and a method for operating the same. The aquatic vehicle including an amusement equipment includes a mobile aquatic vehicle, wherein said mobile aquatic vehicle is equipped with a power system and an installation space. The installation space can be used for the placement of the amusement equipment. A transportation operation is provided so that the mobile aquatic vehicle can move to a predetermined location on the water, and the mobile aquatic vehicle can be moored at the predetermined location by adjusting fluid injection/discharge of a ballast tank of the mobile aquatic vehicle. Moreover, an apparatus installation operation is provided, wherein a base frame is pivotally combined with a rotation structure and at least one passenger carrying device arranged on the rotation structure so as to form the amusement equipment (for example, a Ferris wheel) for carrying users on harbors, rivers, the sea or other aquatic areas while simultaneously resulting in special visual and entertainment effects.

No. of Pages : 13 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/12/2020
(21) Application No.202044056216 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FAILURE DETECTOR AND FAILURE DETECTION METHOD

(51) International classification	:F01N0003200000, F01N0011000000, G01F0023000000, G01F0023260000, G01F0023296000
(31) Priority Document No	:2020-000166
(32) Priority Date	:06/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)AKIFUMI UOZUMI
2)TADASHI TOYOTA
3)DAI MURATA

(57) Abstract :
A failure detector includes a reducing agent tank (65) in which reducing agent solution (67) is stored, a liquid level sensor configured to detect a liquid level of the reducing agent solution (67), a behavior variation detector configured to detect behavior variations of a vehicle, and a controller (50) configured to perform control for causing the behavior variation detector to detect the behavior variations of the vehicle for a first specified time and the liquid level sensor to detect variations in the liquid level of the reducing agent solution (67) for a second specified time. The controller (50) has a failure detection unit that detects a presence of a failure of each of the behavior variation detector and the liquid level sensor based on the behavior variations and the variations in the liquid level of the reducing agent solution (67). (Figure 1)

No. of Pages : 44 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/01/2020
(21) Application No.202047002807 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CASING FOR PREVENTING DISTORTION AND PUMP INCLUDING THE SAME

(51) International classification	:F02M0059480000, F04B0053160000, F02M0059440000, F02M0039000000, F04D0029220000
(31) Priority Document No	:10-2019-0010045
(32) Priority Date	:25/01/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000208
Filing Date	:06/01/2020
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)LEE, Sang Seon
Address of Applicant :(Musil E-Pyunhan Sesang APT., Musil-dong), #204- 503, 89, Mandae-ro, Wonju-si, Gangwondo 26386, Republic of Korea Republic of Korea
(72)**Name of Inventor :**
1)LEE, Sang Seon

(57) Abstract :
Various pumps capable of preventing distortion are disclosed. A casing of the pump comprises a metal member configured to have at least two sub metal members and a body. Here, the sub metal members are included in the body, and the body is formed of plastic.
Figure 5

No. of Pages : 34 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/08/2020
(21) Application No.202047033088 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NEW PHYSICAL DOWNLINK CONTROL CHANNEL DESIGN

(51) International classification	:H04W 72/04, H04L 5/00, H04W 74/00, H04W 92/10, H04W 72/12
(31) Priority Document No	:62/790825
(32) Priority Date	:10/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/FI2020/050002
Filing Date	:02/01/2020
(87) International Publication No	:WO 2020/144401
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)HOOLI, Kari
3)TIIROLA, Esa
4)LUNTTILA, Timo

(57) Abstract :
According to an aspect of the present disclosure, a method includes transmitting, by a network entity, at least one downlink control signal to a user equipment. The downlink control signal comprises a current slot format indicator and a further indicator. The current slot format indicator indicates at least one slot format combination. The further indicator comprises one or more of:at least one offset, at least one applicability indication, at least one next slot format indicator, and at least one indication of at least one channel occupancy time ending.

No. of Pages : 18 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/01/2020
(21) Application No.202049000211 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NOVEL IMPURITIES OF CYCLOPHOSPHAMIDE LIQUID FORMULATIONS

(51) International classification	:A61K0031675000, A61K0031664000, A61K0047260000, A61K0009190000, A61K0047100000
(31) Priority Document No	:3454/CHE/2014
(32) Priority Date	:11/07/2014
(33) Name of priority country	:India
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:IN201747004917A
Filed on	:13/07/2015
(62) Divisional to Application Number	:NA
Filing Date	:NA

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5)Bhavesh Vallabhbhai PATEL
6)Harshal BHAGWATWAR
7)Sumitra Ashok PILLAI
8)Satheesh BALASUBRAMANIAN
9)Joydeep MAZUMDER

(57) Abstract :
The present invention relates to novel impurities of cyclophosphamide having structure V, VI or VII, stabilized form of these novel impurities, a process of preparing a stabilized form and isolating thereof. The invention also relates cyclophosphamide formulations which include cyclophosphamide, at least one pharmaceutically acceptable excipient, and a certain level of these impurities having structure V, VI or VII. The invention further relate to method of using such stable liquid formulations of cyclophosphamide for parenteral administration in treating various cancer disorders.

No. of Pages : 66 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021

(21) Application No.202142029678 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : Integrated Circuit With Areas Having Uniform Voltage Drop And Method Therefor

(51) International classification	:G06F0119060000, H01L0027320000, H01L0023528000, H01C0007120000, G06F0030394000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:888/CHE/2008
Filed on	:09/04/2008

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1)Advanced Micro Devices, Inc.
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1)Shibashish Patel

(57) Abstract :
-As attached-

No. of Pages : 28 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2021

(21) Application No.202144000151 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMAGE FORMING APPARATUS

(51) International classification	:G03G0015000000, H04N0001000000, G03G0015200000, G03G0015160000, G03G0021200000
(31) Priority Document No	:2020-001639
(32) Priority Date	:08/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)Yasukazu Kobayashi

(57) Abstract :
As Attached.

No. of Pages : 48 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2021
(21) Application No.202144000159 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MACHINE-LEARNING-BASED DETECTION AND RECONSTRUCTION FROM LOW-RESOLUTION SAMPLES

(51) International classification	:H03M0001060000, G06N0020000000, H03M0001100000, G01M0013028000, G16H0050500000
(31) Priority Document No	:20205014
(32) Priority Date	:08/01/2020
(33) Name of priority country	:Finland
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)HOYDIS, Jakob
3)TOURNIAIRE, Paul
4)DARTOIS, Luc

(57) Abstract :
According to an aspect, there is provided an apparatus comprising a combiner for combining a received analog signal with an analog dithering signal to produce a combined analog signal, a one-bit analog-to-digital converter for converting the combined analog signal to a combined digital signal, means for performing joint downsampling and feature extraction for the combined digital signal, means for implementing a trained machine-learning algorithm for calculating one or more in-put parameters for waveform generation at least based on one or more features extracted from the combined digital signal and a parametric waveform generator for generating the analog dithering signal based on the one or more input parameters. (Figure 2)

No. of Pages : 56 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :04/01/2021
(21) Application No.202144000203 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMAGE FORMING APPARATUS

(51) International classification	:H04N0001320000, H04N0001387000, G06T0001000000, G06T0015080000, H04N0001000000
(31) Priority Document No	:2020-001638
(32) Priority Date	:08/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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1)Yasukazu Kobayashi

(57) Abstract :
An image processing apparatus may include a processor including a processing unit, a creating unit, and an output unit. The processing unit stores image data created by executing a job in a storage unit. The creating unit creates an information code representing information indicating a storage area of the storage unit in which the image data is stored. The output unit displays the information code created by the creating unit on a display unit. Fig. 1

No. of Pages : 43 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2021

(21) Application No.202144000591 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SILICONE COMPOSITE FOR HIGH TEMPERATURE APPLICATIONS

(51) International classification	:B29C0048000000, H05K0001030000, C04B0028340000, B32B0027200000, B29K0509000000
(31) Priority Document No	:16/736,947
(32) Priority Date	:08/01/2020
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)WANG, Lei
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4)GAO, Ting
5)DRESSEL, Andre Martin
6)WOLF, Marco
7)DONG, Mei

(57) Abstract :
A silicone composite for high temperature insulation applications is disclosed. The composite is formed of a silicone and a thermally decomposable inorganic filler which are compounded together. The compounded material is then injection molded, overmolded, compression molded, cast, laminated, extruded, or dispensed. When the silicone composite is exposed to a high temperature, it forms an inorganic composite and maintains its insulating properties and dimensional stability. [FIGURE 1]

No. of Pages : 25 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2021
(21) Application No.202144000809 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : APPARATUS, METHOD, AND SYSTEM FOR PROVIDING A SAMPLE REPRESENTATION FOR EVENT PREDICTION

(51) International classification	:G06N0020000000, H04L0012260000, H04L0012240000, A61B0005110000, A61B0005000000
(31) Priority Document No	:20205013
(32) Priority Date	:08/01/2020
(33) Name of priority country	:Finland
(86) International Application No	:PCT//
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Ahmet AKYAMAC
2)Gerald LEHMANN
3)Yash GARG

(57) Abstract :
ABSTRACT APPARATUS, METHOD, AND SYSTEM FOR PROVIDING A SAMPLE REPRESENTATION FOR EVENT PREDICTION An approach is provided for sample representation for event prediction (e.g., a device failure event). The approach, for example, involves determining a random set of sliding time window lengths for processing a sensor data stream (e.g., device health measurements) to detect an event (e.g., device failure). The approach also involves generating sensor data samples based on the random set of the sliding time window lengths. The approach further involves evaluating the data samples based on a quality metric indicating a level of sample cohesion relative to the event. The approach further involves selecting a combination of the sliding time window lengths of the one or more window lengths based on the evaluation. The selected combination of the sliding time window lengths is used to process the sensor data to detect the event (e.g., via machine learning). Fig. 3

No. of Pages : 54 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :21/05/2021
(21) Application No.202147022683 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND SYSTEM FOR OPERATING INTERNET OF THINGS DEVICE

(51) International classification	:H04L0029060000, H04L0029080000, H04L0009320000, H04W0012040000, H04W0004800000
(31) Priority Document No	:201910210669.6
(32) Priority Date	:19/03/2019
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2020/070659
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/186902
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)HUANG, Qi
2)LIAO, Hui

(57) Abstract :
Disclosed is a method for operating an Internet of Things device, comprising: a user equipment receives an operation instruction for an Internet of Things device from a user; the user equipment identifies a biometric feature of the user; the user equipment verifies the identity of the user on the basis of the biometric feature; if the identity of the user is successfully verified, the user equipment signs the operation instruction by using a first user key of the user; the user equipment transmits the signed operation instruction to the Internet of Things device; the Internet of Things device verifies the signature of the signed operation instruction by using a second user key of the user, wherein the second user key and the first user key constitute a key pair; and if the signature is successfully verified, the Internet of Things device executes the operation instruction. Also disclosed are a method executed by the user equipment, a method executed by the Internet of Things device, and a corresponding system.

No. of Pages : 18 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/06/2021

(21) Application No.202147024604 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ESCAPE CODING FOR COEFFICIENT LEVELS

(51) International classification	:H04N0019130000, H04N0019180000, H04N0019910000, H04N0019700000, H04N0019600000
(31) Priority Document No	:62/787707
(32) Priority Date	:02/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012054
Filing Date	:02/01/2020
(87) International Publication No	:WO 2020/142608
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)KARCZEWICZ, Marta

(57) Abstract :
As part of bypass decoding syntax elements for a set of coefficients in response to reaching a maximum number of regular coded bins, a video decoder is configured to receive a prefix value for a transform coefficient; decode the prefix value using Golomb-Rice coding; in response to a length of the prefix value being equal to a threshold value, receive a suffix value for the transform coefficient; decode the suffix value using exponential Golomb coding; and determine a level value for the transform coefficient based on the decoded prefix value and the decoded suffix value.

No. of Pages : 58 No. of Claims : 44

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/06/2021
(21) Application No.202147024800 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRANSMISSION OF PULSE POWER AND DATA OVER A WIRE PAIR

(51) International classification	:H04L0012100000, H04W0052320000, G05B0019042000, H04W0052140000, H04L0012280000
(31) Priority Document No	:16/255657
(32) Priority Date	:23/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012758
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/154101
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)GOERGEN, Joel, Richard
3)ZIMMERMAN, George, Allan

(57) Abstract :
In one embodiment, an apparatus includes an interface for transmitting pulse power and data to a powered device over a wire pair and a controller for receiving input identifying power transitions in the pulse power and suspending data transmission during the power transitions. A method is also disclosed herein.

No. of Pages : 21 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :09/06/2021
(21) Application No.202147025572 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RISK DECISION-MAKING METHOD AND APPARATUS

(51) International classification	:G06Q0010060000, G06Q0040060000, H04L0029080000, G06Q0040020000, H04W0004029000
(31) Priority Document No	:201910177003.5
(32) Priority Date	:08/03/2019
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2020/070501
Filing Date	:06/01/2020
(87) International Publication No	:WO 2020/181908
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)SONG, Binbin

(57) Abstract :
A risk decision-making method and apparatus, which relate to the technical field of computers. The risk decision-making method comprises: receiving a risk decision-making request initiated by a local service system (110), the risk decision-making request comprising service information of a local service; on the basis of the service information of the local service, performing risk assessment on the local service by using a first risk decision-making rule for the local service (120) so as to determine a first risk assessment result for the local service, the first risk decision-making rule being obtained from a central server; and determining a risk decision-making result for the local service on the basis of the first risk assessment result (130). By using the risk decision-making method and apparatus, risk assessment is performed on a local service by using a risk decision-making rule from a central server, which may improve the risk management capabilities of a company that originally has no risk management capabilities or that has insufficient risk management capabilities.

No. of Pages : 18 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2021

(21) Application No.202147026062 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HANDLING OF CHANNEL ACCESS PROBLEMS

(51) International classification	:H04W0074080000, H04W0016140000, H04W0052020000, H04W0072040000, H04W0024040000
(31) Priority Document No	:62/789473
(32) Priority Date	:07/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012555
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/146365
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)RADULESCU, Andrei Dragos
4)ZHANG, Xiaoxia
5)LUO, Tao
6)SUN, Jing

(57) Abstract :
A UE determines to send a transmission to a first base station on a first unlicensed frequency channel. The UE determines, for one or more attempts of a listen before talk (LBT) protocol, whether each attempt is a failed attempt or a successful attempt. The UE determines that the first unlicensed frequency channel is one of unavailable based on the LBT protocol failing due to a number of failed attempts exceeding for a first threshold number of failed attempts or a duration of failed attempts exceeding a first threshold duration, or available based on the LBT protocol being successful. The UE sends a report to the first base station indicating whether the first unlicensed frequency channel is unavailable or available through a unicast radio resource control (RRC) message or a medium access control (MAC) control element (CE).

No. of Pages : 46 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/06/2021

(21) Application No.202147026137 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTIPLE DECODER INTERFACE FOR STREAMED MEDIA DATA

(51) International classification	:H04L0029060000, H04L0029080000, H04N0019610000, H04N0019440000, H04N0021430000
(31) Priority Document No	:62/789940
(32) Priority Date	:08/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012774
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/146520
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)STOCKHAMMER, Thomas
2)COBAN, Muhammed Zeyd
3)LIU, Zhen

(57) Abstract :
An example client device for retrieving media data includes a memory configured to store media data; and one or more processors implemented in circuitry and configured to execute a plurality of video decoders; determine a complexity value for the media data including a plurality of encoded video streams, the complexity value representing complexity of an aggregation of the encoded video streams; retrieve the media data including the encoded video streams in response to determining that the client device is capable of decoding the encoded video streams using the complexity value; and distribute the encoded video streams and synchronization information to corresponding video decoders of the plurality of video decoders to cause the video decoders to decode the corresponding video streams and to output decoded video data from the video streams in a synchronized fashion.

No. of Pages : 34 No. of Claims : 33

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/06/2021

(21) Application No.202147026391 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FEEDBACK FOR SIDELINK COMMUNICATIONS

(51) International classification	:H04W0072040000, H04L0005000000, H04W0088040000, H04W0076140000, H04W0004400000
(31) Priority Document No	:62/790823
(32) Priority Date	:10/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012762
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/146513
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)GULATI, Kapil
4)NGUYEN, Tien Viet
5)PATIL, Shailesh
6)CHEN, Wanshi

(57) Abstract :
Various aspects of the present disclosure generally relate to wireless communication. In some aspects, a user equipment (UE) may receive a sidelink communication on a sidelink between the UE and another UE. The UE may transmit, on the sidelink, one or more feedback communications associated with the sidelink communication in a reporting period having a configurable periodicity and/or being configured to occupy an entire bandwidth of a resource pool configured for the sidelink. Numerous other aspects are provided.

No. of Pages : 28 No. of Claims : 66

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :14/06/2021

(21) Application No.202147026448 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : LIGNIN-ENHANCED BUTYL RUBBERS

(51) International classification	:C08K0003040000, C08L0023280000, B60C0001000000, C08H0007000000, C07G0001000000
(31) Priority Document No	:62/788428
(32) Priority Date	:04/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/CA2020/050004
Filing Date	:02/01/2020
(87) International Publication No	:WO 2020/140155
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)BOTHA, Linda

(57) Abstract :
Halogenated butyl rubbers are provided comprising lignins and co-reinforcing agents, where the ratio of the lignin to the co-reinforcing agent is selected so as to effectively modulate advantageous properties of the vulcanizate. The advantageous properties are achieved when using a ratio of lignin to the co-reinforcing agent, such as carbon black or silica, that is higher than in a reference vulcanizate, in effect the substitution of lignin for conventional reinforcing agents improves the reinforcement of the vulcanizates.

No. of Pages : 28 No. of Claims : 46

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :23/06/2021
(21) Application No.202147028213 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : NON-HALOGENATED FLAME RETARDANT POLYAMIDE COMPOSITIONS

(51) International classification	:C08L0077060000, C08G0069360000, D01F0006900000, C08L0077000000, B82Y0030000000
(31) Priority Document No	:62/789223
(32) Priority Date	:07/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012469
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/146308
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)WHITE, Kimberly M.

