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.

( Om Prakash Gupta )
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

15th JUNE, 2018
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### Address of the Patent Offices/Jurisdictions

The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

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<th>No.</th>
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<td>1</td>
<td>Office of the Controller General of Patents, Designs &amp; Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office, S.M. Road, Antop Hill, Mumbai - 400 037</td>
<td>(91)(22) 24123311, (91)(22) 24123322</td>
<td><a href="mailto:cgpdtm@nic.in">cgpdtm@nic.in</a></td>
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<td>(91)(22) 24137701</td>
<td><a href="mailto:mumbai-patent@nic.in">mumbai-patent@nic.in</a></td>
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<td>The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi - 110075</td>
<td>(91)(11) 25300200 &amp; 28032253</td>
<td><a href="mailto:delhi-patent@nic.in">delhi-patent@nic.in</a></td>
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<td>(91)(44) 2250 2081-84</td>
<td><a href="mailto:chennai-patent@nic.in">chennai-patent@nic.in</a></td>
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- The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.
- The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli.

Website: [www.ipindia.nic.in](http://www.ipindia.nic.in)  
[www.patentoffice.nic.in](http://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.
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**वेबसाइट:** [http://www.ipindia.nic.in](http://www.ipindia.nic.in)

**पेटेंट अधिनियम, 1970** तथा **पेटेंट (संशोधन) अधिनियम, 2005** अनुसार पेटेंट (संशोधन) नियम, 2006 द्वारा बाँधित सभी आवेदन, दूरदर्शन, विवरण या अन्य योजनाएं या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे।

शुल्क: शुल्क या तो नाम रूप में या Controller of Patents के नाम में देव बैंक ब्यान्ड या बैंक के द्वारा मोटी जा सकती है जो उसी स्थान के अनुरुप नियम नहीं प्रदर्श 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.

(Om Prakash Gupta)
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 thereunder, 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 18\textsuperscript{th} 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.
CORRIGENDUM (DELHI)

The Patent Application No. 3234/DELNP/2015 was published in the Official Journal No. 40/2015, dated on 02/10/2015.

(1) The applicant name and address of this application should be read as: “Unicharm Corporation, 182, Shimobun, Kinsei-cho, Shikokuchuo-shi, Ehime 7990111, Japan”.

(2) The third inventor’s name should be read as “Takeshi BANDO”
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:

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<td>15/06/2018</td>
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(51) International classification: H04M3/42
(31) Priority Document No: 201611159384.7
(32) Priority Date: 15/12/2016
(33) Name of priority country: China
(86) International Application No: NA
(87) International Publication No: NA
(61) Patent of Addition to Application Number: NA
(62) Divisional to Application Number: NA

(54) Title of the invention: METHOD, DEVICE, AND ELECTRONIC TERMINAL FOR VIDEO RECORDING

(57) Abstract: The present disclosure provides a method, device, and electronic terminal for video recording. The method includes: receiving streaming data of a video, and decoding and broadcasting of the video on a webpage of a browser through a video-playing plugin; based on a triggering operation for starting video recording detected on the webpage by the browser, acquiring first image data and first audio data outputted by the video-playing plugin through a data interaction interface between the video-playing plugin and the browser; encoding the first image data and the first audio data to generate second image data and second audio data; synthesizing the second image data and the second audio data to generate and store streaming data of a recorded video. As such, the impact of other operations on the recorded images during the video recording process may be avoided, the recording effects are satisfying, and the resolution of the video recording is acquired to be consistent with the resolution of the original video source.

No. of Pages: 37 No. of Claims: 20
The present disclosure discloses a method, device, and computing apparatus for acquiring broadcasting content. The method includes a recognition step for recognizing a type of multimedia player in a target webpage and an output mode for broadcasting multimedia resource; and a broadcasting-content acquiring step for, based on the type and the output mode, acquiring broadcasting content of a multimedia resource played by the multimedia player. As such, the present disclosure may, by analyzing a specific broadcasting mechanism of the multimedia resource in the webpage, apply a corresponding processing approach to acquire the played multimedia content, thereby realizing the saving or recording of the multimedia content watched online.

No. of Pages : 40 No. of Claims : 20
A system to provide automatic gear change and throttle coupled to a gear lever of a sports vehicle. The system comprises an electronic enclosure adapted to house a potentiometric switch to provide a numerical value from 0 to 1023 on detecting a movement in a jockey from a minimum range to maximum range, wherein the provided numerical value determines a throttle input. A neutral switch to notify neutral position of the engine. The first microcontroller unit stores data of the neutral position of the engine. The second microcontroller unit receives the throttle input from the potentiometric switch to transmit data of the throttle position to the first microcontroller unit. The servo motor receives a command from the second microcontroller unit to rotate in a calibrated amount to actuate a throttle by rotating an attached butterfly valve. The second microcontroller unit controls the servo motor for throttling. The proximity sensor senses the RPM of a rear axle of the sports vehicle and transmits the sensed data to the first microcontroller unit.

No. of Pages: 20 No. of Claims: 14
The invention relates to a device for generating optical bio-photonic fractal torsional-field waves. The optical bio-photonic fractal torsion-field waves are fractal and spherical-longitudinal in nature. The device is used to deliver beneficial effects, such as anti-microbial, anti-pathogenic effects, cell health restoration, cell repair, cell regeneration, and pain relief effects, on the living organism. A system for generating and delivering optical bio-photonic fractal torsional-field waves to a living organism or non-living things is also disclosed. A process of delivering optical bio-photonic fractal torsional-field waves on to a living organism is also disclosed. The living organism comprises animals, humans, and plants.
The present invention provides a method, an apparatus, and a computing device for determining dissemination heat degree of information. The method for determining dissemination heat degree of information includes analyzing N levels of sharing data of specific network information to determine parameters related to each sharing level of the specific network information, where N is a natural number greater than 1; and calculating a dissemination heat degree S of the specific network information based on the parameters related to the sharing of the specific network information. The dissemination heat degree obtained according to the disclosed method, apparatus, and computing device can be used to predict the popular level of the specific network information during the subsequent dissemination process.