(57) Abstract :
A non-halogenated flame retardant polyamide composition is disclosed which comprises a polyamide, a non-halogenated flame retardant, and a synergist. The polyamide may have a ratio of carboxylic acid to amine end groups of greater than 1.8. Products formed from the composition are also disclosed. The polyamide may comprise nylon 6,6.

No. of Pages : 39 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147028554 A
(19) INDIA
(22) Date of filing of Application :25/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION SYSTEM AND COMMUNICATION TERMINAL

(51) International classification	:H04W0036000000, H04W0056000000, H04L0005000000, H04M0001725000, H04W0036300000
(31) Priority Document No	:2019-001624
(32) Priority Date	:09/01/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2020/000108
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/145248
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)MOCHIZUKI Mitsuru
3)FUKUI Noriyuki
4)UCHINO Daichi
5)NAKAMURA Kiyoshige

(57) Abstract :
The present invention provides low-delay high-reliability wireless communication technology. This communication system includes a communication terminal (UE) and a plurality of communication devices (handover source gNB and handover destination gNB) constituted so as to be capable of communicating with the communication terminal by wireless. When the connection destination of the communication terminal is switched from a first communication device (handover source gNB) to a second communication device (handover destination gNB), the communication terminal corrects the time of day of the communication terminal on the basis of a timing reference transmitted by the second communication device and a timing advance of the second communication device (step ST1512).

No. of Pages : 176 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2021

(21) Application No.202147028835 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A FILTER DEVICE, AND METHOD OF ASSEMBLY

(51) International classification	:C02F0001440000, B01D0029520000, B01D0063080000, D06F0039080000, C02F0103080000
(31) Priority Document No	:20181546
(32) Priority Date	:30/11/2018
(33) Name of priority country	:Norway
(86) International Application No	:PCT/NO2019/050263
Filing Date	:29/11/2019
(87) International Publication No	:WO 2020/111949
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)N˜KLEBY, Pl Helge

(57) Abstract :
A filter device comprises two or more membrane filter units (108), each having an inlet opening for a fluid flow (F) to be processed,a first outlet opening for at least one portion (R) of said fluid flow and second outlet port for at least a remaining portion (P) of said fluid flow. The respective inlet openings of each membrane filter unit (108) are fluidly connected to a common inlet manifold (101; 203) and the respective first outlet openings of each membrane filter unit (108) are fluidly connected to a common outlet manifold (100; 200). At least one membrane filter unit (108) is arranged at a first position (L1) along a longitudinal axis (x1) and at least one membrane filter unit (108) is arranged at a second position (L2) along the longitudinal axis (x1), and the said two membrane filter units (108) are not axially aligned.

No. of Pages : 18 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202147028911 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ACCESS TO FIRMWARE SETTINGS WITH ASYMMETRIC CRYPTOGRAPHY

(51) International classification	:H04L0009320000, G05B0015020000, H04L0029060000, H04N0021478800, G06F0012140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/US2019/020143
Filing Date	:28/02/2019
(87) International Publication No	:WO 2020/176110
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)JEANSONNE, Jeffrey Kevin
2)ALI, Valiuddin
3)BRAMLEY JR, Richard Alden
4)BALDWIN, Adrian John
5)SCHIFFMAN, Joshua Serratelli

(57) Abstract :
An example computing device includes a user interface, a network interface, a non-volatile memory, a processor coupled to the user interface, the network interface, and the non-volatile memory, and a set of instructions stored in the non-volatile memory. The set of instructions, when executed by the processor, is to perform a hardware initialization of the computing device according to a setting, establish a local trust domain and a remote trust domain, use a local-access public key to issue a challenge via the user interface to grant local access to the setting, and use a remote-access public key to grant remote access via the network interface to remote access to the setting.

No. of Pages : 17 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028917 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RECOMBINANT ADENO-ASSOCIATED VIRAL VECTOR FOR GENE DELIVERY

(51) International classification	:C12N0015860000, A61K0048000000, C12N0007000000, C07K0014715000, C07K0014005000
(31) Priority Document No	:62/775871
(32) Priority Date	:05/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/064396
Filing Date	:04/12/2019
(87) International Publication No	:WO 2020/117898
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)PADEGIMAS, Linas

(57) Abstract :
Provided herein are recombinant AAV vectors, AAV viral vectors, and capsid proteins for improved gene therapy, and methods for their manufacture and use.

No. of Pages : 72 No. of Claims : 28

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028918 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTI-BAND ANTENNA STRUCTURE

(51) International classification	:H01Q0001380000, H01Q0001520000, H01Q0013100000, H01Q0001220000, H01Q0021280000
(31) Priority Document No	:201811615844.1
(32) Priority Date	:27/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/125826
Filing Date	:17/12/2019
(87) International Publication No	:WO 2020/135140
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)QIN, Wenfei

(57) Abstract :
The present application provides a multi-band antenna structure comprising a first antenna unit, a second antenna unit, a reflector, and a first parasitic structure of the first antenna unit. The first antenna unit and the second antenna unit operate in different operating frequency bands, wherein the distance between the reflector and the antenna unit in a higher operating frequency band is less than the distance between the reflector and the antenna unit in a lower operating frequency band. The first antenna unit and the second antenna unit are adjacent to each other. The distance between the first antenna unit and the second antenna unit is less than 0.5 times the vacuum wavelength of the minimum operating frequency band of the two units. The distance between the first antenna unit and the first parasitic structure is less than 0.5 times the vacuum wavelength of an operating frequency band of the first antenna unit. The distance between the second antenna unit and the first parasitic structure is less than 0.5 times the vacuum wavelength of an operating frequency band of the second antenna unit. The invention can resolve the issue of poor polarization suppression for a radiation pattern of the first antenna unit, without significantly affecting the performance of the second antenna unit.

No. of Pages : 26 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147028919 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : HIGH-FREQUENCY RADIATOR, MULTI-FREQUENCY ARRAY ANTENNA, AND BASE STATION

(51) International classification	:H01Q0001500000, H01Q0001240000, H01Q0001380000, H01Q0001360000, H01Q0005300000
(31) Priority Document No	:201811640716.2
(32) Priority Date	:29/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/128374
Filing Date	:25/12/2019
(87) International Publication No	:WO 2020/135524
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)XUE, Chengdai
4)ZHANG, Yaojiang
5)XU, Yili
6)CHEN, Zhihan

(57) Abstract :
Provided in the present application are a high-frequency radiator, a multi-frequency array antenna, and a base station. The high-frequency radiator of the present application comprises two plus and minus 45-degree single-polarized radiators; each single-polarized radiator comprises a radiation arm, a balun, a feed circuit, a filter, and a ground layer; the radiation arm is electrically connected to the balun; the feed circuit and the balun are respectively disposed on two surfaces of a first dielectric plate which is placed vertically; the ground layer is disposed on the downward surface of a second dielectric plate which is placed horizontally; the first dielectric player is disposed on the second dielectric plate in a perpendicular manner; the filter comprises a capacitor branch and an inductor branch, the inductor branch is disposed on the same surface of the first dielectric plate as the balun, the inductor branch is electrically connected to the balun and the ground layer, separately, and the capacitor branch is coupled to the ground layer; the feed circuit is used for feeding the high-frequency radiator; the filter is used for weakening the effect of the high-frequency radiator on a low-frequency radiator. The present application solves the problem of common mode resonance of the high-frequency radiator; moreover, the bandwidth of the antenna is not affected, and the processing cost is low.

No. of Pages : 14 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028921 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMAGE CLASSIFICATION METHOD AND ELECTRONIC DEVICE

(51) International classification	:G06K0009620000, H04M0001725000, G06K0009460000, G09G0005120000, G06F0016580000
(31) Priority Document No	:201910055398.1
(32) Priority Date	:21/01/2019
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/125515
Filing Date	:16/12/2019
(87) International Publication No	:WO 2020/151396
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)JI, Yifan
3)WANG, Xinjian

(57) Abstract :
The present application provides an image classification method and an electronic device. The image classification method comprises: a first electronic device detects connection with a second electronic device; the first electronic device allows a data access request of the second electronic device; the second electronic device sends request information to the first electronic device, the request information being used for requesting information of images in one or more image sets, wherein each image set in the one or more image sets is obtained by classifying images captured by a camera of the first electronic device by means of the first electronic device; the first electronic device sends response information to the second electronic device; and the second electronic device displays the information of each image set by means of a display screen. The image classification method provided by embodiments of the present application is helpful for improving user experience.

No. of Pages : 56 No. of Claims : 32

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147028935 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : POSITIVE ELECTRODE ACTIVE MATERIAL FOR NONAQUEOUS ELECTROLYTE SECONDARY BATTERY AND NONAQUEOUS ELECTROLYTE SECONDARY BATTERY

(51) International classification	:H01M0004525000, H01M0004505000, C01G0053000000, H01M0004131000, H01M0010052500
(31) Priority Document No	:2018-247348
(32) Priority Date	:28/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/045909
Filing Date	:25/11/2019
(87) International Publication No	:WO 2020/137296
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)

(57) Abstract :
Provided is a positive electrode active material for a nonaqueous electrolyte secondary battery, the positive electrode active material comprising a Ni-containing lithium composite oxide a, b, wherein the Ni-containing lithium composite oxide a has an average primary particle size of 1 μm or more which is larger than the average primary particle size of the Ni-containing lithium composite oxide b, the Ni-containing lithium composite oxide a has an average secondary particle size of 2 to 6 μm, the Ni-containing lithium composite oxide b has an average primary particle size of 0.05 μm or more and an average secondary particle size of 10 to 20 μm, the Ni-containing lithium composite oxide a contains Mn and at least one of B and Al, the Ni-containing lithium composite oxide b contains Mn, and the ratio of the Ni-containing lithium composite oxide a to the Ni-containing lithium composite oxide b is, in mass ratio, 5:95 to 55:45. A nonaqueous electrolyte secondary battery which has high capacity, good cycle characteristics, and high-rate discharge characteristics can be provided using this positive electrode active material.

No. of Pages : 35 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202147028936 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTEGRATED TANK FOOT PARTICLE TRAP

(51) International classification	:H02G0005060000, H01H0033560000, G11B0033140000, F16L0021030000, H01H0009520000
(31) Priority Document No	:62/786706
(32) Priority Date	:31/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/067199
Filing Date	:18/12/2019
(87) International Publication No	:WO 2020/142217
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)BALLARD, Elizabeth
3)JOHNSTON, Jared P.

(57) Abstract :
An enclosure for a circuit breaker that includes a particle trap that is integrated into at least one foot of the enclosure. The enclosure can be configured to house a circuit interrupter and seal a dielectric insulating medium within an interior region of the enclosure. The particle trap can include an opening that extends through at least an inner side of a wall of the enclosure and into an adjacent foot such that the opening is in fluid communication with the interior region of the enclosure. Additionally, the opening of the particle trap can radially extend within both the wall of the enclosure and the foot between a first side and a second side of the particle trap.

No. of Pages : 11 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028937 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PRESS FOR IN-SITU MANUFACTURING A THERMOPLASTIC SANDWICH PANEL

(51) International classification	:F01D0025120000, B30B0015060000, A47J0031540000, B08B0009055000, E21B0043240000
(31) Priority Document No	:2022113
(32) Priority Date	:03/12/2018
(33) Name of priority country	:Netherlands
(86) International Application No	:PCT/NL2019/050795
Filing Date	:02/12/2019
(87) International Publication No	:WO 2020/117048
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A press (10) for manufacturing a sandwich panel comprises a first and second press plate (12; 14) that are movable with respect to one another. The press (10) has a fluid circulation loop for heating and cooling the press plates(12; 14). The fluid circulation loop comprises a heater (22) for generating a hot fluid connected to a fluid supply conduit(24)in fluid communication with an inlet(18) of at least one internal flow channel (16) in each press plate (12; 14) and connected to a fluid return conduit(26) in fluid communication with an outlet (20) of the at least one internal flow channel(16). The fluid circulation loop is also provided with a controlled expansion valve (34) for cooling by conversion of hot pressurized water into steam, and a water source (38) for slow cooling.

No. of Pages : 13 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147028938 A
(19) INDIA
(22) Date of filing of Application :28/06/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONTROL METHOD AND ASSOCIATED CONTROL SYSTEM

(51) International classification	:H02P0027080000, H02P0021000000, H02M0007480000, F02N0011040000, H02P0006210000
(31) Priority Document No	:1872188
(32) Priority Date	:30/11/2018
(33) Name of priority country	:France
(86) International Application No	:PCT/EP2019/082319
Filing Date	:22/11/2019
(87) International Publication No	:WO 2020/109185
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)VIDAL-NAQUET, Fabien
3)DIB, Wissam

(57) Abstract :
The invention relates to a method for controlling a three phase synchronous-reluctance or synchronous rotating machine (4) with permanent magnets, comprising the following steps: - measuring a current (iA, iB, iC) flowing in each of the phases of a stator of the rotating machine (4); - first calculation, by means of a single proportional-integral controller, of a commutation control signal for controlling an inverter (10), as a function of each measured current (iA, iB, iC), and a target value (Tref) of a mechanical torque supplied by the rotating machine (4) or of a target value of an angular velocity of a rotor of the rotating machine (4) with respect to the stator, the inverter (10) being configured to convey electrical power between a DC source (8) of electrical power and each phase of the stator of the rotating machine (4); - control of the inverter (10) by means of a calculated commutation control signal.

No. of Pages : 21 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028939 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMPOSTABLE WOOD COMPOSITE MATERIAL FOR THIN-WALLED ARTICLES

(51) International classification	:C08L0097020000, B27N0003000000, C08L0067040000, B29C0049060000, B27N0005020000
(31) Priority Document No	:20186033
(32) Priority Date	:02/12/2018
(33) Name of priority country	:Finland
(86) International Application No	:PCT/FI2019/050863
Filing Date	:02/12/2019
(87) International Publication No	:WO 2020/115363
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)P„RSSINEN, Antti

(57) Abstract :
A composition comprising a continuous thermoplastic polymer matrix having a melting point greater than 110 °C and, distributed within the matrix, particles of hydrophilic natural fiber material having a sieved size of less than 1.0 mm, the weight ratio of the thermoplastic polymer to the wood particles being from 99:1 to 35:65. An improvement in biodegradability of biopolymers, such as PLA, can be achieved. On the other hand, the addition of wood fibers enhances the material's ability to resist thermal deformation. The present compositions can be used for manufacturing hollow structures, by injection blow molding, of bottles with a wall thickness between 0.1 mm and 5 mm, in particular from 0.3 to 1 mm or continuous extruded products with a wall thickness from0.3mm to 1.5 mm.

No. of Pages : 29 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021

(21) Application No.202147028965 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : EXTENSIBLE FRAMEWORK FOR EXECUTABLE ANNOTATIONS IN ELECTRONIC CONTENT

(51) International classification	:G06F0016332000, H04L0029060000, G06F0040169000, H04N0021458000, G06F0003048400
(31) Priority Document No	:16/241870
(32) Priority Date	:07/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/068881
Filing Date	:30/12/2019
(87) International Publication No	:WO 2020/146157
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)UPADHYAY, Praveen
3)SRIDHARAN, Mahesh
4)KUMAR, Rajiv
5)BISWAS, Sanjib
6)RAJAPPA, Arun
7)MITRA, Sunny
8)MITRA, Aloka Sanjib Kumar

(57) Abstract :
Insertion of an executable command or instructions in the form of an annotation to electronic content, such that the receiver can benefit from a more precise and detailed context as they interpret and/or act on the sender's request. The system can, upon detecting an appropriate trigger, be configured to 'translate' or convert the annotation across multiple applications and platforms and perform one or more tasks that facilitate the receiver's access to and interaction with the item. The sender enjoys a much finer control over the manner, presentation, and overall context of the electronic content item as it is shared, and becomes able to offer the receiver a more precise understanding of their own intentions in sharing this item. Similarly, a receiver can be guided toward actions or responses that are expected or desired by the receipt of the electronic content item.

No. of Pages : 32 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/06/2021
(21) Application No.202147028966 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTI-REGION IMAGE SCANNING

(51) International classification	:H04N0001000000, G06K0007140000, H04N0005770000, G06K0007100000, G06K0009320000
(31) Priority Document No	:16/241904
(32) Priority Date	:07/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/068882
Filing Date	:30/12/2019
(87) International Publication No	:WO 2020/146158
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)AGARWAL, Abhishek
4)UPADHYAY, Praveen
5)BHUPTANI, Rahul
6)SRIDHARAN, Mahesh

(57) Abstract :
An image captured by a camera can be processed by a scanning application to identify multiple regions within the image that are suitable for scanning. These regions can be detected and selected for scanning automatically. The captured regions for the single image can be stored as individual image content files.

No. of Pages : 34 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :29/06/2021
(21) Application No.202147029207 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR MANUFACTURING HEAT DISSIPATION SHEET

(51) International classification	:B32B0027280000, H01L0023373000, C08J0005040000, H05K0007200000, B32B0009000000
(31) Priority Document No	:10-2019-0000820
(32) Priority Date	:03/01/2019
(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000108
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/141925
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A method for manufacturing a heat dissipation sheet is provided. A heat dissipation sheet, according to one embodiment of the present invention, is manufactured by comprising the steps of: (1) preparing a preliminary sheet comprising a matrix forming component, a crosslinking agent, and a heat dissipation filler; and (2) manufacturing a heat dissipation sheet by crosslinking the matrix forming component included in the preliminary sheet. According to this, the manufactured heat dissipation sheet can be provided with a high content of the heat dissipation filler, so that heat dissipation performance thereof is remarkably excellent. In addition, it is possible to minimize and prevent breakage, shrinkage, pore generation, thickness variation, etc. of the sheet caused by the material properties of the matrix forming component and the crosslinking of the matrix forming component to form a matrix despite being implemented to have excellent heat dissipation performance, and it is possible to have excellent flexibility. Furthermore, as the processability is improved through a cooling process or the like during the manufacture of the heat dissipation sheet, the heat dissipation sheet is very excellent in productivity and may be suitable for mass production.