No. of Pages : 34 No. of Claims : 11
METHOD, APPARATUS, AND SERVER FOR NETWORK INQUIRY

The present invention provides method and apparatus, applied to a server, for network inquiry. The method includes receiving location information sent by a client terminal and network information detected by the client terminal, searching for network information in a preset range stored in a database according to the location information, comparing the network information sent by the client terminal with the network information found through searching and identifying the network information found through searching based on a comparison result, and sending the identified network information to the client terminal. According to the method and the apparatus provided by the present invention, the accuracy of network identification and matching can be effectively improved.

No. of Pages : 25  No. of Claims : 15
METHODS, APPARATUSES, BROWSERS, AND ELECTRONIC DEVICES FOR PROVIDING WEBSITE NAVIGATION ICONS

The present disclosure provides a method, an apparatus, a browser, and electronic devices for providing website navigation icons. The method includes providing a website navigation icon; and through the website navigation icon, providing a service offered within the website that is navigated by the website navigation icon. According to the method, apparatus, browser, and electronic devices provided in the present disclosure, the user experience may be improved.

No. of Pages : 32 No. of Claims : 17
An application control method includes acquiring M running applications on a mobile terminal, wherein M is a positive integer; acquiring user habit data related to closing at least one application within the M running applications; and closing at least one application within the M running applications according to the user habit data. With embodiments of the present disclosure, an intelligent closing of the applications can be achieved, and power consumption of a mobile terminal can be reduced.
MOBILE TERMINAL, METHOD OF CONTROLLING SAME, AND COMPUTER-READABLE STORAGE MEDIUM

A method of controlling a device includes controlling a processor by a mobile terminal to acquire a voice instruction of a user, controlling an artificial intelligence (AI) module, in accordance with a mapping relationship collection which is between a preset voice command and an instruction code combination information, and an acquired voice instruction, to determine the instruction code combination information corresponding to the acquired voice instruction, where the acquired voice instruction has a plurality of instruction codes and transmission sequence of the instruction codes, and controlling the processor to transmit the instruction codes to a target device in accordance with the transmission sequence, where each of the instruction codes is used to instruct the target device to execute an operation corresponding to each of the instruction codes.

No. of Pages: 40 No. of Claims: 15
An iris collection method is used for an electronic device. The electronic device includes an iris recognition module. The iris recognition module includes an infrared light source. The iris collection method includes acquiring a distance between the iris recognition module and an iris of a person to be recognized; adjusting light intensity of transmitted infrared light according to the distance by the infrared light source, so that light intensity of infrared light reaching the iris of the person to be recognized is a target light intensity; and collecting an iris image of the iris by acquiring infrared light having the target light intensity reflected by the iris. An electronic device is also disclosed.

No. of Pages : 33 No. of Claims : 15
Title of the invention: ROTATION SPEED CONTROL MECHANISM

Abstract:
The present disclosure relates to a rotational speed control mechanism and, more specifically, it relates to an electro-mechanical system and a mechanism which controls a rotation speed of descend when a load, hanging at a certain height, needs to be lowered with the help of ropes or steel wires. In an aspect of the present disclosure relates to a mechanism for climbing or mountaineering. In an aspect, the mechanism can include a pulley having at least one loop of a single or double rope wound around circumference of said pulley; and a light-emitting diode (LED) electrically connected in series with at least one motor. In another aspect, the pulley, while descending, rotates and transfers said rotational movement to said motor so as to generate current, and said LED is powered by the generated current and its property of cut-off voltage results in controlled descending along the rope.

No. of Pages: 31 No. of Claims: 10
Title of the invention: USE OF EP4 RECEPTOR ANTAGONISTS FOR THE TREATMENT OF NASH-ASSOCIATED LIVER CANCER

Abstract:
This invention is directed to prostaglandin E2 receptor 4 (EP4) antagonists useful in the treatment of nonalcoholic steatohepatitis (NASH)-associated liver cancer in a human or animal. The method comprises administering one or more of Compound A, Compound B, or Compound C or pharmaceutically acceptable salts thereof as the EP4 antagonist(s). The method may include a pharmaceutical composition comprising the EP4 antagonist(s) and may include one or more other active agents and/or therapies.
Title of the invention: MULTIFILAMENT YARN WITH VARYING DENIER TYPICALLY FOR DIFFERENTIAL DYEING IN SINGLE BATH

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<tr>
<td>D02J</td>
<td>Address of Applicant: 3RD FLOOR, MAKER CHAMBER-IV, 222, NARIMAN POINT, MUMBAI-400021, India</td>
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<td>D02G</td>
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<td>(72) Name of Inventor:</td>
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<tr>
<td>1) GUPTA, Kamal Kumar</td>
<td>2) KADAM, Sandesh C</td>
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<td>3) PENDSE, Nitin</td>
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Abstract:
ABSTRACT A TEXTURIZED MULTIFILAMENT YARN WITH VARYING DENIER, APPARATUS AND PROCESS OF PREPARATION THEREOF

The present disclosure provides a texturized multifilament yarn comprising a plurality of texturized filaments wherein each filament varies in denier along its length. The present disclosure also provides an apparatus (100) and a process for preparing the yarn comprising varying denier along its length. The process comprises feeding filaments (101) into a processing unit (103) using a feed roller (102) followed by processing and drawing the filaments (101) simultaneously to obtain texturized filaments. A plurality of texturized filaments is obtained and combined to obtain the texturized multifilament yarn (107). The present disclosure uses a simple and direct process to achieve lengthwise variation in denier of the yarn for obtaining improved aesthetic characteristics of the yarn.