No. of Pages : 27 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/06/2021
(21) Application No.202147029321 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ATMOSPHERIC WATER GENERATOR

(51) International classification	:G02B0006120000, H01B0007000000, F24F0013240000, F24F0011770000, H04W0024100000
(31) Priority Document No	:62/789603
(32) Priority Date	:08/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/IL2020/050031
Filing Date	:08/01/2020
(87) International Publication No	:WO 2020/144685
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)PERY, Moran
4)CHERNIN, Guy Evgeni
5)NECHEMIA, Chen

(57) Abstract :
The invention discloses an AWG having improvements designed to reduce noise, improve uniform airflow through the evaporator of the AWG and reduce energy consumption. In one embodiment the AWG includes an air inlet located in one of the sidewalls of the enclosure and a blower located in proximity to the air outlet at the bottom wall of the enclosure.

No. of Pages : 16 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :30/06/2021
(21) Application No.202147029458 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PACKET BASED LINK AGGREGATION ARCHITECTURES

(51) International classification	:H04W0084120000, H04W0076150000, H04L0001160000, H04W0040020000, H04L0012891000
(31) Priority Document No	:16/246410
(32) Priority Date	:11/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012599
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/146401
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
Methods, systems, and devices for wireless communication are described. Wireless devices may support parallel communications over multiple wireless links, which may benefit a wireless system in terms of throughput and latency (among other benefits). However, such systems may experience increased system complexity, which may in some cases mitigate some of the benefits provided by the parallel communication links. The described techniques provide for aggregation architectures that address various such complexities. For example, devices communicating in accordance with the described techniques may format data to be transmitted into a set of data units that are allocated to a communication link based on various factors described herein. Correspondingly, a device that receives the data packets may reorder the packets in accordance with the described techniques.

No. of Pages : 70 No. of Claims : 30

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029533 A
(19) INDIA
(22) Date of filing of Application :01/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : EXCESS AIR COEFFICIENT CONTROL METHOD AND DEVICE FOR CATALYTIC CONVERTER, VEHICLE, AND STORAGE MEDIUM

(51) International classification	:F02D0041140000, F02D0041000000, F02D0041020000, F01N0003080000, F01N0003200000
(31) Priority Document No	:201811626662.4
(32) Priority Date	:28/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/129117
Filing Date	:27/12/2019
(87) International Publication No	:WO 2020/135692
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)ZHANG, Peng
7)TSUNODA, Hiroshi
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9)SUN, Huidi
10)YANG, Xufei
11)WANG, Weiqiang
12)YANG, Wei

(57) Abstract :
An excess air coefficient control method for a gasoline engine catalytic converter, comprising: in an engine idle stage before the ignition of a catalytic converter and after the start of an engine, controlling an excess air coefficient to alternately switch between a first set value and a second set value until an excess air coefficient sensor achieves a closed loop; when the excess air coefficient is controlled at the first set value, making the air-fuel ratio greater than 14.7 so as to perform lean control; and when the excess air coefficient is controlled at the second set value, making the air-fuel ratio less than 14.7 so as to perform enrichment control. Said method is able to reduce the emission amounts of NMOG and NOX at low cost. Also disclosed are an excess air coefficient control device for a gasoline engine catalytic converter, a vehicle and a computer readable medium.

No. of Pages : 12 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029534 A
(19) INDIA
(22) Date of filing of Application :01/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : OBSTACLE AVOIDANCE METHOD AND SYSTEM DURING AUTOMATIC DRIVING OF VEHICLE, AND VEHICLE

(51) International classification	:G08G0001160000, G05D0001020000, G06K0009000000, G08G0001096700, B60W0030120000
(31) Priority Document No	:201811637024.2
(32) Priority Date	:29/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/129278
Filing Date	:27/12/2019
(87) International Publication No	:WO 2020/135738
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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7)LIU, Hongwei
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(57) Abstract :
Disclosed are an obstacle avoidance method and system during automatic driving of a vehicle, and the vehicle. The method comprises: providing a road environment model within a pre-set range near a vehicle (S1); if there are a plurality of obstacles in the current driving lane within the pre-set range, acquiring, according to the road environment model, the position and size of a first adjacent obstacle (A), the position and size of a second adjacent obstacle (B), the width of the current driving lane and the obstacle distance between the first adjacent obstacle (A) and the second adjacent obstacle (B) in a driving direction of the current driving lane, and acquiring the speed of the vehicle (S2); determining, according to the position and size of the first obstacle (A), the position and size of the second obstacle (B), the speed of the vehicle and the obstacle distance, whether the vehicle can bypass the first adjacent obstacle (A) and the second adjacent obstacle (B) in the current driving lane and pass (S3); and carrying out obstacle avoidance control on the vehicle (S4). Whether the vehicle can pass is determined according to the positions and sizes of the obstacles on the current driving road, and thus the vehicle is controlled.

No. of Pages : 21 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029560 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : FIRST NODE, SECOND NODE, THIRD NODE AND METHODS PERFORMED THEREBY FOR HANDLING ROAMING INFORMATION

(51) International classification	:H04W0076150000, G05D0001000000, H04L0012801000, H04W0004029000, H04N0021442000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/EP2018/083663
Filing Date	:05/12/2018
(87) International Publication No	:WO 2020/114592
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)SHUKLA, Rohit
4)SABHARWAL, Tushar
5)ERIKSSON, Hans
6)FIORESE, Virgilio

(57) Abstract :
A method, performed by a first node (111) is described, the method being for handling roaming information. The first node (111) operates in a first communications network (101). The first node (111) determines (202) a set of network resources predicted to be required by a group of subscribers (151) while roaming in a second communications network (102), The first node (111) then initiates (203) providing an indication of the determined set of resources to a second node (112) in the second communications network (102). The second node (112) receives (301) the indication and determines (302) whether or not an allocation of the set of resources meets a criterion. The second node (112) then initiates (303) performing an operation based on the determination. A third node (113) determines (401) data regarding a roaming behavior of the group of subscribers (151) and provides (402) information based on the determined data, to the first node (111).

No. of Pages : 46 No. of Claims : 34

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029577 A
(19) INDIA
(22) Date of filing of Application :01/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD OF PRODUCING FUNGAL MATS AND MATERIALS MADE THEREFROM

(51) International classification	:C12N0001140000, C12N0001200000, C12P0019020000, A61Q0019000000, D04H0003020000
(31) Priority Document No	:102018000010869
(32) Priority Date	:06/12/2018
(33) Name of priority country	:Italy
(86) International Application No	:PCT/IB2019/060466
Filing Date	:05/12/2019
(87) International Publication No	:WO 2020/115690
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)MONTALTI, Maurizio
3)BABBINI, Stefano

(57) Abstract :
The present invention relates to a method for obtaining a fungal mat comprising the steps of: a) inoculating and growing a filamentous fungal species onto a solid nutritive medium comprising a lignocellulosic material, thereby obtaining a solid nutritive medium colonized by said fungal species; b) mixing said colonized nutritive medium with water or with an aqueous solution and blending at high speed to obtain a homogeneous living fungal slurry; c) pouring the living fungal slurry into a flat container; d) incubating the living fungal slurry until a continuous fungal mat of the desired thickness and density is formed on the top surface of the living fungal slurry; e) harvesting the fungal mat thus obtained; and, optionally f) washing the harvested fungal mat.

No. of Pages : 19 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029578 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MOVABLE SHELF DEVICE

(51) International classification	:B65G0001040000, G01S0017931000, G05D0001020000, F25D0025040000, H01M0010655600
(31) Priority Document No	:2018-238437
(32) Priority Date	:20/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/047772
Filing Date	:06/12/2019
(87) International Publication No	:WO 2020/129691
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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6)KASAHARA Takahiro

(57) Abstract :
In this movable shelf device provided with a plurality of shelves that are movable relative to each other, the presence of an obstacle in an inter-shelf passage formed between a shelf and a shelf is always appropriately detected. Provided is a movable shelf device (10) comprising a first shelf and a second shelf that face each other in a first direction (M) along a horizontal surface, wherein the first shelf and the second shelf are provided so as to be capable of relative movement in the first direction (M), and the inter-shelf passage (E) is formed between the first shelf and the second shelf while the first shelf and the second shelf are spaced away from each other. In a state in which the inter-shelf passage (E) is formed, the movable shelf device (10) is provided with an obstacle sensor that detects an obstacle (B) present in the inter-shelf passage (E) and a distance sensor that detects an inter-shelf distance (D) which is the distance over which the first shelf and the second shelf face each other in the first direction (M) while the inter-shelf passage (E) is formed, the obstacle sensor and the distance sensor being configured by a single active sensor (5) that detects an object by transmitting light and receiving reflected light from the object, and the detection range (S) of the obstacle sensor is set to be dynamically variable in accordance with the inter-shelf distance (D).

No. of Pages : 21 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029595 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DISPLAY WITH SWITCHING CONFIGURABLE FOR POWER CONSUMPTION AND SPEED

(51) International classification	:G09G0003200000, G09G0003360000, G09G0005000000, G06F0001323400, G09G0003000000
(31) Priority Document No	:16/372865
(32) Priority Date	:02/04/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:16/372865
Filing Date	:02/04/2019
(87) International Publication No	:WO 2020/205004
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)CHOI, Sangmoo
2)KANG, Chang Ju

(57) Abstract :
A flat panel display that includes a switch bank to couple a signal from a driver integrated circuit to a column data line of a display panel is disclosed. The switch bank can be adjusted based on the frame rate of the display. When the frame rate is high, all sub-switches in the switch bank may be used to reduce an ON resistance of the switch bank. This high frame rate configuration may maintain or increase the speed at which pixels can be controlled but consumes more power. Accordingly, when the frame rate is low, a portion of the sub-switches in the switch bank are unused to reduce the power consumed. This low frame rate configuration may maintain or decrease the speed at which pixels of the display can be controlled but consumes less power.

No. of Pages : 14 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029649 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A HOLLOW FIBER MODULE

(51) International classification	:B01D0063020000, B01D0061000000, B01D0063040000, B01D0069080000, B01D0065020000
(31) Priority Document No	:PA 2018 70809
(32) Priority Date	:12/12/2018
(33) Name of priority country	:Denmark
(86) International Application No	:PCT/EP2019/084667
Filing Date	:11/12/2019
(87) International Publication No	:WO 2020/120583
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)ANDERSEN, Mads Friis
4)NGUYEN, Xuan Tung
5)ALVISSE, Simon
6)SUN, Guofei

(57) Abstract :
A hollow fiber module comprising a plurality of hollow fiber cartridges is disclosed. Each hollow fiber cartridge comprises a bundle of semi-permeable hollow fibers, said bundle being surrounded by a shell extending longitudinally along the length of the bundle and potted at both ends in a resin, thereby defining a lumen side volume for the treatment of a first solution and a shell side volume for the treatment of a second solution, said shell being provided with a port for receiving the second solution to be treated in the shell side volume and another port for discharging the treated second solution. The hollow fiber module comprises a first end cap comprising an inlet for the first solution and a distributer for distributing the first solution to a first end of each of the hollow fiber cartridges and a second end cap comprising a collector for collecting the treated first solution from the second end of each of the hollow fiber cartridges and an outlet for the treated first solution. The module also comprises a first connector comprising an inlet for the second solution and a distributer for distributing the second solution to a port of each of the hollow fiber cartridges and a second connector comprising a collector for collecting the treated second solution from the other port of each of the hollow fiber cartridges and an outlet for the treated second solution. The module meets the market need for a hollow fiber module having a large membrane area.

No. of Pages : 25 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029652 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : STEROID COMPOUND, AND USE THEREOF AND PREPARATION METHOD THEREFOR

(51) International classification	:A01K0063040000, A61P0025000000, A61K0009480000, A61K0031568000, A61P0035020000
(31) Priority Document No	:201910017373.2
(32) Priority Date	:08/01/2019
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2020/070755
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/143640
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)CHEN, Pei

(57) Abstract :
The present invention relates to a steroid compound, and a use thereof and a preparation method therefor. It is expected that such compound can effectively treat mental and neurological diseases, and has good active efficacy, pharmacokinetic (PK) performance, oral bioavailability, stability, safety, clearance rate, and/or metabolic performance and the like.

No. of Pages : 91 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021
(21) Application No.202147029654 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TM MODE FILTER AND MANUFACTURING METHOD THEREFOR

(51) International classification	:H01P0001207000, H01P0007100000, H01P0011000000, H01P0001200000, G01N0033680000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/CN2018/124755
Filing Date	:28/12/2018
(87) International Publication No	:WO 2020/133181
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
The present application provides a TM mode filter and a manufacturing method therefor. The TM mode filter comprises: a filter body comprising a filter cavity and a cover plate and having a hollow closed space; a medium located in the hollow closed space; and a transition layer used for connecting the medium and the filter body, with the coefficient of thermal expansion (CTE) of the transition layer being between the CTE of the filter body and the CTE of the medium. Due to the fact that in embodiments of the present application, the CTE of the transition layer is between the CTE of the filter body and the CTE of the medium, the embodiments of the present application can solve the problem of CTE mismatch, and realize good contact between the medium and the filter.

No. of Pages : 24 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021

(21) Application No.202147029697 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTIPLE SOURCE MEDIA MANAGEMENT

(51) International classification	:H04N0021472000, G06F0016440000, G06F0003048800, H04L0012713000, G11B0027340000
(31) Priority Document No	:16/247472
(32) Priority Date	:14/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012280
Filing Date	:04/01/2020
(87) International Publication No	:WO 2020/150015
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A computing device identifies a plurality of media applications configured to operate at the computing device. The computing device accesses metadata and playback information for each media application of the plurality of media applications. The computing device generates a unified graphical user interface for the plurality of media applications. The unified graphical user interface provides media information and control access for each corresponding media application.

No. of Pages : 21 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029698 A
(19) INDIA
(22) Date of filing of Application :01/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : LOOKUP TABLE OPTIMIZATION FOR PROGRAMMING LANGUAGES THAT TARGET SYNCHRONOUS DIGITAL CIRCUITS

(51) International classification	:G06F0008410000, G06F0030340000, H03K0019177280, H04N0001600000, G06F0016245300
(31) Priority Document No	:16/247250
(32) Priority Date	:14/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/069030
Filing Date	:31/12/2019
(87) International Publication No	:WO 2020/150000
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A programming language and a compiler are disclosed that optimize the use of look-up tables (LUTs) on a synchronous digital circuit (SDC) such as a field programmable gate array (FPGA) that has been programmed. LUTs are optimized by merging multiple computational operations into the same LUT. A compiler parses source code into an intermediate representation (IR). Each node of the IR that represents an operator (e.g. '&', '+') is mapped to a LUT that implements that operator. The compiler iteratively traverses the IR, merging adjacent LUTs into a LUT that performs both operations and performing input removal optimizations. Additional operators may be merged into a merged LUT until all the LUT's inputs are assigned. Pipeline stages are then generated based on merged LUTs, and an SDC is programmed based on the pipeline and the merged LUT.

No. of Pages : 23 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029700 A
(19) INDIA
(22) Date of filing of Application :01/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : WIRELESS COMMUNICATION SYSTEM

(51) International classification	:H04L0001180000, H04W0036020000, H04B0007022000, H04W0088020000, G01S0005000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/JP2019/008195
Filing Date	:01/03/2019
(87) International Publication No	:WO 2020/178918
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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4)FUKUI, Noriyuki

(57) Abstract :
This wireless communication system (1) comprises a mobile terminal (101), a plurality of lower-level base stations (401-403) that communicate with the mobile terminal (101), and an upper-level base station (404) that controls the plurality of lower-level base stations, a plurality of first data items duplicated by the upper-level base station (404) being transmitted to the plurality of lower-level base stations (401-403), and the plurality of lower-level base stations (401-403) each transmitting the first data to the mobile terminal, wherein the wireless communication system (1) is characterized in that the mobile terminal (101) comprises: a plurality of link control units that receive the first data from each of the plurality of lower-level base stations (401-403); and a data control unit that, when a first link control unit among the plurality of link control units has received the first data from a first lower-level base station among the plurality of lower-level base stations, transmits a retransmission request stop message for stopping a request for retransmission of the first data from a second lower-level base station, which is a lower-level base station other than the first lower-level base station, to a second link control unit that has not received the first data.

No. of Pages : 23 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021

(21) Application No.202147029742 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MONITORING OF GASES PRODUCED IN AN INSULATING-MEANS HOUSEHOLD

(51) International classification	:H01H0009000000, F02D0035020000, H01F0029040000, H01M0010440000, G05D0023190000
(31) Priority Document No	:10 2018 131 388.8
(32) Priority Date	:07/12/2018
(33) Name of priority country	:Germany
(86) International Application No	:PCT/EP2019/083870
Filing Date	:05/12/2019
(87) International Publication No	:WO 2020/115232
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)SACHSENHAUSER, Andreas

(57) Abstract :
The invention relates to a method for monitoring gases (GG, GG') produced in an insulating-means household (IM, IM'), wherein: the insulating-means household (IM, IM') is in contact with a transition resistor (W) of an on-load tap changer (S); the time curve of a resistor temperature of the transition resistor (W) during a loading time period is determined; at least one characteristic value for characterizing the gases (GG, GG') produced is determined from the time curve of the resistor temperature.

No. of Pages : 10 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029743 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : TOPICAL TREATMENT OF IMMUNE CHECKPOINT INHIBITOR INDUCED DIARRHOEA, COLITIS OR ENTEROCOLITIS USING ANTIBODIES AND FRAGMENTS THEREOF

(51) International classification	:C07K0016280000, A61K0039395000, C07K0016240000, A61K0039000000, A61K0008370000
(31) Priority Document No	:PCT/EP2018/084057
(32) Priority Date	:07/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/083992
Filing Date	:06/12/2019
(87) International Publication No	:WO 2020/115277
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)BRAVO, Roberto
4)SPLEISS, Johannes
5)NEDELJKOVIC PROTIC, Marijana
6)GERSTNER, Ortrud
7)BRUNO, Cristina

(57) Abstract :
The present invention relates to the therapeutic topical use of compositions containing antibody molecules or functional fragments or derivatives specific to tumour necrosis factor alpha (TNFa), for treating or preventing immune checkpoint (ICP) inhibitor-induced adverse events.

No. of Pages : 58 No. of Claims : 25

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029745 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PHARMACEUTICAL COMPOUNDS AND THEIR USE AS INHIBITORS OF UBIQUITIN SPECIFIC PROTEASE 19 (USP19)

(51) International classification	:A61K0031341000, A61K0039395000, A61K0031416000, A61K0031474500, C07D0309060000
(31) Priority Document No	:1819937.2
(32) Priority Date	:06/12/2018
(33) Name of priority country	:U.K.
(86) International Application No	:PCT/GB2019/053457
Filing Date	:06/12/2019
(87) International Publication No	:WO 2020/115501
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)TREDER, Adam Piotr
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7)COSTA, Joana Rita Castro
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9)HARRISON, Timothy
10)HELM, Matthew Duncan
11)ROZYKA, Ewelina
12)CRANSTON, Aaron
13)JACQ, Xavier

(57) Abstract :
Provided are USP19 inhibitors, methods of treating obesity, metabolic syndrome and/or diabetes using the USP19 inhibitor compounds, as well as those compounds for use in methods of treating obesity, metabolic syndrome and/or diabetes. Also provided are methods of treating muscular atrophy, for example cachexia or sarcopenia with USP19 inhibitor compounds, plus those compounds for use in methods of treating muscular atrophy.

No. of Pages : 334 No. of Claims : 47

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029747 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : DISTRIBUTED COOPERATIVE OPERATION OF WIRELESS CELLS BASED ON SPARSE CHANNEL REPRESENTATIONS

(51) International classification	:H04W0016280000, H04W0028160000, H04B0007040800, H04L0029080000, H04W0072080000
(31) Priority Document No	:62/787729
(32) Priority Date	:02/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/069115
Filing Date	:31/12/2019
(87) International Publication No	:WO 2020/142520
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)RAKIB, Shlomo Selim
3)HADANI, Ronny

(57) Abstract :
Methods, systems and devices for distributed cooperative operation of wireless cells based on sparse channel representations are described. One example method includes providing, using a server, seamless wireless connectivity in an area in which a plurality of network nodes are organized as clusters, where each network node is configured to provide wireless connectivity via N angular sectors covering a surrounding area, where N is an integer and wherein angular sectors of the plurality of network nodes collectively cover the area; controlling, by the server, network nodes in a cluster to collect channel condition information for the N angular sectors and communicate the channel condition information to the network-side server, and operating the server to use the channel condition information collected from the network nodes in the cluster to control communication for the network nodes in the cluster at a different time or a different frequency or a different spatial direction.

No. of Pages : 85 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029748 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COOKING DEVICE

(51) International classification	:F24C0015320000, H05B0006640000, B41J0002140000, F27B0005160000, A01M0001200000
(31) Priority Document No	:2019-002480
(32) Priority Date	:10/01/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/043526
Filing Date	:06/11/2019
(87) International Publication No	:WO 2020/144927
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)

(57) Abstract :
This cooking device comprises: a heating chamber that accommodates an object to be heated; a circulation fan that takes in air from the heating chamber and vents the air taken in to the heating chamber; a heating chamber internal channel forming unit that is disposed inside the heating chamber and that regulates the flow rate and the vent direction of the air vented into the heating chamber from the circulation fan; and an internal temperature detection sensor that is disposed in the air circulation channel formed inside the heating chamber by the heating chamber internal channel forming unit and that is provided within a designated area from the heating chamber internal channel forming unit.

No. of Pages : 31 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029749 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HYBRID SOLAR PANEL FOR PRODUCING ELECTRICAL ENERGY AND THERMAL ENERGY

(51) International classification	:H02S0040440000, H01L0031054000, H02J0003380000, H02S0030100000, H02S0010300000
(31) Priority Document No	:P201930007
(32) Priority Date	:04/01/2019
(33) Name of priority country	:Spain
(86) International Application No	:PCT/ES2019/070870
Filing Date	:20/12/2019
(87) International Publication No	:WO 2020/141241
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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2)CA'ADA GRACIA, Marta
3)Z • RATE • VILA, Vicente

(57) Abstract :
The present invention relates to a hybrid solar panel for producing electrical energy and thermal energy, which comprises a photovoltaic electrical generation system; a heat absorber into which the heat from the photovoltaic generation system is evacuated, increasing electrical efficiency; and an intermediate layer of material or gas, wherein the photovoltaic electrical generation system is joined to the heat absorber by means of two layers of material with a silicone base, the first layer comprising encapsulating silicone inside the photovoltaic generation system and the second layer comprising a thermal adhesion silicone.

No. of Pages : 9 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029750 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : ARTICLE TRANSPORT VEHICLE

(51) International classification	:B65G0047900000, G02B0026100000, B65G0001040000, B66F0009070000, B65G0013060000
(31) Priority Document No	:2018-240328
(32) Priority Date	:21/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/034149
Filing Date	:30/08/2019
(87) International Publication No	:WO 2020/129322
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
This article transport vehicle (V) is provided with a bogie main body (1) and a transfer device (3) which is mounted on the bogie main body (1) for transferring articles. The transfer device (3) comprises an article support unit (32), a linking support unit (31) which links the article support unit (32) and the bogie main body (1), and a drive unit (D). The linking support unit (31) has a first axial support unit (311) which is linked swingably about a first axis (A1) to the bogie main body (1). The article support unit (32) has a second axial support unit (321) which is linked swingably about a second axis (A2) to the linking support unit (31). The drive unit (D) comprises a first drive unit (33D) and a second drive unit (34D). The first drive unit (33D) causes the linking support unit (31) and the article support unit (32) linked to the linking support unit (31) to swing about the first axis (A1), and the second drive unit (34D) causes the article support unit (32) to swing about the second axis (A2).

No. of Pages : 25 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029751 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONJUGATES OF PATTERN RECOGNITION RECEPTOR AGONISTS

(51) International classification	:A61K0047600000, A61K0047640000, A61K0039000000, A61K0047500000, A61P0019080000
(31) Priority Document No	:19150384.6
(32) Priority Date	:04/01/2019
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2020/050093
Filing Date	:03/01/2020
(87) International Publication No	:WO 2020/141221
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)YANG-MALTEN, Yang
3)LESSMANN, Torben
4)BISEK, Nicola
5)WEISBROD, Samuel
6)STARK, Sebastian
7)VOIGT, Tobias

(57) Abstract :
The present invention relates to a conjugate or its pharmaceutically acceptable salt, wherein said conjugate is water-insoluble and comprises a carrier moiety Z to which one or more moieties -L2-L1-D are conjugated, wherein each -L2- is individually a chemical bond or a spacer moiety; each -L1- is individually a linker moiety to which -D is reversibly and covalently conjugated; and each -D is individually a pattern recognition receptor agonist. It further relates to pharmaceutical compositions comprising such conjugate and to their use in the treatment of cell-proliferation disorders; and to related aspects.

No. of Pages : 263 No. of Claims : 26

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029760 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHODS AND PHARMACEUTICAL COMPOSITIONS FOR ENHANCING CD8+ T CELL-DEPENDENT IMMUNE RESPONSES IN SUBJECTS SUFFERING FROM CANCER

(51) International classification :C07K0016280000, A61K0039000000, A61K0039395000, A61K0035170000, A61P0035000000
(31) Priority Document No :19305003.6
(32) Priority Date :03/01/2019
(33) Name of priority country :EPO
(86) International Application No :PCT/EP2020/050039
Filing Date :02/01/2020
(87) International Publication No :WO 2020/141199
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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7)RIGNAULT-BRICARD, Rachel
8)COMAN, Tereza
9)GUILLEM, Flavia
10)LEPELLETIER, Yves
11)RENAND, Amde
12)MILPIED, Pierre

(57) Abstract :
Targeting immune checkpoints, such as Programmed cell Death 1 (PD1), has improved survival in cancer patients by unleashing exhausted CD8+ T-cell thereby restoring anti-tumor immune responses. Most patients, however, relapse or are refractory to immune checkpoint blocking therapies. Here, the inventors show that NRP1 is recruited in the cytolytic synapse of PD1+CD8+ T-cells, interacts and enhances PD-1 activity. In mice, CD8+ T-cell specific deletion of Nrp1 improves spontaneous and anti PD1 antibody anti-tumor immune responses. Likewise, in human metastatic melanoma, the expression of NRP1 in tumor infiltrating CD8+ T-cells predicts poor outcome of patients treated with anti-PD1 (e.g. pembrolizumab). Finally, the combination of anti-NRPl and anti-PD1 antibodies is synergistic in human, specifically in CD8+ T-cells anti-tumor response. Thus the therapeutic inhibition of NRP1 alone or combined with an immune checkpoint inhibitor (e.g. anti-PD1 antibody) could efficiently repress tumor growth in human cancer. The present invention also relates to multispecific antibodies comprising at least one binding site that specifically binds to an immune checkpoint molecule (e.g. PD-1), and at least one binding site that specifically binds to NRP-1. The present invention also relates to a population of cells engineered to express a chimeric antigen receptor (CAR) and wherein the expression of NRP-1 in said cells is repressed.

No. of Pages : 71 No. of Claims : 36

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029795 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PARTICULATE CARBON MATERIALS AND METHOD FOR THE SEPARATION THEREOF

(51) International classification	:H01M0004136000, B01J0021180000, B01J0037020000, C04B0111280000, C08F0010020000
(31) Priority Document No	:10 2018 220 946.4
(32) Priority Date	:04/12/2018
(33) Name of priority country	:Germany
(86) International Application No	:PCT/EP2019/083695
Filing Date	:04/12/2019
(87) International Publication No	:WO 2020/115143
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)PODSCHUN, Jacob

(57) Abstract :
The invention relates to a method for separating particulate carbon materials and to the materials obtained therefrom and to the use thereof.

No. of Pages : 18 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021

(21) Application No.202147029806 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : LANGUAGE AND COMPILER THAT GENERATE SYNCHRONOUS DIGITAL CIRCUITS THAT MAINTAIN THREAD EXECUTION ORDER

(51) International classification	:G06F0008410000, G06F0030300000, G06F0011360000, G06F0008520000, G06F0009480000
(31) Priority Document No	:16/247269
(32) Priority Date	:14/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2020/012278
Filing Date	:04/01/2020
(87) International Publication No	:WO 2020/150013
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)CAULFIELD, Adrian Michael

(57) Abstract :
A multi-threaded programming language and compiler generates synchronous digital circuits that maintain thread execution order by generating pipelines with code paths that have the same number of stages. The compiler balances related code paths within a pipeline by adding additional stages to a code path that has fewer stages. Programming constructs that, by design, allow thread execution to be re-ordered, may be placed in a reorder block construct that releases threads in the order they entered the programming construct. First-in-first-out (FIFO) queues pass local variables between pipelines. Local variables are popped from FIFOs in the order they were pushed, preserving thread execution order across pipelines.

No. of Pages : 22 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021

(21) Application No.202147029818 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : EXPANDABLE, SHELF STABLE POLYMER BEAD

(51) International classification	:C08L0023060000, C08J0009140000, C08J0009120000, B32B0005280000, C08J0009000000
(31) Priority Document No	:18210363.0
(32) Priority Date	:05/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/081999
Filing Date	:20/11/2019
(87) International Publication No	:WO 2020/114784
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)AUGER, James, Arthur
3)ARAFATH, Abdul, Rahim, Ahamed
4)AL-KHORAYEF, Ali, Khalid

(57) Abstract :
The invention relates to an expandable bead comprising a) a polyolefin selected from polyethylene (PE), polypropylene (PP) and mixtures thereof and b) thermoplastic microspheres encapsulating a blowing agent.

No. of Pages : 32 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147029825 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : THREE-DIMENSIONAL RECONSTRUCTION DEVICE, THREE-DIMENSIONAL RECONSTRUCTION SYSTEM, THREE-DIMENSIONAL RECONSTRUCTION METHOD, AND THREE-DIMENSIONAL RECONSTRUCTION PROGRAM

(51) International classification	:G05D0001020000, A61B0005000000, G02B0023240000, A61B0034200000, G06T0007550000
(31) Priority Document No	:2019-004819
(32) Priority Date	:16/01/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/018759
Filing Date	:10/05/2019
(87) International Publication No	:WO 2020/148926
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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3)MINAGAWA Jun
4)MIZUNO Shinji
5)SAKATA Shintaro
6)SAKAKIBARA Takumi

(57) Abstract :
A three-dimensional reconstruction device (60) comprises: a three-dimensional information acquisition unit (63) that acquires first three-dimensional information (D10) from a first sensor (10) which detects a target object, and that acquires second three-dimensional information (D50) from a second sensor (50) which is provided so as to be capable of movement and detects an area of interest (A1); a sensor information acquisition unit (62) that acquires first sensor information (I10) and second sensor information (I50); a position and orientation information acquisition unit (61) that acquires first position and orientation information (E10) and that acquires second position and orientation information (E50); and a three-dimensional reconstruction unit (64) that uses the first sensor information, the second sensor information, the first position and orientation information, and the second position and orientation information to reconstruct three-dimensional information representing the area of interest from the first three-dimensional information and the second three-dimensional information.

No. of Pages : 19 No. of Claims : 17

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029845 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : TRANSMISSION/RECEPTION SEPARATION CIRCUIT, TRANSCEIVER, AND RADIO COMMUNICATION DEVICE

(51) International classification	:H03F0003240000, G06K0007100000, H03H0007460000, H04B0001525000, H04B0001480000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/CN2018/125100
Filing Date	:28/12/2018
(87) International Publication No	:WO 2020/133287
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)ZENG, Zhixiong

(57) Abstract :
A transmission/reception separation circuit, a transceiver, and a radio communication device. The transmission/reception separation circuit comprises: a transmission amplifying circuit, an impedance adjusting circuit, and a reception amplifying circuit. An input end of the transmission amplifying circuit is connected to a first end of the impedance adjusting circuit. A second end of the impedance adjusting circuit is connected to an input end of the reception amplifying circuit. The second end of the impedance adjusting circuit and the input end of the reception amplifying circuit also are used for connecting to an antenna. The transmission amplifying circuit is used for amplifying a first signal to be transmitted via the antenna. The reception amplifying circuit is used for amplifying a second signal received via the antenna. Moreover, when the antenna transmits the amplified first signal, a first impedance is in a high impedance state, the first impedance being the impedance viewing inwards from an input port of the reception amplifying circuit. The impedance adjusting circuit is used for adjusting a second impedance to a high impedance state when the antenna receives the second signal, the second impedance being the impedance viewing inwards from a second end of the impedance adjusting circuit.

No. of Pages : 21 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029846 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS OF CROSS-COMPONENT LINEAR MODELING FOR INTRA PREDICTION

(51) International classification	:H04N0019186000, H04N0019176000, H04N0019593000, H04N0019420000, H04N0019590000
(31) Priority Document No	:62/786563
(32) Priority Date	:31/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/RU2019/050261
Filing Date	:30/12/2019
(87) International Publication No	:WO 2020/141985
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)FILIPPOV, Alexey Konstantinovich
2)FILIPPOV, Alexey Konstantinovich
3)CHEN, Jianle
4)MA, Xiang

(57) Abstract :
Apparatuses and methods for encoding and decoding are provided. The method for intra predicting a chroma sample of a block by applying cross-component linear model includes: obtaining reconstructed luma samples; determining maximum and minimum luma sample values based on the reconstructed luma samples; obtaining a difference of the maximum and minimum luma sample values. The method also includes: fetching a value out of a lookup table (LUT) by using a set of bits as an index, the set of bits following a position of the most- significant bit; obtaining linear model parameters based on the fetched value; and calculating a predicted chroma sample value by using the obtained linear model parameters. The efficiency to fetch the value out of the LUT is increased.

No. of Pages : 45 No. of Claims : 23

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029853 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION METHOD AND COMMUNICATION APPARATUS

(51) International classification	:H04W0036000000, H04W0036300000, H04W0036180000, H04L0005000000, H04B0007000000
(31) Priority Document No	:201811603870.2
(32) Priority Date	:26/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/127836
Filing Date	:24/12/2019
(87) International Publication No	:WO 2020/135400
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)YAN, Le
2)ZHANG, Hongping
3)ZENG, Qinghai
4)GENG, Tingting
5)YUAN, Shitong

(57) Abstract :
Provided are a communication method and a communication apparatus. The method comprises: a terminal device receiving, from a first network device, configuration information of conditional switching, wherein the first network device is a network device to which a serving cell currently accessed by the terminal belongs; and the terminal device determining a first target cell according to the configuration information of conditional switching, and after the first target cell satisfying a trigger condition is determined, the terminal device being able to perform switching, that is, the terminal device switching from the serving cell to the first target cell. In the embodiments of the present application, the first network device sends configuration information to the terminal device, for example, the first network device sends the configuration information to the terminal device in the case where the link communication quality is better, which can ensure the success rate of the configuration information, and thus, the terminal device can seek a target cell on its own according to the configuration information and perform switching, and the success rate of switching can be improved.

No. of Pages : 107 No. of Claims : 29

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029854 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION METHOD AND COMMUNICATION APPARATUS

(51) International classification	:H04W0036000000, H04W0036080000, H04W0036300000, H04W0036180000, H04W0036260000
(31) Priority Document No	:201811602445.1
(32) Priority Date	:26/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/127727
Filing Date	:24/12/2019
(87) International Publication No	:WO 2020/135383
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)YAN, Le
2)ZHANG, Hongping
3)GENG, Tingting
4)ZENG, Qinghai

(57) Abstract :
The present application provides a switching method and a communication apparatus. The method comprises: a terminal device receives from a first network device configuration information about condition switching, the configuration information being used for configuring a trigger condition about condition switching, and the first network device being a network device to which a serving cell currently accessed by the terminal device belongs; the terminal device determines a first target cell according to the configuration information about condition switching, the first target cell being a cell in at least one candidate target cell satisfying the trigger condition. According to embodiments of the present application, configuration information is sent to the terminal device by means of the first network device. For example, the first network device sends the configuration information to the terminal device in the case of better link communication quality, to ensure the success rate of the configuration information, so that the terminal device finds the target cell according to the configuration information, and carries out switching, thereby improving the switching success rate.