No. of Pages: 45 No. of Claims: 26
The invention discloses porous, bioactive glass and glass ceramic morsels or pellets to be used as tissue graft substitute materials and processes for obtaining the same wherein the bioactive glass and glass ceramic morsels or pellets are made up of natural agents like phosphate, calcium, sodium and other elements which are not alien to the human or animal body. The said preparation process encompasses various steps like quenching, sintering, foaming, and sol-gel casting which render the glass morsels or pellets unique bioactivity and enhanced porosity which may facilitate tissue repair and augmentation during tissue graft replacement. To be published with Figure 1

No. of Pages : 45 No. of Claims : 21
The present disclosure relates to the field of diagnosing foot inflammation. The envisaged system is compact, portable and light in weight. The system includes a hollow box, at least one sensor, an image capturing device, and an electronic unit. At least one sensor and the image capturing device are disposed within the hollow box, and are placed opposite to each other. The at least one sensor is configured to detect the placement of both the feet of the user. The image capturing device is configured to capture a thermal image of both the feet. The electronic unit is configured to receive the thermal image from the image capturing device, and is further configured to analyze the received thermal image to determine the presence of foot inflammation by identifying asymmetric hot spots on the corresponding portions of the left foot and the right foot.

No. of Pages : 21 No. of Claims : 10
Title of the invention: A BACKPACK FOR VISUALLY IMPAIRED USER

Abstract:
ABSTRACT A BACKPACK FOR VISUALLY IMPAIRED USER The present disclosure relates to the field of backpacks to provide safety to blind people. Conventional arrangements fail to provide the same. The present disclosure envisages a backpack (100) comprising an electronic unit (106) placed inside the backpack (100) to aid the blind people to navigate easily. Each of shoulder straps (126, 128) of the backpack (100) comprise at least one first sensor module (102) and at least one second sensor module (104) to generate at least one sensed signals and transmit the at least one sensed signals to the electronic unit (106). The electronic unit (106) processes the electric signal and activates at least one vibrator (112). The electronic unit (106) controls remotely controlled appliances with the help of a microphone (116) and a GPS module (114) incorporated in the electronic unit (106).

No. of Pages: 17 No. of Claims: 9
The Patent Office Journal No. 24/2018 Dated 15/06/2018

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(21) Application No.201841021108 A

(22) Date of filing of Application :06/06/2018

(23) Date of publication of Application : 15/06/2018

(54) Title of the invention : CHAIN-ROPE ELEVATOR

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<td>(38) Name of Inventor</td>
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<td>3) SELVARAJ VIGNESH BALARAMAN</td>
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</table>

(57) Abstract:
In order to avoid these type of insecurities and to assure the safety, The claiming invention is independent of the existing systems. Here the four sprockets are mounted in the driving shaft and the driven shafts have four spur gears are mixing in two pairs mounted on a two drive shafts in both sides in shown in fig. And the drive shafts are connected to the gear box. And the electric motor is activated in the gear box and the drive shafts and sprockets are rotated then the chainrope is operates the elevator platform and the supporting spur gears is supported the chainrope flowing path in the elevator platform is moves up and down motion.

No. of Pages : 12 No. of Claims : 2
Title of the invention: LIPOSOMES OF COMBINED LAMIVUDINE AND STAVUDINE FOR CONTROLLED RELEASE

Abstract:
The present invention relates to the preparation of multilamellar liposomes of combined antiretroviral drugs, lamivudine and stavudine. The present invention mainly relates to the field of pharmaceuticals specific to drug delivery field. More particularly application of this prepared controlled release liposomes of antiretroviral drugs; lamivudine and stavudine for oral and parenteral administration. The invention relates to preparation of liposomes by thin film hydration technique using soya lecithin, cholesterol and tocopheryl acetate and drugs in different weight ratios. The invention relates to characterization of prepared liposomes for size, shape, entrapment efficiency, in vitro drug release and physical stability. The studies demonstrated successful preparation of liposomes and effect of soya lecithin:cholesterol weight ratio on entrapment efficiency and on drug release. Maximum entrapment efficiency was found 88.53±0.578%. The prepared liposomes were found to have uniform size distribution. The percentage cumulative drug release from the optimized batch was 99.62±1.02% after 11 h of diffusion studies. Stability studies showed maximum percent drug retention at refrigerated temperature (2°C-8°C). The prepared liposomes loaded with lamivudine and stavudine provided increased solubility and protection against hostile environment of gastrointestinal tract and parenteral us and could be successfully employed for reducing toxicity.

No. of Pages: 20 No. of Claims: 7
Title of the invention: SYSTEM AND METHOD FOR ANALYSIS OF SOFTWARE RELIABILITY

Abstract:
Exemplary embodiments of the present disclosure are directed towards a method for analysis of software reliability comprising of: collecting failure events data in a software lifecycle and the collected data is subjected to a study for analysis and based on the study a relevant software reliability growth model is chosen and analysed; identifying a plurality of characteristics of the software reliability growth model undergoing analysis and the estimated parameters from software reliability growth model are obtained by using magnitude of relative error and sum of square errors; obtaining a model customised to fit into the requirements by substituting the estimated parameters in the selected software reliability growth model and the assessment of the predictability of the performance of the model is done by using predetermined calculations; and making of decisions by computing quantitative measures in combination of relevant software reliability growth model.