No. of Pages : 120 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021

(21) Application No.202147029880 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A NOISE MASKING DEVICE AND A METHOD FOR MASKING NOISE

(51) International classification	:G10K0011175000, H04K0003000000, G10K0011178000, G01T0007000000, H04B0007080000
(31) Priority Document No	:18212981.7
(32) Priority Date	:17/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/084782
Filing Date	:12/12/2019
(87) International Publication No	:WO 2020/126777
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)VAN DEN ENDE, Daan, Anton
2)PASTOOR, Sander, Theodoor

(57) Abstract :
The invention provides a device (and method) for masking noise in which a calibration is carried out to determine the sensitivity of a user to a calibration sound. During use of the device, the signal characteristics of the masking sound are adjusted based on the detected noise, the response of the user to the detected noise and also the response of the user to the calibration sound. As a result, a masking sound is generated that is optimally adapted to mask unwanted noise, in particular in a way which avoids the masking noise itself becoming a disturbance to the particular user.

No. of Pages : 16 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029881 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR DELIVERING AN AUDIO OUTPUT

(51) International classification	:A61B0005000000, G06F0003160000, H04R0003040000, G10H0001460000, G16H0010200000
(31) Priority Document No	:18213011.2
(32) Priority Date	:17/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/084612
Filing Date	:11/12/2019
(87) International Publication No	:WO 2020/126736
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)VAN DEN ENDE, Daan, Anton
2)PASTOOR, Sander, Theodoor

(57) Abstract :
A system and method that adapts how an audio output is generated based on a response of a subject's sleep parameters to the audio output. In particular, one or more rules used to generate the audio output are modified in response to how values of sleep parameters (i.e. parameters responsive to a sleep state of the subject) change in response to the audio output. The audio output can be iteratively modified to assess the impact of different audio outputs.

No. of Pages : 23 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021

(21) Application No.202147029882 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A SYSTEM AND METHOD FOR DELIVERING AUDITORY SLEEP STIMULATION

(51) International classification	:G10K0011175000, A61B0005000000, H04K0003000000, A61B0005120000, A61M0021000000
(31) Priority Document No	:18212883.5
(32) Priority Date	:17/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/084865
Filing Date	:12/12/2019
(87) International Publication No	:WO 2020/126814
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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2)PASTOOR, Sander ,Theodoor

(57) Abstract :
A system delivers auditory sleep stimulation. It is able to generate masking sounds for masking external noise as well as sleep stimulation tones for promoting deep sleep. Noise masking sounds are provided in a frequency range including first and second frequency bands, before the onset of sleep. In response to the detection of particular sleep characteristics (such as a particular sleep stage), the noise masking sounds in the second frequency band are stopped. Instead, sleep stimulation tones are provided in the second frequency band. Thus, noise masking continues but the sleep stimulation tones are not masked.

No. of Pages : 14 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029883 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEMS AND METHODS FOR FRAME INDEXING AND IMAGE REVIEW

(51) International classification	:A61B0008000000, A61B0034000000, A61N0001372000, G11B0027100000, A61B0008080000
(31) Priority Document No	:62/780354
(32) Priority Date	:17/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/EP2019/084534
Filing Date	:11/12/2019
(87) International Publication No	:WO 2020/126712
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)CANFIELD, Earl M.
2)LOUPAS, Thanasis
3)TRAHMS, Robert Gustav
4)HOPE SIMPSON, David

(57) Abstract :
The present disclosure describes imaging systems configured to generate index information to indicate which image frames in a plurality of image frames include one or more target anatomical features, such as a head or femur of a fetus. The confidence levels of the presence of the target anatomical features are also determined. The system may be configured to determine if the target anatomical feature is present in an image frame by implementing at least one neural network. Merit levels based on the quality of the image frames may also be determined. Measurements of the one or more items of interest may be acquired. Visual representations (500) of the index information (502), confidence levels, merit levels, and/or measurements may be provided via a user interface. A user interface may receive user inputs based on the visual representations to navigate to specific image frames (508) of the plurality of image frames.

No. of Pages : 28 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029889 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : GENERATING SYNCHRONOUS DIGITAL CIRCUITS FROM SOURCE CODE CONSTRUCTS THAT MAP TO CIRCUIT IMPLEMENTATIONS

(51) International classification	:G06F0030330000, G06F0030340000, G06F0030327000, G06F0008300000, G06F0030300000
(31) Priority Document No	:16/247226
(32) Priority Date	:14/01/2019
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/069034
Filing Date	:31/12/2019
(87) International Publication No	:WO 2020/150004
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)PELTON, Blake D.
2)CAULFIELD, Adrian Michael

(57) Abstract :
A multi-threaded imperative programming language includes language constructs that map to circuit implementations. The constructs can include a condition statement that enables a thread in a hardware pipeline to wait for a specified condition to occur, identify the start and end of a portion of source code instructions that are to be executed atomically, or indicate that a read-modify -write memory operation is to be performed atomically. Source code that includes one or more constructs mapping to a circuit implementation can be compiled to generate a circuit description. The circuit description can be expressed using hardware description language (HDL), for instance. The circuit description can, in turn, be used to generate a synchronous digital circuit that includes the circuit implementation. For example, HDL might be utilized to generate aa FPGA image or bitstream that can be utilized to program an FPGA that includes the circuit implementation associate with the language construct.

No. of Pages : 20 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029928 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POLYPEPTIDES HAVING XYLANASE ACTIVITY AND POLYNUCLEOTIDES ENCODING SAME

(51) International classification	:C12N0009240000, C12P0019140000, C12P0019020000, C12P0019120000, C11D0003386000
(31) Priority Document No	:62/778615
(32) Priority Date	:12/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/065401
Filing Date	:10/12/2019
(87) International Publication No	:WO 2020/123463
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)OSBORN, David
2)OSBORN, David

(57) Abstract :
The present invention relates to isolated polypeptides having xylanase activity, catalytic domains, carbohydrate binding modules and polynucleotides encoding the polypeptides, catalytic domains or carbohydrate binding modules. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the polynucleotides as well as methods of producing and using the polypeptides, catalytic domains or carbohydrate binding modules.

No. of Pages : 79 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :02/07/2021
(21) Application No.202147029929 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POWDER DETERGENT COMPOSITIONS

(51) International classification	:C11D0003386000, A61K0045060000, C22C0038040000, D06F0039020000, C07K0016280000
(31) Priority Document No	:18209835.0
(32) Priority Date	:03/12/2018
(33) Name of priority country	:EPO
(86) International Application No	:PCT/EP2019/083312
Filing Date	:02/12/2019
(87) International Publication No	:WO 2020/114968
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)BENIE, Astrid
2)BAUER, Carl, Mikael

(57) Abstract :
The invention relates to moderate pH and optionally low conductivity powder detergent compositions comprising a protease.

No. of Pages : 47 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030028 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ADAPTER FOR MOTOR VEHICLE WINDSCREEN WIPER BLADE

(51) International classification	:B60S0001400000, B60S0001380000, B60S0001520000, B60G0015060000, F16D0003840000
(31) Priority Document No	:FR1874334
(32) Priority Date	:28/12/2018
(33) Name of priority country	:France
(86) International Application No	:PCT/EP2019/082499
Filing Date	:26/11/2019
(87) International Publication No	:WO 2020/135959
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)JARASSON, Jean-Michel
2)CAILLOT, Grald
3)IZABEL, Vincent

(57) Abstract :
The invention concerns an adapter (300) for fastening a windscreen wiper blade (500) on an arm 600) of a wiping system (700), the adapter (300) comprising two side walls (320, 330) connected together by an upper wall (340). At a distal end of the side walls (320, 330) with respect to the upper wall (340), the adapter comprises a lower bearing face (323, 333) intended to interact with a folded edge (655) of the yoke (650). According to the invention, at each side wall (320, 330), the lower bearing face (323, 333) of the adapter (300) extends at least partially in a zone situated vertically in line with an axis of rotation (310) of the adapter (300) relative to the connector (200). Said invention applies to motor vehicles.

No. of Pages : 28 No. of Claims : 11

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030037 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ADAPTER FOR MOTOR VEHICLE WIPER BLADE

(51) International classification	:B60S0001400000, B60S0001380000, B60S0001520000, G02B0006380000, E04G0005040000
(31) Priority Document No	:1874355
(32) Priority Date	:28/12/2018
(33) Name of priority country	:France
(86) International Application No	:PCT/EP2019/082507
Filing Date	:26/11/2019
(87) International Publication No	:WO 2020/135960
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)IZABEL, Vincent
2)JARASSON, Jean-Michel
3)CAILLOT, Grald

(57) Abstract :
The invention relates to an adapter (300) for attaching a wiper blade (500) to an articulated arm (600) of a wiping system (700), the adapter (300) being pivotally mounted on a connector (200) of the wiper blade (500). The adapter (300) comprises two lateral walls (320, 330) joined together by an upper wall (340) and forming a recess (350) for the connector (200). At one distal end of the lateral walls (320, 330) relative to the upper wall (340), the connector comprises a lower bearing surface (323, 333) designed to cooperate with a folded edge (655) of the cover (650). According to the invention, the recess (650) opens lengthwise at the two longitudinal ends of the adapter (300). The invention also relates to a wiper blade comprising such an adapter (300) mounted on a structure (400), and to a wiping system (700) comprising such a wiper blade (500). The invention is applicable to motor vehicles.

No. of Pages : 27 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030044 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PLANAR VIBRATORY DENSITOMETER, DENSITOMETER MEMBER, AND RELATED METHOD

(51) International classification	:G01N0009000000, G01C0019571900, B07B0001460000, G01F0001840000, C04B0035660000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/US2018/065242
Filing Date	:12/12/2018
(87) International Publication No	:WO 2020/122899
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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1)MACDONALD, George Alexander
2)GOFF, Jonathan James

(57) Abstract :
A planar vibratory member (300, 400) is provided, being operable for use in a vibrating densitometer (500). The planar vibratory member (300, 400) comprises a body (302) and a vibratable portion (304) emanating from the body (302), wherein the vibratable portion (304) comprises a plurality of vibratable projections, and wherein the plurality of vibratable projections are cantilevered. The vibratable portion is operable to be vibrated by a driver (504).

No. of Pages : 14 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030045 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEM AND METHOD FOR DETECTING AUDITORY BIOMARKERS

(51) International classification	:H04R0025000000, A61B0005120000, A63B0022020000, H04M0001725000, A63B0022000000
(31) Priority Document No	:62/778623
(32) Priority Date	:12/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/066071
Filing Date	:12/12/2019
(87) International Publication No	:WO 2020/123866
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)CABRERA, Takeichi, Kanzaki
2)DONOGHUE, Stephen
3)MIAN, Alec

(57) Abstract :
The disclosed systems and methods include providing a plurality of sounds at varying intensity levels, and receiving an input indicative of a perceived volume level of the plurality of sounds as perceived by a user. The disclosed systems and methods include determining, based on the received input, a plurality of user volume levels that indicate a hearing sensitivity of the user. The disclosed systems and methods include providing a background sound, and concurrently while providing the background sound, providing a stimulus sound. The disclosed systems and methods include receiving an indication that the user perceived the stimulus sound. The disclosed systems and methods include determining a change in the hearing sensitivity of the user based on receiving the indication that the user perceived the stimulus sound, and predicting an onset of a migraine attack of the user based on determining the change in the hearing sensitivity of the user.

No. of Pages : 25 No. of Claims : 20

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030046 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : RECTANGULAR SECONDARY BATTERY

(51) International classification	:H01M0010058700, H01M0010040000, H01M0002020000, H01M0010052500, H01M0002260000
(31) Priority Document No	:2018-236848
(32) Priority Date	:19/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/049117
Filing Date	:16/12/2019
(87) International Publication No	:WO 2020/129881
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)

(57) Abstract :
Provided is a highly-reliable rectangular secondary battery. This rectangular secondary battery is provided with: a rectangular exterior body having an opening, a bottom part, a first lateral wall, a second lateral wall, a third lateral wall, and a fourth lateral wall; a sealing plate for sealing the opening; and a flat wound electrode body obtained by winding a positive electrode plate and a negative electrode plate with a separator therebetween, wherein a plurality of the flat wound electrode bodies are arranged in the rectangular exterior body. The flat wound electrode bodies each have: a flat region formed at the center; a first bent region having a bent outer surface and being formed on one end side of the flat region; and a second bent region having a bent outer surface and being formed on the other end side of the flat region. A tape is attached to the outer surface of the first bent region. The plurality of flat wound electrode bodies are arranged such that each of the first bent regions is located on the first lateral wall side in an orientation in which the corresponding winding axis is perpendicular to the bottom part.

No. of Pages : 22 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030047 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : AQUEOUS BASED PHARMACEUTICAL FORMULATIONS OF 1,2-DIHYDROPYRIDINE COMPOUNDS

(51) International classification	:A61K0009000000, A61K0047100000, A61K0009080000, A61K0047180000, A61K0031443900
(31) Priority Document No	:62/779620
(32) Priority Date	:14/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/066622
Filing Date	:16/12/2019
(87) International Publication No	:WO 2020/124090
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)HIRD, Geoffrey S.
2)BOMMAREDDY, Ganesh S.P.
3)JOSHI, Anjali
4)MCSHANE, James

(57) Abstract :
An aqueous pharmaceutical formulation of a solubilizing agent with a pyridone compound that is useful as an inhibitor to non-NMDA receptors, particularly to the AMPA receptor is disclosed herein. In some embodiments the pyridone compound is supersaturated in aqueous solution at pH between 6 and 8. The formulations are particularly useful as intravenous injections.

No. of Pages : 54 No. of Claims : 36

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030048 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD OF CHANGING MELT RHEOLOGY PROPERTY OF BIMODAL POLYETHYLENE POLYMER

(51) International classification	:C08F0210160000, C08F0010000000, C08F0004659200, C08F0010020000, C08F0110020000
(31) Priority Document No	:62/724219
(32) Priority Date	:29/08/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/047433
Filing Date	:21/08/2019
(87) International Publication No	:WO 2020/046664
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)HE, Chuan
2)LYNN, Timothy R.
3)REIB, Robert N.
4)LIU, Bo

(57) Abstract :
A method of independently changing a melt rheology property value of a bimodal polyethylene polymer being made using a bimodal catalyst system in a single gas phase polymerization reactor. The method comprises process conditions comprising alkane(s) in the reactor. The method comprises a bimodal catalyst system that is characterized by an inverse response to alkane(s) concentration. The method comprises changing concentration of the alkane(s) in the reactor by an amount sufficient to effect a measurable change in the melt rheology property value; wherein the bimodal catalyst system is characterized by an inverse response to alkane(s) concentration such that when the alkane(s) concentration is increased, the melt rheology property value of the resulting bimodal polyethylene polymer is decreased, and when the alkane(s) concentration is decreased, the melt rheology property value of the resulting bimodal polyethylene polymer is increased.

No. of Pages : 28 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030049 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : PLANAR VIBRATORY VISCOMETER, VISCOMETER MEMBER, AND RELATED METHOD

(51) International classification	:G01F0001840000, G01N0009000000, G01N0011160000, G01C0019571900, G01N0011000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/US2018/065248
Filing Date	:12/12/2018
(87) International Publication No	:WO 2020/122901
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)MICRO MOTION, INC.
Address of Applicant :7070 Winchester Circle Boulder, Colorado 80301 U.S.A.
(72)**Name of Inventor :**
1)MACDONALD, George Alexander

(57) Abstract :
A viscometer (700) is provided, for determining a viscosity of a gas therein. The viscometer (700) comprises a driver (704) and a planar vibratory member (500, 600) vibratable by the driver (704), that comprises a body (502) and a vibratable portion (504) emanating from the body (502), wherein the vibratable portion (504) comprises a plurality of vibratable cantilevered projections. At least one pickoff sensor (706) is configured to detect vibrations of the vibratory member (500, 600). Meter electronics (900) comprise an interface (901) configured to send an excitation signal to the driver (704) and to receive a vibrational response from the at least one pickoff sensor (706), measure a Q and resonant frequency of the planar vibratory member (500, 600), and to determine a viscosity (923) of the gas therein using the measured Q and the measured resonant frequency.

No. of Pages : 17 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030056 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONSTRUCTION MACHINERY MANAGEMENT SYSTEM, CONSTRUCTION MACHINERY MANAGEMENT PROGRAM, CONSTRUCTION MACHINERY MANAGEMENT METHOD, CONSTRUCTION MACHINERY, AND EXTERNAL MANAGEMENT DEVICE FOR CONSTRUCTION MACHINERY

(51) International classification	:E02F0009260000, G01S0005000000, G05D0001020000, G01C0021200000, G01C0015000000
(31) Priority Document No	:2018-232862
(32) Priority Date	:12/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/047573
Filing Date	:05/12/2019
(87) International Publication No	:WO 2020/121933
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)TAMASATO Yoshinao

(57) Abstract :
The construction machinery management system is configured by comprising: a detection sensor 11 that is mounted to construction machinery 2 capable of moving within a construction site area 1; and a location recognition unit 13a that recognizes location information for the mobile work tool 3 construction position in the construction site area 1 on the basis of the detection results from the detection sensor 11 for an external indicator 1a installed in the construction site area 1 and the detection results from the detection sensor 11 for a mobile indicator 3a attached to a mobile work tool 3 constituting the construction machinery 2.

No. of Pages : 52 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030057 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : HERBOXIDIENE ANTIBODY-DRUG CONJUGATES AND METHODS OF USE

(51) International classification	:A61K0047680000, A61K0039000000, C07K0016280000, A61P0035000000, A61K0045060000
(31) Priority Document No	:62/779400
(32) Priority Date	:13/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/066029
Filing Date	:12/12/2019
(87) International Publication No	:WO 2020/123836
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)EISAI R&D MANAGEMENT CO., LTD.
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1)FISHKIN, Nathan
2)SAMARAKOON, Thiwanka
3)PALACINO, James
4)ARAI, Kenzo
5)KOTAKE, Yoshihiko
6)OKUBO, Shinya
7)MURAI, Norio
8)MIYANO, Masayuki

(57) Abstract :
Linker-drug compounds and antibody-drug conjugates that bind to human oncology targets are disclosed. The linker-drug compounds and antibody-drug conjugates comprise a herboxidiene splicing modulator drug moiety. The disclosure further relates to methods and compositions for use in the treatment of neoplastic disorders by administering the antibody-drug conjugates provided herein. The herboxidiene itself is also claimed. Further claims are directed to its use, and to the use of a neoantigen, generated by the herboxidiene or its ADC, or a vaccine against this neoantigen.

No. of Pages : 246 No. of Claims : 159

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030058 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AMINO ACID HAVING FUNCTIONAL GROUP CAPABLE OF INTERMOLECULAR HYDROGEN BONDING, PEPTIDE COMPOUND CONTAINING SAME AND METHOD FOR PRODUCTION THEREOF

(51) International classification	:A61K0038000000, C07K0007060000, A23L0033180000, C07K0005110000, C07K0005113000
(31) Priority Document No	:2018-232144
(32) Priority Date	:12/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/048720
Filing Date	:12/12/2019
(87) International Publication No	:WO 2020/122182
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)MURAOKA, Terushige
2)TANAKA, Shota

(57) Abstract :
The present inventor found that the membrane permeability of a peptide compound can be improved by employing at least one amino acid which has a side chain capable of forming an intermolecular hydrogen bond, as one of the amino acids constituting the peptide compound.

No. of Pages : 417 No. of Claims : 16

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030060 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : IMAGE ENCODING DEVICE, IMAGE DECODING DEVICE, AND METHOD AND PROGRAM FOR CONTROLLING SAME

(51) International classification	:H04N0019124000, H04N0019126000, H04N0019176000, H04N0019463000, H04N0019180000
(31) Priority Document No	:2018-235910
(32) Priority Date	:17/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/044754
Filing Date	:14/11/2019
(87) International Publication No	:WO 2020/129489
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)SHIMA, Masato

(57) Abstract :
The present invention performs image encoding while suppressing a code amount of a quantization matrix to be used in encoding. To this end, an image encoding device, which encodes image data, according to the present invention includes: a first encoding unit which divides image data to be encoded into basic blocks of a preset size, further divides each of the basic blocks into one or more sub-blocks by using any one among a plurality of preset sub-block division patterns, and performs frequency conversion, quantization, and entropy coding for each sub-block unit; a maintaining unit which maintains a plurality of quantization matrices corresponding to the size of the sub-blocks included in the sub-block division patterns used in the first image encoding unit; a second encoding unit which encodes the plurality of quantization matrices maintained in the maintaining unit; and an integration unit which integrates the encoded data generated in the second encoding unit and the encoded data obtained in the first encoding unit. Here, with respect to a quantization matrix having the same size as any one size in horizontal and vertical directions of the basic block, the maintaining unit maintains, as an independent value, an element at a position in a preset prescribed range from a storage position of a DC component element and maintains the same element in a preset number of units at a position exceeding the prescribed range.

No. of Pages : 38 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030071 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : MEMORY EFFICIENT SOFTWARE PATCHING FOR UPDATING APPLICATIONS ON COMPUTING DEVICES

(51) International classification	:H04L0029060000, G06F0021620000, G06F0008658000, G06F0009480000, G10L0019008000	(71)**Name of Applicant :** **1)GOOGLE LLC** Address of Applicant :1600 Amphitheatre Parkway Mountain View, California 94043 U.S.A.
(31) Priority Document No	:62/928748	(72)**Name of Inventor :** **1)SCHNEIDER, Jakob**
(32) Priority Date	:31/10/2019	**2)CHURCHILL, Martin David**
(33) Name of priority country	:U.S.A.	**3)DOVIS, Alessandro**
(86) International Application No	:PCT/US2019/068973	
Filing Date	:30/12/2019	
(87) International Publication No	:WO 2021/086423	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
In general, techniques are described by which to perform memory efficient patching for computing devices. A server computing device comprising a memory and a processor may be configured to perform the techniques. The memory may store first assets that form an unpatched application and second assets that form a patched application. The processor may virtualize the first assets to obtain a single first virtual asset and obtain a single second virtual asset that represents the second assets. The processor may obtain, based on differences between the single first virtual asset and the single second virtual asset, a patch identifying how to update the single first virtual asset to obtain the single second virtual asset. The processor may next segment the patch into a plurality of segments and output to a user computing device a single segment from the plurality of segments for individual application by the user computing device.

No. of Pages : 47 No. of Claims : 14

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030097 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : AIRBAG FABRIC AND METHOD FOR MANUFACTURING AIRBAG FABRIC

(51) International classification	:B60R0021235000, D03D0001020000, D02G0003440000, D03D0015120000, D06N0003000000
(31) Priority Document No	:2018-234321
(32) Priority Date	:14/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/042427
Filing Date	:29/10/2019
(87) International Publication No	:WO 2020/121670
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)YAMADA, Riku
2)KAWASAKI, Naoki
3)TANAKA, Nobuaki

(57) Abstract :
The present invention provides an airbag fabric comprising synthetic fibers, wherein at least one ear section of the fabric has a weaving yarn YA and a weaving yarn YB arranged in warp directions having respectively different crimp ratios, the weaving yarn YA and the weaving yarn YB are repeatedly arrayed, the crimp ratio CA of the weaving yarn YA and the crimp ratio CB of the weaving yarn YB satisfies the relationship CA = CB — 1.2, and the crimp ratio CB is less than the crimp ratio CA.

No. of Pages : 42 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030109 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR PRODUCING CELLULOSE BEADS

(51) International classification	:C08J0003160000, H01S0005100000, B01J0002060000, D01D0001020000, G11B0007006500
(31) Priority Document No	:2018-232337
(32) Priority Date	:12/12/2018
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2019/046243
Filing Date	:26/11/2019
(87) International Publication No	:WO 2020/121805
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)SHIBATA, Toru
2)OKURA, Hiromichi

(57) Abstract :
A novel method for producing cellulose beads is provided by which spherical cellulose beads can be advantageously produced. The method for producing cellulose beads comprises step 1, in which a coagulating bath comprising a first liquid medium phase and a second liquid medium phase is prepared, step 2, in which a cellulose solution is supplied to the first liquid medium phase of the coagulating bath to form particles of the cellulose solution within the first liquid medium phase, and step 3, in which the particles of the cellulose solution within the first liquid medium phase are supplied to the second liquid medium phase to coagulate the particles of the cellulose solution.

No. of Pages : 18 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030112 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CONOTOXIN PEPTIDE ANALOGS AND USES FOR THE TREATMENT OF PAIN AND INFLAMMATORY CONDITIONS

(51) International classification	:C07K0014435000, A61K0038000000, C07D0401120000, C07D0417120000, A61K0047600000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/US2019/012307
Filing Date	:04/01/2019
(87) International Publication No	:WO 2020/142102
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)MERCADO, Jose
2)TARCHA, Eric, J.
3)POSAKONY, Jeffrey, J.
4)IADONATO, Shawn

(57) Abstract :
Provided herein are alpha-conotoxin peptide analogs, including alpha-conotoxin peptide analogs that are covalently attached to polyethylene glycol (PEG), and pharmaceutical compositions of such alpha-conotoxin peptide analogs. Also provided herein are methods of treating or preventing a condition conducive to treatment or prevention by inhibition of an a9- containing nicotinic acetylcholine receptor (nAChR) (e.g., the a9a10 subtype of the nAChR) in a subject.

No. of Pages : 137 No. of Claims : 164

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030114 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : LAMINATED FILM

(51) International classification	:B32B0027360000, B32B0027080000, C08J0005180000, B32B0027320000, B65D0065400000
(31) Priority Document No	:2019-002744
(32) Priority Date	:10/01/2019
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2020/000131
Filing Date	:07/01/2020
(87) International Publication No	:WO 2020/145254
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)YAMAZAKI, Atsushi
2)GOTO, Takamichi
3)NUMATA, Yukihiro

(57) Abstract :
The laminated film according to the present invention has laminated therein at least a base material layer, a covering layer, and an inorganic thin-film layer in this order, and satisfies requirements (a)-(d): (a) the base material layer comprises a resin composition that contains at least 70 mass% of polybutylene terephthalate resin; (b) the laminated film has a piercing strength of at least 0.6 N/μm as measured in accordance with JIS Z 1707 after having undergone a 95°C-boiling treatment for 30 minutes; (c) the base material layer has a surface orientation degree of 0.144-0.160; and (d) when the value of oxygen transmission rate obtained by measuring the laminated film under a 23°C—65%RH condition is defined as (A) and the value of oxygen transmission rate obtained by measuring same under a 40°C—90%RH condition is defined as (B), the barrier value deterioration rate, determined by the following formula, of the laminated film is at most 300% under high-temperature and high-humidity condition. Barrier value deterioration rate (%) under high-temperature and high-humidity condition = (B/A) —100

No. of Pages : 60 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202147030142 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SEALED ELECTRIC PLUG

(51) International classification	:A61B0018140000, H01R0103000000, H01R0024640000, H01R0024300000, H01R0013502000
(31) Priority Document No	:201811571707.2
(32) Priority Date	:21/12/2018
(33) Name of priority country	:China
(86) International Application No	:PCT/CN2019/074382
Filing Date	:01/02/2019
(87) International Publication No	:WO 2020/124755
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)ZHAO, ChangChun
2)TOH, Mui Lian Jessica
3)MO, Yuanwen

(57) Abstract :
A sealed electric plug (100) comprises: one or more temperature sensors (120a, 120b) used to monitor a temperature inside the electric plug (100); a data cable (166) housed within a blocking enclosure (162) used to block electric noise so as to precisely acquire and transmit temperature data; and a housing or a supporting member (130) used to receive the one or more temperature sensors (120a, 120b) and capable of being inserted into an internal casing (170) of the electric plug (100) and positioned near one or more pins (102, 104, 106). One or more sealing members (910) can be placed at the one or more pins (102, 104, 106), the internal casing (170), and regions at connections between wires of the data cable (166), thereby insulating the internal casing (170) from air, moisture and particles.

No. of Pages : 20 No. of Claims : 28

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021

(21) Application No.202147030167 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ADAPTER FOR MOTOR VEHICLE WINDSCREEN WIPER BLADE

(51) International classification	:B60S0001380000, B60S0001400000, H01R0013516000, B60S0001340000, B60S0001180000
(31) Priority Document No	:1874353
(32) Priority Date	:28/12/2018
(33) Name of priority country	:France
(86) International Application No	:PCT/EP2019/082516
Filing Date	:26/11/2019
(87) International Publication No	:WO 2020/135961
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)JARASSON, Jean-Michel
2)CAILLOT, Grald
3)IZABEL, Vincent

(57) Abstract :
The invention concerns an adapter (300) for fastening a windscreen wiper blade (500) on a hinged arm (600) of a wiper system (700), the adapter (300) being mounted to pivot on a connector (200) of the windscreen wiper blade (500). The adapter (300) comprises two side walls (320, 330) connected together by an upper wall (340) and together forming a housing (350) for the connector (200). According to the invention, at least one of the side walls (320, 330) of the adapter (300) comprises one or more grooves (100) which extend longitudinally between the two longitudinal ends (321, 331, 341, 322, 332, 342) of the adapter (300) in order to allow a contact-free insertion of a folded tab forming a tongue (656) on an edge (651, 652) of the yoke (650) of the hinged arm (600). Said invention applies to motor vehicles.

No. of Pages : 36 No. of Claims : 15

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202147030171 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD FOR TRANSMITTING UPLINK INFORMATION, APPARATUS, BASE STATION AND TERMINAL

(51) International classification	:H04W0072040000, H04L0005000000, H04W0072120000, H04W0072100000, H04W0074080000	(71)**Name of Applicant :** **1)BEIJING XIAOMI MOBILE SOFTWARE CO., LTD.** Address of Applicant :No.018, Floor 8, Building 6, Yard 33, Middle Xierqi Road, Haidian District Beijing 100085 China (72)**Name of Inventor :** **1)ZHU, Yajun**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:PCT/CN2018/122416	
Filing Date	:20/12/2018	
(87) International Publication No	:WO 2020/124499	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
Provided in the present disclosure are a method for transmitting uplink information, an apparatus, a base station and a terminal, wherein the method applied in a base station of a new air interface NR system and comprises: determining uplink transmission configuration information for target uplink information, the uplink transmission configuration information being used for notifying a terminal of how to transmit the target uplink information by using unauthorized frequency band resources; and sending the uplink transmission configuration information to the terminal so that the terminal transmits the target uplink information by using the unauthorized frequency band resources according to the uplink transmission configuration information. By using the method for transmitting uplink information provided by the present disclosure, the transmission delay of uplink information that is caused by uncertainty in unauthorized frequency band resources may be reduced.

No. of Pages : 53 No. of Claims : 24

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021

(21) Application No.202147030180 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SUPPORT GRID ASSEMBLY FOR PRESSURE VESSEL

(51) International classification	:G06F0003041000, B07B0001280000, F28F0009020000, B07B0001460000, B01F0015000000
(31) Priority Document No	:62/777537
(32) Priority Date	:10/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/065475
Filing Date	:10/12/2019
(87) International Publication No	:WO 2020/123504
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)AQSEPTENCE GROUP, INC.
Address of Applicant :1950 Old Hwy. 8 NW New Brighton, MN 55112 U.S.A.
(72)**Name of Inventor :**
1)DEHN, Steven
2)ROSIEJKA, Brett
3)AL-FARSI, Ali
4)SHIPMAN, Kyle
5)MORIARTY, Miles
6)DREWS, Kyle

(57) Abstract :
A support grid assembly for use in a pressure vessel includes one or more screen panel assemblies that are flexibly, fluidly coupled to a central fluid manifold. Each screen panel assembly is operably slidably inserted into a central fluid manifold, whereby a flexible connection fluidly individually seals each screen panel assembly to the central fluid manifold. Through the use of a flexible connection, each screen panel assembly can individually slide, rotate or otherwise shift relative to the central fluid manifold and into engagement with a vessel floor regardless of inconsistencies in the vessel floor.

No. of Pages : 15 No. of Claims : 36

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021

(21) Application No.202147030194 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : METHOD AND APPARATUS FOR MANUFACTURING MICROTABLETS

(51) International classification	:H01M0008023400, A61K0031137000, C11D0003390000, B30B0011020000, B30B0015020000
(31) Priority Document No	:62/776826
(32) Priority Date	:07/12/2018
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2019/064932
Filing Date	:06/12/2019
(87) International Publication No	:WO 2020/118181
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)INCUBE LABS, LLC
Address of Applicant :2051 Ringwood Avenue San Jose, California 95131 U.S.A.
(72)**Name of Inventor :**
1)IMRAN, Mir A.
2)CHANG, Arthur Hsu Chen
3)ONG, Chang Jin
4)GRATTA, Delia Anna

(57) Abstract :
Embodiments provide methods and apparatus for manufacturing a microtablet from a precursor material such as a pharmaceutical powder. Various embodiments provide a method which includes compressing the powder to form a compressed mass of a selected density and repeatedly compacting the compressed mass to increase the density of the compressed mass and form a microtablet. Related methods and apparatus are provided.

No. of Pages : 62 No. of Claims : 21

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :01/07/2021

(21) Application No.202148029705 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ROOM LAYOUT ESTIMATION METHODS AND TECHNIQUES

(51) International classification	:H04W0084180000, H04L0025030000, H04N0019105000, H04L0012240000, H04L0027000000
(31) Priority Document No	:62/473,257
(32) Priority Date	:17/03/2017
(33) Name of priority country	:U.S.A.
(86) International Application No	:PCT/US2018/022905
Filing Date	:16/03/2018
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201947034364
Filed on	:26/08/2019

(71)**Name of Applicant :**
1)MAGIC LEAP, INC.
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(72)**Name of Inventor :**
1)LEE, Chen-Yu
2)BADRINARAYANAN, Vijay
3)MALISIEWICZ, Tomasz
4)RABINOVICH, Andrew

(57) Abstract :
As attached

No. of Pages : 70 No. of Claims : 44

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202148029756 A
(19) INDIA
(22) Date of filing of Application :02/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : INTERWORKING WITH LEGACY RADIO ACCESS TECHNOLOGIES FOR CONNECTIVITY TO NEXT GENERATION CORE NETWORK

(51) International classification	:H04W0076160000, H04W0088100000, H04L0012707000, H04W0036280000, H04W0036000000	(71)**Name of Applicant :** **1)QUALCOMM INCORPORATED** Address of Applicant :ATTN: International IP Administration, 5775 Morehouse Drive, San Diego, CA 92121-1714, USA, U.S.A.
(31) Priority Document No	:62/317,414	(72)**Name of Inventor :**
(32) Priority Date	:01/04/2016	**1)FACCIN, Stefano**
(33) Name of priority country	:U.S.A.	**2)ZISIMOPOULOS, Haris**
(86) International Application No Filing Date	:PCT/US2017/020752 :03/03/2017	**3)HORN, Gavin, Bernard**
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filed on	:201847031079 :20/08/2018	

(57) Abstract :
As attached

No. of Pages : 92 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :03/07/2021

(21) Application No.202148029966 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : SYSTEMS AND METHODS FOR PERFORMING FINGERPRINT BASED USER AUTHENTICATION USING IMAGERY CAPTURED USING MOBILE DEVICES

(51) International classification	:G06K0009000000, G06K0009660000, H04M0001725000, G06T0005000000, G06Q0010100000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT/US2017/065240
Filing Date	:08/12/2017
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201847027653
Filed on	:23/07/2018

(71)**Name of Applicant :**
1)Veridium IP Limited
Address of Applicant :100 New Bridge Street, London, EC4V 6JA, United Kingdom U.K.
(72)**Name of Inventor :**
1)OTHMAN, Asem

(57) Abstract :
As Uploaded

No. of Pages : 89 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202148030033 A
(19) INDIA
(22) Date of filing of Application :05/07/2021
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION SYSTEM