No. of Pages: 20 No. of Claims: 8
The proposed invention is a polyester sheet based flexible sensor used for fracture detection. The sensor made of two microstrip patch antennas, is wrapped over the affected region and scanned for chosen step angle. The reflection characteristics of the microstrip patch antenna depends on the permittivity of the material it is placed on. The invention uses the fact that the difference in permittivity of healthy and fractured bones changes the reflection characteristics of the patch antenna. In this invention the microstrip patch antenna has a defected ground structure in its ground plane. The resonant frequency of the microstrip patch antenna changes when it scans over the region of fracture in the bone. The slope of the change in the resonant frequency of the patch antenna is used to localize the position of the fracture. The extent of fracture is computed using the difference in reflection coefficient between the two patch antennas.
Title of the invention : TUNABLE BAND NOTCHED FILTENNA

Abstract:
This invention presents a tunable band notched UWB filtering antenna. The proposed filtering monopole antenna rejects the narrow band interferences at 3.5 GHz (WiMAX), 5.2 GHz and 5.8 GHz (WLAN) in the UWB spectrum. The designed prototype is composed of a semi ellipsoid radiator and a 50 Q feed line to cover the bandwidth ranges from 3.1 GHz to 10.6 GHz according to the FCC standard. The microstrip 50 Q transmission line of the designed prototype also incorporates an UWB filter to acquire the sharp roll off at the edges of the UWB spectrum. In addition, this filtering antenna also comprises of an Asymmetric T shaped Open Ended Stubs (ATOES) and two J shaped Open Ended Stub (JOES) to create three band notches at respective frequencies that eliminates the in band interferences in the UWB spectrum. These three band notched frequencies are tuned continuously using the loaded varactor diodes individually. The centre frequencies of the three notch band are tuned from 3.57 GHz to 3.31 GHz for WIMAX and 5.45 GHz to 5.26 GHz and 6.10 GHz to 5.78 GHz for WLAN with percentage tuning of 7.5 %, 5.38 % and 3.54 % respectively. Thus the proposed multifunctional filtering antenna provides better frequency selectivity by the creation of transmission zeros and possess high attenuation at the band notched frequencies.

No. of Pages : 10 No. of Claims : 10
Title of the invention: SYSTEM AND METHOD FOR DETECTING UNAUTHORISED DEVICES IN A SYSTEM OF TELECOM NETWORKS

Abstract:
The present disclosure relates to authentication system, and, more specifically, to system and method for suppression/prevention of the use of cloned/unauthentic cell phone devices in a cellular network. More specifically, system and method enables for detecting an authorized/ unauthorized device in the network. Accordingly, an aspect of the present disclosure relates to a system for detecting an authorized device in a network. The system can include a database of authorized pairs/combinations of connection identifications (IDs) and device identifications (IDs), and a network monitor and server.

No. of Pages: 40 No. of Claims: 15
Title of the invention : DESIGN AND FABRICATION OF MOVING FIXTURE IN A SPOT WELDING MACHINE

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<td>Name of Inventor</td>
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Abstract:
Resistance spot welding is the most widely used form of the electric resistance welding process in which faying surfaces are joined in one or more spots. The main objective of this project is to reduce the accident while working the welding machine in an industry. The operators handle the fixture in spot welding machine by using their hands, by doing this there has more chances to get injuries. At the same time while lifting the fixture, fatigue may cause for the operator because of the overweight. To weld the Part operators, need to lift and handle the fixture from one place to another place. This will be increase more fatigue to the operator. By moving the object (fixture) we can easily avoid accident and also, we can reduce fatigue to the operator and increase the productivity as well. With the help of this project we can easily find the repetitive turning movement comes across while loading and uploading the job in fixture.

No. of Pages : 11 No. of Claims : 8
In Fireworks Industries, Aluminium is one of the main chemicals which exhibit excellent performance towards display in fireworks. However, fine Aluminium powder is being used nowadays which has more fire hazards since it is associated with pyrophoric, highly exothermic when mixing with water leads to detonation. In order to minimize the workplace accidents, the explosive composition has to be modified with less hazardous chemicals without compromising the quality of fireworks display. From literatures, it is found that Boron has suitable and beneficial properties similar to Aluminium. Boron possess higher heat of combustion (approximately twice that of Aluminium) and doesn’t have any affinity to water. Though Boron is safe to handle, yet it is very expensive. Hence instead of pure Boron, Boron compounds can be suggested. This patent suggests blending Boron in the form of Borax with the existing composition by replacing Aluminium. Borax is much cheaper than Aluminium. Here Borax is replaced for Aluminium in nine different proportions and the impact sensitivity tests, friction sensitivity tests and noise tests are conducted. The result shows some significant changes when compared with the existing firework composition.

No. of Pages: 9 No. of Claims: 7
The present invention relates to the process of preparation of melanin-typhoid polysaccharide microparticles from the cell free supernatant of Streptomyces spinoverrucosus. The microparticles when injected into mice models triggered T-cell dependent immune response against the polysaccharide which is comparable or even better than the traditional conjugate vaccine. The polysaccharide microparticle confers higher titers than the traditional polysaccharide conjugate with same amount of antigen. This microparticle vaccine can be a credible and potential alternative to the currently marketed typhoid conjugate vaccines. These melanin microparticles induce T-cell dependent immune response to the poorly immunogenic polysaccharide. This is a very simple and safer alternative to the cumbersome conjugation process with cyanylating agents which may be carcinogenic.

No. of Pages : 8  No. of Claims : 3
(54) Title of the invention: DEPICTION AND CREATION OF MODIFIED BIO-TOILET

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(57) Abstract:
This invention revolves around constructing a bio-toilet, in which major changes have been implemented in rectifying the defects like clogging problems, methane emission, improper working of pneumatic ball valve and wastage of effluent water. Capacitive sensor, desiccator, agitator and gating systems are used to avoid those above mentioned defects with anaerobic and aerobic bacterial actions. From this, the production of methane gas is accelerated and the overall gas losses to the surrounding are also minimized without any clogging. In one embodiment, bio-digester with all five compartments. In further embodiments, capacitive sensors and agitator and the methods of working are enclosed.