(51) International classification	:H04W0016060000, H04W0084100000, H04W0016320000, H04W0004900000, H04W0004060000
(31) Priority Document No	:2014-160482
(32) Priority Date	:06/08/2014
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2015/071932
Filing Date	:03/08/2015
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201747002071
Filed on	:03/08/2015

(71)**Name of Applicant :**
1)MITSUBISHI ELECTRIC CORPORATION
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(72)**Name of Inventor :**
1)MOCHIZUKI, Mitsuru
2)SUZUKI, Kuniyuki
3)KATADA, Futoshi
4)HIRAKI, Hirochika

(57) Abstract :
COMMUNICATION SYSTEM A communication system is provided that can improve the communication capability of a communication terminal device in the case where a large number of small cells in addition to a macro cell are installed and operated. A communication terminal device (UE) (105) is connected with a macro cell configured by a MeNB (103) and a small cell configured by a SeNB (104), so that dual connectivity is performed. When receiving information for small cells, for example, emergency information from a CBC (101) via an MME (102), at least one cell of the macro cell and the small cell notifies the communication terminal device connected with the at least one cell of the information for small cells. Fig. 9

No. of Pages : 179 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202148030055 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION SYSTEM

(51) International classification	:H04W0084100000, H04W0016320000, H04W0016060000, H04W0004900000, H04W0004060000
(31) Priority Document No	:2014-160482
(32) Priority Date	:06/08/2014
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2015/071932
Filing Date	:03/08/2015
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201747002071
Filed on	:03/08/2015

(71)**Name of Applicant :**
1)MITSUBISHI ELECTRIC CORPORATION
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(72)**Name of Inventor :**
1)MOCHIZUKI, Mitsuru
2)SUZUKI, Kuniyuki
3)KATADA, Futoshi
4)HIRAKI, Hirochika

(57) Abstract :
A communication system is provided that can improve the communication capability of a communication terminal device in the case where a large number of small cells in addition to a macro cell are installed and operated. A communication terminal device (UE) (105) is connected with a macro cell configured by a MeNB (103) and a small cell configured by a SeNB (104), so that dual connectivity is performed. When receiving information for small cells, for example, emergency information from a CBC (101) via an MME (102), at least one cell of the macro cell and the small cell notifies the communication terminal device connected with the at least one cell of the information for small cells. Fig. 9 A communication system is provided that can improve the communication capability of a communication terminal device in the case where a large number of small cells in addition to a macro cell are installed and operated. A communication terminal device (UE) (105) is connected with a macro cell configured by a MeNB (103) and a small cell configured by a SeNB (104), so that dual connectivity is performed. When receiving information for small cells, for example, emergency information from a CBC (101) via an MME (102), at least one cell of the macro cell and the small cell notifies the communication terminal device connected with the at least one cell of the information for small cells. Fig. 9

No. of Pages : 179 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202148030082 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION SYSTEM

(51) International classification	:H04W0084100000, H04W0016060000, H04W0016320000, H04W0004900000, H04W0004060000
(31) Priority Document No	:2014-160482
(32) Priority Date	:06/08/2014
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2015/071932
Filing Date	:03/08/2015
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201747002071
Filed on	:03/08/2015

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)MOCHIZUKI, Mitsuru
2)SUZUKI, Kuniyuki
3)KATADA, Futoshi
4)HIRAKI, Hirochika

(57) Abstract :
A communication system is provided that can improve the communication capability of a communication terminal device in the case where a large number of small cells in addition to a macro cell are installed and operated. A communication terminal device (UE) (105) is connected with a macro cell configured by a MeNB (103) and a small cell configured by a SeNB (104), so that dual connectivity is performed. When receiving information for small cells, for example, emergency information from a CBC (101) via an MME (102), at least one cell of the macro cell and the small cell notifies the communication terminal device connected with the at least one cell of the information for small cells.

No. of Pages : 180 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/07/2021
(21) Application No.202148030101 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : COMMUNICATION SYSTEM

(51) International classification	:H04W0084100000, H04W0016060000, H04W0016320000, H04W0004900000, H04W0004060000
(31) Priority Document No	:2014-160482
(32) Priority Date	:06/08/2014
(33) Name of priority country	:Japan
(86) International Application No	:PCT/JP2015/071932
Filing Date	:03/08/2015
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:201747002071
Filed on	:03/08/2015

(71)**Name of Applicant :**
1)MITSUBISHI ELECTRIC CORPORATION
Address of Applicant :7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310, Japan Japan
(72)**Name of Inventor :**
1)MOCHIZUKI, Mitsuru
2)SUZUKI, Kuniyuki
3)KATADA, Futoshi
4)HIRAKI, Hirochika

(57) Abstract :
A communication system is provided that can improve the communication capability of a communication terminal device in the case where a large number of small cells in addition to a macro cell are installed and operated. A communication terminal device (UE) (105) is connected with a macro cell configured by a MeNB (103) and a small cell configured by a SeNB (104), so that dual connectivity is performed. When receiving information for small cells, for example, emergency information from a CBC (101) via an MME (102), at least one cell of the macro cell and the small cell notifies the communication terminal device connected with the at least one cell of the information for small cells. Fig. 9

No. of Pages : 180 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(21) Application No.201931047605 A
(19) INDIA
(22) Date of filing of Application :21/11/2019
(43) Publication Date : 09/07/2021

(54) Title of the invention : Design and Development of Screening Apparatus for Non-invasive Blood Glucose Estimation and Feature extraction from Joint Visible-Infrared Spectrum •

(51) International classification	:A61B0005000000, A61B0005145000, A61B0005145500, A61B0005020500, A61B0005024000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:PCT// /
Filing Date	:01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Prasanta Kr Sen
Address of Applicant :IIT Kharagpur, Kharagpur, Pin-721302, West Bengal, India West Bengal India
2)Shyamal Kumar Das Mandal
3)Sudipta Ghosh
4)Biswarup Neogi
5)Mostafizur Rahaman Laskar
(72)**Name of Inventor :**
1)Sudipta Ghosh
2)Mostafizur Rahaman Laskar
3)Biswarup Neogi
4)Shyamal Kumar Das Mandal
5)Prasanta Kr Sen

(57) Abstract :
A novel prototype design and implementation is explored for non-invasive estimation of blood glucose level in NIR visible spectrum. The design as disclosed in this invention, is non-obvious and excellent for spectrum analysis of biological tissues for biomedical applications, with an emphasis on diabetes research. The proposed system is a low-cost, portable, power efficient, and wirelessly connected device. There is a high potential for its use in many bio-medical industrial applications, use in research work at laboratories, and also to use at remote places for analysis of physiological responses related to change of concentration of certain substances (such as glucose, and oxygen saturation) in human blood stream non-invasively. The design also considers the connectivity of the data generated from patents to the digital storage wirelessly to store and analyze further. This invention is expected to benefit a large population as it is the most economical one. Several considerations are taken such invention at circuit design level, light-weight 3-D printing of the model, sensor placement and the data acquisition system. This will be a cutting edge technology for instant estimation of glucose measurement.

No. of Pages : 16 No. of Claims : 8

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000136 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A VARIABLE PRESSURE JET DEVICE

(51) International classification	:A61B0017320300, A61M0005200000, B60T0013570000, F01M0001080000, A61M0005162000	(71)**Name of Applicant :** **1)DR.SUBHASISH SARKAR** Address of Applicant :4A,BLOCK D,BHAWANI DREAMS,9 SREEMA ROAD, DUMDUM CANTONMENT,KOLKATA-700065,WEST BENGAL INDIA West Bengal India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)DR.SUBHASISH SARKAR**
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
NA

No. of Pages : 16 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000196 A
(19) INDIA
(22) Date of filing of Application :02/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ECO-FRIENDLY CONDITIONING FORMULATION FOR SPINNING JUTE FIBRES INTO QUALITY YARN

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)INDIAN JUTE INDUSTRIES™ RESEARCH ASSOCIATION
Address of Applicant :17, Taratala Road, Kolkata West Bengal India PIN: 700 088 West Bengal India
(72)**Name of Inventor :**
1)CHAKRABORTY, Ritwik
2)PAUL, Dr. Amit Kumar
3)CHAKRABARTI, Dr. Syamal Kanti
4)SARMA, Dr. Uma Sankar

(57) Abstract :
ABSTRACT Title of Invention: AN ECO-FRIENDLY CONDITIONING FORMULATION FOR SPINNING JUTE FIBRES INTO QUALITY YARN An eco-friendly and synergistic jute conditioning formulation for spinning jute fibres into yarn comprising synergistically co-acting polydimethylsiloxane (PDMS) a low viscosity friction modifying agents having viscosity in range of (10 500 cSt) and fumed silica in the form of colloidal dispersion in select levels . The said formulation comprises PDMS in concentration range of 0.05 0.5 % on the weight of jute fibres and fumed silica in concentration range of 0.05 0.5 % on the weight of jute fibres. It enables synergistically advanced spinning process performance by reduction of fiber loss during the whole mechanical processing from 3.15% to 2.61% at carding stage, significant reduction of yarn break and increasing the strength of the jute fibre treated with the said formulation , in comparison to the conventionally treated jute fibre.

No. of Pages : 13 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000360 A
(19) INDIA
(22) Date of filing of Application :04/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN ELECTRONIC SYSTEM FOR WRITING USING CONVENTIONAL ACCESSORIES

(51) International classification	:G06K0009220000, H04M0001725000, H04W0088020000, H04N0007180000, G01N0021640000	(71)**Name of Applicant :** **1)National Institute Technology** Address of Applicant :Agartala, Barjala, Jirania, Tripura - 799046, India Tripura India (72)**Name of Inventor :** **1)Dr. Ashim Saha** **2)Dr. Mrinal Kanti Deb Barma** **3)Sharmistha Majumder**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
The present invention provides a system for communicating a handwritten content through an electronic media in a real time comprising an imaging unit, a transceiver unit, and a computing unit. The transceiver unit is connected to the imaging unit and communicates a processed data to-and-from the imaging unit. The computing unit communicates bidirectionally with the transceiver unit. The present invention provides a portable system to communicate a handwritten content to a recipient in a real time. This eases a mode of communication as a user is able to write a content faster and in a better manner through a conventional mode like a pen and paper and by using the present system, the user is able to communicate the written content in a captured handwriting as well as the content converted into a computer readable font.

No. of Pages : 15 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202031000461 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A METHOD FOR MARKING A BOILER FITTING DURING ANGLE MARKING PROCESS

(51) International classification	:G01C0015000000, G01B0005060000, B23K0026000000, H01S0005000000, B23K0026280000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)BHARAT HEAVY ELECTRICALS LIMITED
Address of Applicant :Regional Office: Regional Operations Division (ROD), Plot No. : 9/1, DJ Block 3rd Floor, Karunamoyee, Salt Lake, Kolkata 700091, West Bengal, Registered Office: BHEL House, Siri Fort, New Delhi-110049, India West Bengal India
(72)**Name of Inventor :**
1)PADMANABAN MADHURAJ

(57) Abstract :
The invention relates to a method for marking a boiler fitting during angle marking process, the method comprising steps of: clamping a laser light (3) on a laser light clamp (1) set on a Vernier height gauge (2); clamping said Laser light unit on a Swivel base (5) of a height gauge clamp (4); rotating laser light unit for required angle with the help of said swivel base and a bottom block (6); guiding the laser unit using a linear guide block (7) in to and fro motion while setting the radius.

No. of Pages : 19 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000486 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF CHEAP, EFFICIENT, NON-TOXIC ANTISPROUTING AGENTS OF POTATO USING ORGANIC COMPOUNDS

(51) International classification	:A23B0007154000, A23B0007144000, A01N0035020000, C08J0005040000, A01N0047200000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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Address of Applicant :203, B.T. Road, Kolkata 700 108, West Bengal, India West Bengal India
(72)**Name of Inventor :**
1)Suparna Mandal Biswas
2)Panchanan Pramanik

(57) Abstract :
Inhibiting sprouting of potatoes is of great concern these days for potato storage and processing. Sprouting of potatoes not only degrades the quality of tuber but also it releases glykoalkaloids, which are harmful for health. There are many antisprouting agents available in the market, but these are either costly, toxic or less efficient. Therefore, exploration was done for new sprouting suppressant compound that is cheap, non-toxic and much more efficient. It was established that simple Maleic acid in solution form is very effective antisprouting agent which hinders sprouting upto 6 weeks post treatment at room temperature in darkness. It does not affect quality parameters of tubers such as Protein, total phenolic and reducing sugar content. It retains moisture content of the potato tubers along total storage period and stout appearance. Thus, maleic acid would be new, cheap, non- toxic and highly efficient sprout suppressant for potato storage and marketing.

No. of Pages : 23 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000510 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DEVELOPMENT OF ELECTRONIC MATERIAL USEFUL FOR APPLICATION IN FILTER CIRCUIT FROM INDUSTRIAL WASTE RED MUD

(51) International classification	:C01G0029000000, C04B0035495000, H01L0039240000, C04B0035645000, C01G0003000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)NATIONAL ALUMINIUM COMPANY LIMITED (NALCO)
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2)INSTITUTE OF TECHNICAL EDUCATION AND RESEARCH - SIKSHA ˜O • ANUSANDHAN (ITER-SOA)
(72)**Name of Inventor :**
1)Bhimsen Pradhan
2)Vasudevan Krishnakumari
3)Partha Bandopadhyay
4)Sushrisangita Sahoo
5)Ram Naresh Prasad Choudhary
6)Shaik Mohammed Ali

(57) Abstract :
The process comprising the steps of weighing of stoichiometric amounts of the precursor materials such as raw Red Mud, Bismuth oxide (Bi2O3), Barium carbonate (BaCO3), and Lanthanum oxide (La2O3); grinding of weighed precursor materials together in an agate mortar and pestle; calcining of ground powder of precursor materials at 790-810°C on a muffle furnace with a heating rate of about 1.7°C/ min and soaking at 790-800°C for 4 hours; grinding thoroughly of the calcined material and shaping into cylindrical pellets; sintering of pellets for densification at 790-810°C and soaking with the same heating rate and time as in step (c) to avoid any phase change of material; applying an input of preferably 5V in series or parallel to the sintered pellet; developing output voltage across a resistor with variation in frequency; and calculating bandwidth of the pellet from obtained frequency response.

No. of Pages : 22 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000520 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : AN AUTOMOBILE WIRE HARNESS PROTECTION DEVICE

(51) International classification	:B60R0016020000, H02G0003040000, F24H0003000000, B62J0017080000, H01L0027040000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)LUO, Xiaofang
2)ZHAO, Xiaobin
3)LI, Beiwen
4)HUANG, Qunxiu

(57) Abstract :
The present invention discloses an automobile wire harness protection device, comprising a shield upper cover and a shield lower cover which are detachably and fixedly connected and between which is defined a wire harness channel which runs from top to bottom, the upper end of the wire harness channel is a wire harness inlet, and the lower end of the wire harness is a wire harness outlet, a front wire harness penetrates into the wire harness channel from the wire harness inlet and penetrates out from the wire harness outlet, the upper end of the shield lower cover is detachably fixed on one side of a battery bracket, while the lower end of the shield lower cover is detachably fixed on one side of a girder reinforcing plate. The automobile wire harness protection device according to the present invention can accurately fix and limit the path of the wire harness, so that the wire harness can effectively avoid the engine suspension and the sharp edges of sheet metals, eliminating the interference risk, reducing the risk of functional failure of electric appliances, improving the perceived quality, and the part structure being flexible and facilitating the installation.
FIG. 2

No. of Pages : 17 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000522 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A VEHICLE DISTANCE MEASUREMENT METHOD BASED ON MONOCULAR CAMERA

(51) International classification	:G06K0009320000, B60R0011040000, B60R0013100000, G06T0007500000, G01C0011360000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)KUANG Xiaojun
2)CUI, Shuo
3)TANG, Xiangjiao
4)PENG, Yang
5)QIN, Huaqiang

(57) Abstract :
The invention discloses a vehicle distance measurement method based on monocular camera, which includes: detecting the license plate based on the front vehicle's video image captured by the monocular camera; calculating the sizes of the license plate image; determining the country to which the current location belongs based on GPS positioning information; based on the license plate sizes in the database, matching the license plate's length-width ratio with the license plate image's length-width ratio and obtaining the first set of the license plate sizes; characters in the license plate image being extracted and matched with the license plate character templates, and obtaining the second set of the license plate sizes; according to the two sets of license plate sizes and the image sizes of the license plate, calculating the distance L1 and L2 respectively, and obtaining the distance L by data fusion of L1 and L2. The vehicle distance measurement method based on monocular camera imaging according to the invention has the advantages of low cost and wide distance measurement range, etc. The data fusion between the distance measurement results of the two methods has improved the distance measurement accuracy. FIG. 1

No. of Pages : 13 No. of Claims : 3

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000524 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A REFRIGERATION DEVICE FOR AUTOMOTIVE GLOVE BOX

(51) International classification	:B60R0007060000, E05B0083300000, G21F0007040000, B60H0001000000, B25J0021020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
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(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)MENG, Yangchao
2)TAN, Chong

(57) Abstract :
The present utility model discloses a refrigeration device for automobile glove box, which comprises an air conditioning box and a refrigerating air duct which are inside the automobile, the air conditioning box communicates with the glove box on the instrument panel in an on/off fashion by means of the refrigerating air duct, one end of the refrigerating air duct is an air inlet, while the other end of the refrigerating air duct is an air outlet, and the air inlet is connected with the rear of the refrigeration mechanism within the air conditioning box and sealingly communicates with the air conditioning box, the air outlet is connected with the upper of the glove box and is sealingly communicates with the glove box. The refrigeration device for automobile glove box according to the present utility model introduces the air-conditioned cold air inside the automobile into the glove box and refrigerates the inside of the glove box to meet people's needs for the refrigeration items in summer, and the maximum refrigeration quantity and air flow are given to the glove box, thus obtaining good refrigeration effect and saving the layout space. FIG. 2

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000526 A
(19) INDIA
(22) Date of filing of Application :06/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A DUAL-OUTLET REAR AIR-CONDITIONING BOX