No. of Pages: 15 No. of Claims: 9
Title of the invention: HIGH PERFORMANCE LOW POWER (HPLP) COMPUTER VISION BASED REAL-TIME DRIVER FATIGUE DETECTION METHOD AND ALERT SYSTEM

HIGH PERFORMANCE LOW POWER (HPLP) COMPUTER VISION BASED REAL-TIME DRIVER FATIGUE DETECTION METHOD AND ALERT SYSTEM

A high performance, low power (HPLP) non-intrusive, real-time computer vision based driver fatigue detection method and alert system is developed, which is capable of monitoring on-board driver’s fatigue. An image capturing means captures continuous streams of video images of driver’s face. The captured continuous streams of video images are converted into frames, and image processing is performed. The system uses a trained high performance eye classifier (THPEC) algorithm, which is trained with appearance-based and feature-based methods for accurately and reliably detect face features of the driver. When the level of fatigue of the driver exceeds certain predefined threshold, the system activates visual and/or audible alarm for the driver to stop the vehicle. If the system determines that the vehicle’s speed did not decrease after three seconds of the initiation of the first visual and/or audible alarm, then the system sends an SMS (text message) to a third party reporting the occurrence with a warning to stop the vehicle.

No. of Pages: 28 No. of Claims: 12
The present disclosure relates to a two-wheeled self-balancing vehicle, which is compact and facilitates switching between a left-hand drive configuration and a right-hand drive configuration. Two electrical motors are configured to provide drive to the vehicle. Pedal controls are configured to control the speed of the vehicle. A steering mechanism is configured to steer the vehicle. The steering mechanism has a steering wheel coupled to an axle of the vehicle via a steering rod and is configured to steer the vehicle. A sliding mechanism is configured to facilitate lateral movement of the pedal controls and the steering mechanism to facilitate switching between the left-hand drive configuration and the right-hand drive configuration. A balancing unit which includes a pair of first set of reciprocating cylinders and a pair of second set of reciprocating cylinders, and is configured to balance the vehicle.

No. of Pages: 25 No. of Claims: 11
**Title of the Invention:** COMPACT DRINKING WATER COOLING AND HEATING SYSTEM WITHOUT COMPRESSOR OR HEATER

**Abstract:**
The process and schematic of heating and cooling drinking water using peltier module, copper blocks and Radiator.

No. of Pages: 11  No. of Claims: 1
Title of the invention: WARP BEAM LEVEL MONITORING AND INTIMATING KNOTTING SERVICE USING WIRELESS NETWORKS

The loom industry contributes 62 percent of the textile production in India which is done only on looms. Indian loom industry is equipped with 2.43 million looms which producing 54,000 square meters of cloths and providing 57.45 lakhs of income via direct & indirect employment. Loom industry focused on various clusters of regions include Erode, Coimbatore, Tiruppur, Salem, Madurai, Solapur, Bhiwandi, Malegaon and Bhilwara. These are capable of producing many varieties of bleached gadas, dyed gadas, lungies, printed sarees, furnishing covers, pillow covers and blended dhoties. A device called the warp beam plays a major role, by supplying raw material for weaving. Once the warp becomes empty, a new warp beam has to be replaced with the help of knotting service. The knotting service provider is contacted and informed about the requirement of their service. It is easy to monitor manually when the number of looms is less, whereas it is tedious to monitor when unit is large. It requires the person to monitor and to notify the knotting service provider to replace the warp beam. This proposed system continuously monitors the warp beam level and intimates the knotting service providers before the warp beam is exhausted. The system uses incremental optical rotary encoder for monitoring the warp beam level and a microcontroller for processing the incremental optical rotary encoder input. When the level of warp beam reaches the calculated threshold, GSM > module is triggered to send a message to knotting service provider along with the location using : GPS module.

No. of Pages: 10 No. of Claims: 7
The present invention relates to the purification of pheomelanin from the culture supernatant of Streptomyces spinoverrucosus. It further relates to the purification of pheomelanin from the supernatant left over after acid precipitation of eumelanin. The Streptomyces spinoverrucosus isolated from marine source was grown in a culture medium, cells separated, eumelanin was precipitated by acid precipitation, the left over supernatant after centrifugation was heat treated, filtered through molecular weight cutoff membrane, chromatographed and vacuum dried to yield pheomelanin. The pheomelanin markers were identified by FTIR, GC-MS and LC-MS. The specific pheomelanin bands at 1176 and 775 cm\(^{-1}\) were observed in FTIR spectra along with other common markers for eumelanin. ESI-MS spectra from positive ionization mode showed two major ions corresponding to molecular mass of monomer of eumelanin at 178 and monomer of pheomelanin at 256. The pheomelanin marker 7-(2-amino-2-carboxyethyl)-5-hydroxy-2H-1,4-benzothiazine with molecular mass of 252 was identified by GC-MS. Pheomelanin has not been purified and characterized from a bacterial source till date and this is the first study to report on this regard. Pheomelanin is not available commercially and this process can be used to produce pheomelanin in high quantities.
Title of the invention: AUTONOMOUS BOARD SWABBING MACHINE

Abstract:
This invention encloses the design of autonomous board swabbing machine. The board is one of the most important writing media in all classrooms. Nearly, 70% - 80% classroom uses board as instruction medium. These boards are wiped manually with the help of dusters. So, the person who is wiping the board is affected by the chalk dust that will affect the regular respiratory process. Nearly, 8 out of 10 persons are affected by this problem. In order to overcome the effects of dust on humans, we propose a system which consists of simple vertical duster frame which is powered by two electric motors moving in predefined guideways to automatically wipe the board. More specifically it contains two electric motors, one vertical frame with dusters, two similar horizontal guideways and micro-controller to automate the blackboard wiping process. Two electric motors are attached to the top and bottom ends of the vertical frame. The vertical frame is fixed with dusters to cover the length of the board as it will be moving in the horizontal direction. The motor shaft is then attached with a wheel to move forward and backward in the guideways. Two horizontal guideways are fixed above and below the regular board.

No. of Pages: 11
No. of Claims: 6
Title of the invention: SYNCHRONOUSLY RUNNING ELECTRIC VEHICLE BY USING POWER REGENERATIVE SYSTEM

Abstract:
THE PROCESS OF DESIGNING SMART ELECTRIC VEHICLES IN REAL TIME REQUIRES THE STUDY OF MAIN FUNCTIONAL PARAMETERS OF VEHICLES BASED ON ANALYTICAL AND CALCULATED APPROACHES FOR ANALYZING AND SPECIFYING THE DESIGNING COMPONENTS SUCH AS BATTERY, MOTOR, ELECTRIC CONTROLLER AND TRANSMISSION. SAFETY ISSUES, COSTS OF RUNNING, ARCHITECTURAL IMPLEMENTATIONS AND BATTERY CHARGING WITH MAINTENANCE ALONGSIDE ARE VALUED. THE MAIN IDEA BEHIND THIS CONCEPT IS ALL ABOUT INCREASING THE DRIVING RANGE OF ELECTRIC VEHICLES BY INTRODUCING A POWER REGENERATION SYSTEM WHICH IS DIRECTLY CONNECTED DIRECTLY WITH THE MOTOR DIRECTLY THIS IN TURNS HELPS ONESELF TO SAVE FUEL BY IMPROVING THE DRIVING RANGE BY FEW MILES.

No. of Pages: 18 No. of Claims: 7
Title of the invention: ELECTRONIC DEVICE AND MULTI-TYPE AND MULTI-LOCKING METHODS THEREOF

Abstract:
An electronic device and multi-type and multi-locking methods thereof and computer readable storage medium having stored instructions implemented using methods described thereof are disclosed. The method comprising the step of: selecting, by the user, one of the locking types among a plurality of locking types to lock an electronic device; determining that a pop-up opens and displays a plurality of locking types, whereas the current lock used on said electronic device is also included, if the user presses the lock button of said device; selecting, by the user, one of the locking type among a plurality of locking types including current lock to lock said electronic device; providing that said lock is automatically changed to unselected locking type other than the current lock by either serially or randomly. Corresponding methods are also described thereof.

No. of Pages: 35  No. of Claims: 18
Title of the invention: RECONFIGURABLE IOT NODE DEVICE

Abstract:
The present invention relates to a reconfigurable IoT node device comprising of a microcontroller. The microcontroller comprises of a microcontroller reset circuit to reset the controller operation externally. The oscillator circuit provides the clock pulse for the microcontroller’s synchronous operation. The USB interface connects the microcontroller as a peripheral device to a host device. Serial communication interface loads the reconfigurable data into the microcontroller’s internal EEPROM memory. Wireless Module Interface is a serial interface which is used to connect a wireless device which establishes the wireless communication link with a gateway or a router. The external power supply is connected from the external power source such as power adaptor or AC-DC buck converter, etc. The second is a battery power supply. Power supply switch over circuit is used to switch between two power sources. The parameters of internal GPIOs of the microcontroller are reconfigured based on the application need.
Title of the invention: TUTELAGE DEVICE

Abstract:
Self defense techniques are the first and foremost thing to which each and every woman must be aware of. Although there are various gadgets in market, but there is no complete solution. This brought our attention towards women safety and security. Our motive and idea is to reduce sexual assaults and increase the safety and self defense for women through "Tutelage device". The Tutelage device is an electrical immobilization device that emits high voltage with low current electrical discharge through probes in case of emergency and simultaneously send a distress signal to the control room and personal registered number with the help of GPS and GSM embedded in the device and the usage details of the Tutelage device are stored in the memory card placed in the third layer. Self defense for women being top priority in the nation, we introduce tutelage device which will create great impact on National women security.

No. of Pages : 15 No. of Claims : 6
(54) Title of the invention : DESIGN A HYBRID AND FLEXIBLE DISSOLUTION TESTING APPARATUS BASED ON HYDRODYNAMIC PERFORMANCE

(51) International classification : H02S10/00
(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. T. Vinay Kumar
3) Dr. S. Balaiah

(72) Name of Inventor :
1) Mr. Harekrishna Roy
2) Dr. T. Vinay Kumar
3) Dr. S. Balaiah

(57) Abstract :
In pharmaceutical industry, drug dissolution testing is routinely used to forecast the possible in-vivo drug release and for quality-control assessment. Dissolution described as a mass transfer process and are under the influence of both thermodynamic and hydrodynamics. The selection and performance of dissolution apparatus highly depends on hydrodynamic especially for low soluble drugs. Over the past few years numerous studies and experimental models are being designed to establish a surrogate for human bodies. Based on above mentioned performance and results, several official and non-official apparatus are designed. In this regards, we proposed a new hybrid dissolution apparatus, which can combine works as an alternative to USP Type-II and USP Type-V. During this experimental approach, the cost and feasibility for small scale labs were primarily considered. The major challenge for this proposed work was the principal design of instrument and selection of suitable construction materials especially polymers (Most chemical and temperature Resistance). In preliminary step, we proposed and designed a sketch and manufactured as per the need of suitable dissolution apparatus. Furthermore, a deep study is needed to qualify the proposed instrument to meet the FDA need and regulation. We hope that, our invention would provide the platform for simultaneous release study of solid as well as transdermal delivery devices and would encourage the young budding scientist of our generation to create innovation and new era in pharmaceutical dissolution field.