(51) International classification	:B60H0001240000, B60H0001000000, A61L0009040000, F25D0011020000, F24F0013020000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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(72)**Name of Inventor :**
1)MENG, Yangchao
2)TAN, Chong

(57) Abstract :
The present utility model discloses a dual-outlet rear air-conditioning box, which comprises an air-conditioning box body which is arranged on the floor between the rear side coaming plate and the interior plaque, the front side below the air-conditioning box body is provided with a left air-conditioning box air outlet and a right air-conditioning box air outlet, and the opening of the left air-conditioning box air outlet faces toward the front side and communicates with the left air channel located in the left side of the automobile body, while the opening of the right air-conditioning box air outlet faces toward the right side and communicates with the right air channel located in the right side of the automobile body. The dual-outlet rear air-conditioning box of the present utility model reduces the layout space of the air channel, obtains the flexible arrangement, meets the individual air outlet requirements of passengers on the left and right sides of the automobile, and does not affect the head space of passengers. FIG. 3

No. of Pages : 12 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/01/2020
(21) Application No.202031000528 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : A POWER ASSEMBLY OF A SMALL SUV

(51) International classification	:B62D0065100000, A61B0006030000, B60K0017080000, A61B0017290000, B60K0005120000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
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1)WANG, Weiwei
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4)SUN, Weigang
5)YAN, Jiantao

(57) Abstract :
The present invention discloses a power assembly of a small SUV comprising two drive shafts, an engine body and an engine suspension device, an output shaft is arranged in the engine body, the output shaft penetrates through the engine assembly from left to right in the horizontal direction, the two drive shafts are detachably fixed on both ends of the output shaft in a bilaterally symmetric manner, an angle is formed between the axis of the drive shaft and the axis of the output shaft, the angle is less than 8 degrees and more than 0 degree, the engine suspension device is detachably fixed on one side of the engine body. The present invention also discloses an integrated layout method of a power assembly of a small SUV, which comprises integrating and installing the engine body, the engine suspension device and the two drive shafts together firstly, then adjusting the a angle and the position of the power assembly to ensure the clearance between the power assembly and the peripheral part meet the requirements. The power assembly of a small SUV and the integrated layout method thereof according to the present invention can solve the problem that the vibration of a drive shaft is increased, and improve the service life of the power assembly, and realize the light weight and low cost integrated layout. FIG. 3

No. of Pages : 14 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020

(21) Application No.202031000641 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MAGNETIC LID ASSEMBLY FOR ELECTRICAL DEVICE

(51) International classification	:E02D0029140000, H02G0003180000, H05K0009000000, B65D0043020000, A45D0033000000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT MAGNETIC LID ASSEMBLY FOR ELECTRICAL DEVICE The present invention relates to magnetic lid assembly (100) for securing electrical device (106). The magnetic lid assembly (100) comprises a cover frame (102) for housing said electrical device; a lid (104), attached to said cover frame (102), with open position and a closed position where the lid (104) is engaged on the cover frame (102); a hinge joint (108) allowing the lid (104) to rotate between said open position and said closed position, and a magnetic arrangement (110-1,110-2) disposed within said cover frame (102) and said lid (104) providing an attractive force between said lid (104) and said cover frame (102). The magnetic arrangement (110-1,110-2) is disposed in close vicinity of each other and such oriented that a magnetic field of attraction is maintained between said cover frame (102) and said lid (104) to removably retain the lid (104) into engagement with said cover frame (102). Ref. figure 4

No. of Pages : 26 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000705 A
(19) INDIA
(22) Date of filing of Application :07/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : DIAGUANOSINE DERIVATIVES AS SYNTHETIC MEMBRANE CHANNELS FOR DRUG DELIVERY APPLICATIONS

(51) International classification	:H01M0010440000, G11B0017049000, G03G0015080000, A24D0003060000, B65D0006220000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)DASH, Jyotirmayee
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3)DEBNATH, Manish
4)PAUL, Rakesh
5)DAS, Tania

(57) Abstract :
Diguanosine derivative selected from compounds having formula DG1, DG2, DG3 and DG4 and a guanosine derivative selected from compound having formula MG . Also provided are processes for preparing the same.

No. of Pages : 63 No. of Claims : 7

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :07/01/2020
(21) Application No.202031000716 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : BOOT STRUCTURE OF SILICON STEEL SHEET

(51) International classification	:F16J0003040000, G02B0019000000, H02K0003520000, H01L0023310000, A61F0013514000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
A boot structure of a silicon steel sheet contains: a peripheral extension and multiple boot portions. The multiple boot portions are connected with the peripheral extension and surround an inner wall of the peripheral extension. A first concaved face is formed on a first portion of the boot portion, a second concaved face is formed on a second portion of the boot portion, and an intersection point is formed on a connection portion of the first concaved face and the second concaved face.

No. of Pages : 11 No. of Claims : 2

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202031000820 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : MULTIFUNCTIONAL HEADGEAR

(51) International classification	:H02J0007000000, H02J0007350000, A42B0003040000, A42B0001240000, H02J0003140000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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Address of Applicant :Patia, Bhubaneswar-751024, Odisha, India. Orissa India
(72)**Name of Inventor :**
1)CHAUHAN, Hullash
2)SATAPATHY, Suchismita
3)SAHOO, A. K.

(57) Abstract :
The present disclosure provides a multifunctional headgear 100. The headgear 100 includes a cooling unit 104 to provide cooling-effect, illumination sources 108 to illuminate a pre-determined area, a rain cover 110 to protect from rain, a charging module 114 to enable charging of rechargeable devices, and a communication unit 106 to transmit meteorological attributes. The headgear 100 includes a protecting segment to protect eyes of the user from dust and dirt. The headgear 100 includes a power supply and management unit 116 to supply conditioned electric power to the headgear 100. The headgear includes solar panels 120 to enable generation of electric power through insolating solar radiations.

No. of Pages : 20 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202031000842 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : ANTI-TWISTING DEVICE FOR HOLDING THIN METAL SHEET DURING SHEAR TESTING

(51) International classification	:F16B0025000000, B29C0070540000, F16B0025100000, H01J0037200000, B21D0051440000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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(72)**Name of Inventor :**
1)Shashank Choudhary
2)Gujre Vinay Sanjay
3)Pundan Kumar Singh

(57) Abstract :
ANTI-TWISTING DEVICE FOR HOLDING THIN METAL SHEET DURING SHEAR TESTING The subject matter disclosed herein relates to an anti-twisting device (100) for holding a specimen thin metal sheet (111) and preventing twisting of the sheet during shear testing of thin sheet metal (111). The anti-twistig device (100) comprises of two I-shaped sections (101a, 101b), and an identical circular slot (105a 105b) at center of each of the two I-shaped sections (101a, 101b). A through holes (102a, 102b, 102c, 102d, 103a, 103b, 103c, 103d) are provided at each of the two I-shaped sections (101a, 101b) to mount the one I-shaped section (101a) over the other I-shaped section (101b) by a plurality of fasteners (112a,112b, 112c, 112d and 113a, 113b, 113c, 113d) by sandwiching the thin metal sheet (111). To be published with Fig. 1

No. of Pages : 20 No. of Claims : 13

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000866 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : A BEVERAGE DISPENSING APPARATUS

(51) International classification	:G06Q0010080000, G06Q0050120000, B01F0013100000, B67D0001080000, A61M0005142000	(71)**Name of Applicant :** **1)Boozimba** Address of Applicant :4/2, Daws Temple Road, Bally, Howrah 711201 West Bengal India
(31) Priority Document No	:NA	(72)**Name of Inventor :** **1)Shubhojyoti Ganguly**
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
A BEVERAGE DISPENSING APPARATUS ABSTRACT A beverage dispensing apparatus is provided. The apparatus includes a housing including containers to store corresponding ingredients. Sensors to sense an amount of the ingredients present in corresponding containers. A processing unit configured to determine the amount of the ingredients in the corresponding containers based on sensed data; identify beverage recipes to be made based on determined amount of the ingredients; display identified beverage recipes via a display unit on an interface unit; and receive at least one request from a user via a computing device, wherein the at least one request represents an order request for a beverage from one or more displayed beverage recipes. A control unit to measure the ingredients to be used in preparing the at least one request. A mixing chamber to mix measured ingredients for a predefined time upon receiving the measured ingredients. A dispenser unit to dispense mixed ingredients into a receiver. FIG. 4

No. of Pages : 29 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/01/2020
(21) Application No.202031000888 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : CROP REAPING APPARATUS

(51) International classification	:A01G0003040000, F16M0011320000, B29C0037020000, D05B0037040000, E04H0006060000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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1)MISHRA, Debesh
2)SATAPATHY, Suchismita
3)MISHRA, Purna Chandra
4)SAHOO, Ashok Kumar

(57) Abstract :
The present invention discloses a crop reaping apparatus. The apparatus comprises at least one pair of vertical telescopic members, a lower cutter plate is fixed to an upper end of the at least one pair of vertical telescopic members. An upper cutter plate is slidably configured with the lower cutter plate to move along a longitudinal axis of the lower cutter plate between a first position in which upper plate overlap on the lower cutter plate, and a second position in which a proximal end of the upper cutter plate moves away from the proximal end of the lower cutter plate. The plurality of cutting teethes of the lower cutter plate and the upper cutter plate are configured for cutting crops on movement of the upper plate relative to the lower cutter plate between the first and second positions.

No. of Pages : 16 No. of Claims : 9

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202031000910 A
(19) INDIA
(22) Date of filing of Application :08/01/2020
(43) Publication Date : 09/07/2021

(54) Title of the invention : PROTEIN HYDROGEL FOR TOPICAL APPLICATION AND FORMULATION FOR SKIN REGENERATION/ WOUND HEALING

(51) International classification	:A61K0009060000, A61K0009000000, A61L0026000000, A61L0027520000, A61K0047100000	(71)**Name of Applicant :** **1)DR. ASHOKE SHARON** Address of Applicant :A-27, HARIOM CITY, RUDIYA ROAD, MESRA, RANCHI, JHARKHAND INDIA 835217 Jharkhand India
(31) Priority Document No	:NA	(72)**Name of Inventor :**
(32) Priority Date	:NA	**1)DR. ASHOKE SHARON**
(33) Name of priority country	:NA	**2)DR. NARESH CHANDRA BAL**
(86) International Application No	:NA	**3)DR. ARIJIT BASU**
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :
PROTEIN HYDROGEL FOR TOPICAL APPLICATION AND FORMULATION FOR SKIN REGENERATION/ WOUND HEALING ABSTRACT The present disclosure relates to protein hydrogel for topical application and formulation for skin regeneration and wound healing. More particularly, the formulation can be either a solution or a gel form comprising of a protein base: albumin with gelatin blend, glycerol as an anti-infective plasticizer, and PEG-based cross-linker. In addition, the said formulation system promotes the formation of the skin layer through in-situ scaffold formation of cross-linked protein matrix hydrogels (CPMH) when applied to the patient™s skin. The in-situ crosslinking reaction provides a support framework for the blood vessels and other cells to regrow a new layer of the dermis and prevents the development of a scar. In addition, the invention also provides a medical device as kits that are useful for the practice of the methods of the invention.

No. of Pages : 46 No. of Claims : 18

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :09/12/2020
(21) Application No.202034053622 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : POWER SUPPLY MODULE AND ELECTRONIC DEVICE

(51) International classification	:G06F0001260000, G06F0001200000, H02M0007000000, G06F0001180000, H05K0001140000
(31) Priority Document No	:202010016898.7
(32) Priority Date	:08/01/2020
(33) Name of priority country	:China
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)HONG, Shouyu
3)XIN, Xiaoni
4)ZHAO, Zhenqing

(57) Abstract :
The present disclosure provides a power supply module. The power supply module is applied to an integrated circuit chip assembly which includes a first carrier board and an integrated circuit chip located at a first side of the first carrier board; the power supply module includes: a second carrier board; a first-stage power supply unit; and a second-stage power supply unit, power input terminals of the second-stage power supply unit are electrically connected with corresponding power output terminals of the first-stage power supply unit through the second carrier board; power output terminals of the second-stage power supply unit are electrically connected with corresponding power terminals of the integrated circuit chip, a projection of the second-stage power supply unit on a first plane is at least partially located within a projection range of the integrated circuit chip on the first plane, the first plane is parallel to the first carrier board. (FIG. 1)

No. of Pages : 68 No. of Claims : 22

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/12/2020
(21) Application No.202034053652 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : EXHAUST PIPE

(51) International classification	:F01N0013140000, A61M0025010000, F16L0057020000, F16L0059140000, F01N0013080000
(31) Priority Document No	:2020-000372
(32) Priority Date	:06/01/2020
(33) Name of priority country	:Japan
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

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2)TANAKA, Kenichi

(57) Abstract :
An exhaust pipe (1, 1a, 1b) having a double-pipe structure includes an inner tube (2, 2a, 2b, 2c) and an outer tube (3, 3b, 3c). The inner tube (2, 2a, 2b, 2c) is for an exhaust gas to pass through. The outer tube (3, 3b, 3c) is arranged to surround an outer circumferential surface of the inner tube (2, 2a, 2b, 2c). The inner tube (2, 2a, 2b, 2c) is arranged in a manner that a sliding end (24, 73) of the inner tube (2, 2a, 2b, 2c) is slidable with respect to the outer tube (3, 3b, 3c). The inner tube (2, 2a, 2b, 2c) includes at least one dilation inhibiting mechanism (5, 5a, 5b) at the sliding end (24, 72) to inhibit a radial dilation of the inner tube (2, 2a, 2b, 2c) due to an expansion of the inner tube (2, 2a, 2b, 2c).

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(54) Title of the invention : VIDEO DISTRIBUTION SYSTEMS AND METHODS

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(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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(62) Divisional to Application Number	:NA
Filing Date	:NA

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(57) Abstract :
ABSTRACT A multimedia content selection system includes at least one processor executing instructions for performing operations. The operations include receiving a playback request from a playback unit, including a content identifier, providing, to the playback unit, a manifest with at least a set of content segment identifiers based on the content identifier, each content segment identifier identifying a content segment associated with a content stream, receiving a content stream request comprising one of the content segment identifiers, and selecting a segment for playback from the content segment associated with the received content segment identifier, determined using a set of content selection rules.

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(12) PATENT APPLICATION PUBLICATION
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(54) Title of the invention : DEVICE-TO-DEVICE COMMUNICATION APPARATUS AND METHOD

(51) International classification	:H04W0072040000, H04W0076140000, H04W0036000000, H04W0048120000, H04W0088060000
(31) Priority Document No	:75/KOL/2014
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(33) Name of priority country	:India
(86) International Application No	:NA
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(61) Patent of Addition to Application Number	:NA
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(57) Abstract :
A device to device (D2D) communication apparatus and method are provided. The D2D communication apparatus includes a transceiver configured to receive resource configuration information indicating D2D resources configured in a serving cell from a base station (BS) of the serving cell, and a controller configured to determine locations of resources for transmission or reception of signals for D2D communication based on the resource configuration information. The resource configuration information includes information about length of common D2D resources configured in a plurality of cells and additional D2D resources configured in the serving cell and information about length of common and additional D2D resources of a cell that configures maximum-sized additional D2D resources among the serving cell and neighboring cells.

No. of Pages : 71 No. of Claims : 12

(12) PATENT APPLICATION PUBLICATION
(21) Application No.202135023923 A
(19) INDIA
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(54) Title of the invention : A LIGHT EMITTING DIODE, AND A LIGHT EMITTING DEVICE

(51) International classification	:H01L0033620000, H01L0033500000, H01L0033200000, H01L0033000000, H01L0033460000
(31) Priority Document No	:10-2014-0035925
(32) Priority Date	:27/03/2014
(33) Name of priority country	:Republic of Korea
(86) International Application No	:NA
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(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
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Filed on	:27/03/2015

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2)JUNG, Jae Hye
3)KIM, Chang Yeon

(57) Abstract :
ABSTRACT The present invention discloses a light emitting diode, and a light emitting device. The a light emitting diode comprising : a base; a light emitting structure disposed over the base and including a first conductive type semiconductor layer, a second conductive type semiconductor layer, and an active layer disposed between the first conductive type semiconductor layer and the second conductive type semiconductor layer; a second electrode disposed on a lower surface of the second conductive type semiconductor layer and electrically connected to the second conductive type semiconductor layer; an insulation layer covering the second electrode and the light emitting structure and including at least one opening; and a first electrode electrically connected to the first conductive type semiconductor layer exposed through the at least one opening, wherein the base includes a supporting insulator and a plurality of bulk electrodes electrically connected to the first electrode, and wherein the light emitting structure includes a rough surface formed on an upper surface of the light emitting structure.

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(22) Date of filing of Application :18/03/2021
(21) Application No.202137011539 A
(43) Publication Date : 09/07/2021

(54) Title of the invention : APPARATUS AND METHOD FOR HANDLING ESIM PROFILE FOR ISSP DEVICE

(51) International classification	:H04W0008180000, H04W0008200000, H04L0029060000, H04M0001725000, G06F0008610000
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(33) Name of priority country	:Republic of Korea
(86) International Application No	:PCT/KR2020/000268
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(61) Patent of Addition to Application Number	:NA
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(57) Abstract :
The present disclosure relates to a pre-5th-Generation (5G) or 5G communication system to be provided for supporting higher data rates Beyond 4th-Generation (4G) communication system such as Long Term Evolution (LTE). A method and apparatus for providing a communication service by installing an eSIM profile even in a terminal to which an iSSP is applied. The method comprises: detecting whether information is input information for eSIM profile download input information from a terminal to which an iSSP is applied, and determining whether the terminal supports the same. Collecting eSIM bundle information of the iSSP by the terminal; selecting an eSIM bundle to be used by referring to a condition designated by the terminal from among the collected eSIM bundles; if there is no bundle to be used or when it is determined that no eSIM bundle is used among existing eSIM bundles, generating an eSIM bundle by the terminal itself or providing an eSIM bundle via communication with the terminal and a server; and on the basis of eSIM bundle information, downloading and installing an eSIM profile package.

No. of Pages : 28 No. of Claims : 14

CONTINUED TO PART- 2