No. of Pages : 9 No. of Claims : 7
TITLE: Exponential energy method for bicycle. A vehicle (100) including multiple sprockets and chain sets by a way of multiplying speed by means of an exponential energy method is disclosed. The vehicle (100) comprising: a plurality of sprocket wheels (4,6,9,11,14,16) and a plurality of chain links (5,10,15) including first chain link (5) which connects first large sprocket peddle wheel (4) to second small sprocket wheel (6) which in turn is fitted with second large sprocket wheel (9), second chain link (10) which connects second large sprocket wheel (9) to third small sprocket wheel (11) which in turn fitted with third large sprocket wheel (14) and third chain link (15) which connects third large sprocket wheel (14) to fourth small sprocket wheel (16) which in fitted with wheel tyre (25). The speed of rotation of the vehicle can be increased number of times using number of chain and sprocket sets.

No. of Pages : 15 No. of Claims : 6
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<td>(57) Abstract</td>
<td>The present invention is a hover bike comprising of plurality of propellers attached to its end and will cause the bike to hover in the air. The invention further comprises of two handles which will be used for accelerating and de-accelerating the Hover-Bike and their control movements will be easily done with the help of the two levers which will be present at the bottom of the hover-bike, thereby providing a movement in the propeller which will automatically make a change in the direction of the movement of the bike.</td>
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No. of Pages: 12
No. of Claims: 6
Exemplary embodiments of the present disclosure are directed towards a system and method for reporting and monitoring of traffic management. The method includes identifying a real time location of an end-user automatically through a traffic violation reporting module, whereby the real time location includes geo-details like date, time and place, selecting "record" option from the traffic violation reporting module and recording the traffic violation's video at a predetermined time interval. The method further includes displaying the recorded video to preview the quality of the recorded traffic violation video before submitting the recorded video, and selecting "submit" to upload the recorded video of the traffic violation.

No. of Pages : 24
No. of Claims : 10
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201741020214 A
(19) INDIA
(22) Date of filing of Application :08/06/2017
(43) Publication Date : 15/06/2018

(54) Title of the invention : HETEROCYCLIC COMPOUNDS USEFUL AS ANTIBACTERIAL AGENTS AND METHOD FOR PRODUCTION THEREOF

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Title of the invention: A SYSTEM FOR SUPERVISING AN OCCUPANT OF A WHEELCHAIR

Abstract:
ABSTRACT A SYSTEM FOR SUPERVISING AN OCCUPANT OF A WHEELCHAIR A system (100) for supervising an occupant of a wheelchair relates to the field of electronics engineering. The system (100) enables an authorized person to effectively supervise the occupant. The system (100) further enables the occupant to control electrical appliances. The system (100) includes a plurality of sensors (102) configured to sense various parameters related to the occupant and the wheelchair. The sensed parameters are stored in a server (108), which enables the authorized person to effectively supervise the occupant and take necessary actions in case of the health of the occupant deteriorates. The system (100) also enables the authorized person to track the wheelchair, and to locate the wheelchair if the wheelchair meets an accident. Further, the system (100) enables the occupant to control the electrical appliances while sitting on the wheelchair.

No. of Pages: 17 No. of Claims: 10
The present disclosure relates to a control system (100) for controlling operation of a retractable roof. In accordance with the present disclosure, the control system (100) comprises at least one sensor (102), a control and switching unit (104) and an actuating unit (110).

The at least one sensor (102) is configured to sense environmental parameters and generate at least one sensed signal. The control and switching unit (104) is configured to receive the sensed signal from said sensor (102), and is further configured to generate a driving signal. Further, the actuating unit (110) is configured to provide a mechanical drive for effecting extension or retraction of the retractable roof based on the driving signal.

No. of Pages : 16 No. of Claims : 8
The present disclosure envisages a neck posture monitoring device comprising a monitoring unit and a clamp. The monitoring unit comprising a first sensor to sense neck position to generate a first analog signal, a second sensor to sense back position and generate a second analog signal, an analog to digital converter to convert the first analog signal and the second analog signal to a first digital signal and a second digital signal, a comparator to compare the first digital signal with the second digital signal to generate a compared signal, an analyzer to analyze the compared signal with respect to the threshold signal value to generate an alert signal, an alerting unit to generate attention cues. The clamp is configured to securely connect the monitoring device to a chair.
The present invention provides a sustainable stain resistant composition 102 that includes (a) about 3 % to 8 % of at least one silicon nano particle surface functionalized with (Pentafluorophenyl)triethoxysilane 104, and (b) about 3 % to 8 % of at least one hydrophobic agent 106 selected from a group comprising polymer of (a) methacrylic esters of aliphatic C1 to C18 alcohols, or (b) vinyl acetate, or (c) acrylonitrile. The stain resistant composition further includes (a) at least one softening agent 110, (b) an extending agent 108, (c) at least one of (i) a wetting agent or (ii) a re-wetting agent 112, and (d) a microencapsulated odour neutralizing agent 114. The present invention also relates to a process for producing stain resistant textile 118 using the sustainable stain resistant composition 102.
| (54) Title of the invention : ELECTRICAL TOOTHBRUSH WITH AN ORAL IRRIGATOR |
| (51) International classification : A61C17/349; A61C17/3418; A61C17/3436 |
| (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) SRM UNIVERSITY
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(72) Name of Inventor :
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2) V Pradeep Kumar
3) RAJA PANDIAN
4) KALAIVANI. V
5) NIDHI PRIYA
6) SHREYA PRASAD
7) ASHI MADHARIYA

(57) Abstract : ELECTRICAL TOOTHBRUSH The present disclosure relates to the field of toothbrush. A conventional electrical toothbrush fails to provide total dental hygiene due to limited accessibility of areas within the mouth. The present disclosure envisages an electrical toothbrush embedded with an oral irrigating unit for dental hygiene. The electrical toothbrush comprises a handle portion, a head holding portion, and a head portion. The head portion has a disc having bristles extending therefrom, which is configured to rotate. The oral irrigating unit includes a pump, a cistern, and a pipe. The cistern stores a fluid. The pump pumps the fluid stored in the cistern through a pipe towards the head portion. At least one motor is provided in the handle portion, and is configured to provide rotary drive to a head control mechanism, and a disc control mechanism. A battery provides power to at least one motor, and the pump. Figure.2

No. of Pages : 20 No. of Claims : 10
**Title of the invention:** AN ASSISTIVE ROBOTIC SYSTEM

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<td>3) GANTI SRI GIRI SAI SURAJ</td>
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**Abstract:**
ABSTRACT AN ASSISTIVE ROBOTIC SYSTEM The present disclosure relates to an assistive robotic system. The system comprises a memory for storing a predetermined set of rules, a plurality of pre-stored images associated with a plurality of persons, and a plurality of pre-stored audio signals associated with the persons. The system comprises a microcontroller for generating system processing commands, a plurality of sensors for sensing a plurality of parameters and generating a plurality of sensed signals, at least one camera for capturing at least one image, at least one microphone for sensing audio signals, an obstacle detector for detecting obstacles present in a path, an image identifier for identifying persons present in the captured image(s), an audio identifier for identifying persons associated with the sensed audio signals, and an alerting module for generating an alert based on the identified persons, and a navigation module for facilitating navigation.

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

ABSTRACT A TROLLEY The present disclosure relates to the field of trolleys. The present disclosure envisages a trolley that enables dental professionals to handle tools and equipment placed within the trolley simultaneously. The trolley is wirelessly controlled and comprises a housing, a sterilization unit and an electronic unit. The sterilization unit is configured on an operative top portion of the housing, and is used for sterilizing a plurality of dental tools & equipment. The electronic unit is disposed within the housing, and is connected to a remote device. The electronic unit is configured to regulate the temperature & pressure within the sterilization unit, based on the plurality of commands received from the remote device. The electronic unit is further configured to control the displacement of the trolley.

No. of Pages : 20 No. of Claims : 10
In the recent trend of the real world, people are interested in automation of environmental works such as protection of historical materials, buildings, monitoring small objects like important files, school bags, etc. Specifically, many places in India, people give more importance to tradition and heritage, it is obvious to give protection to traditional monuments. It has been estimated that around 413 idols in Tamil Nadu, 506 idols in Karnataka, 203 idols in Gujarat, 174 idols in Delhi are found untraceable till January 2018. This has become a serious issue and there is a need of achieving immediate solution. This can be achieved by using the technology Internet of Things (IoT). The objects in the structured (Indoor) environment have been assigned an IP address and have the ability to connect and transfer data over a network without manual assistance or intervention. Spotting an object in a global environment is obvious using Global Positioning System whereas the locating objects in the local environment is quite complex. An innovative solution of locomotive detection - idols using IoT has been made to find accurate positions with low error to yield good outcomes. Positioning an object in the local environment can be carried out by Radio frequency identification technology. This system makes use of GPS and RFID for estimating the position and direction of the object in both local and global networks. Collision avoidance techniques are used to sense multiple data at a time by dividing it according to the time slots. The local structured environment is protected by capturing malicious objects, monitoring the crucial items, immediate alert and keeps track of smoke levels. These data are sent to specific micro-controller via router using protocols such as MQTT, etc. The micro-controller Raspberry pi extract, process and analyze the data in the cloud. The alert messages have been sent to the admin and police station using SMTP. These data can be viewed in the user terminal through wireless networks. The overall benefits of the designed systems are low error, high reliability, and simultaneous reception of various environmental data.
Abstract:
The rapid increase in traffic intensity on roads has become almost indispensable in human life. At the same time we find there is tremendous change in climate due to "Global warming" effect on the earth. So deterioration of roads by their age and their condition has become an unavoidable phenomenon in day to day life. As the days pass on, all roads need rehabilitation. Rehabilitation of pavement is a major activity for all highway agencies and has several consequences on an agency resources and traffic disruption because of extensive and extended lane closures. The traffic volume on the primary highway system has seen tremendously being increasing which is leading to failures of highway pavements. The aging of the highway system and other primary systems built long ago has resulted in the expenditure of a large portion of highway funds on pavement rehabilitation which does not use proper method / technique and materials for rehabilitation and hence again fails. Efforts to develop innovative techniques and procedures that will result in cost effective, environmental friendly and long lasting pavement rehabilitation to serve the nation’s highway and other road systems well into the 21st century should be made.
**Title of the invention :** A HYBRID INJECTOR ASSEMBLY

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<td>1) INDIAN INSTITUTE OF SCIENCE</td>
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<tr>
<td></td>
<td>Address of Applicant: Bangalore 560 012, Karnataka, India</td>
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**Abstract:**

Present disclosure relates to a injector, which comprises a first lance, provisioned with at least one first inlet port, to receive a first fluid. Further, a second lance is coaxially disposed within the first lance, and provisioned with at least one second inlet port, to receive a second fluid. The injector further includes a tube member, disposable within the second lance to receive the first fluid at one end, while sealed at another end. The tube member is provisioned with at least one recess for the first fluid in the tube member to mix with the second fluid and form the effervescent fluid. The effervescent fluid is then dispensed through at least one of a first exit port of the first lance and a second exit port of the second lance. The injector may be employed in applications such as, fuel injection, spray coating, cooling, drying, and the like. Figure 1.

No. of Pages: 24 No. of Claims: 11
A novel master-key management technique has been proposed for the purpose of managing the keys which enhance the health care information security and the multi-key server approach is used for balancing the load in key server which provides quick access to patient’s health care data. This research focuses on the development of a new architecture of the large scale e-Healthcare group key management system to facilitate a secured and reliable assist among the health care enterprises, service providers and users. We have implemented and tested in a group of health care users joining and leaving dynamically and validated by applying it to virtual servers, which shows that the rekeying overhead, threats and communication time of health care network system are minimized when compared with the existing schemes. This research work is driven by investigation of different healthcare enterprise systems, consultations with hospital, data centre, and medical device firm employees and sourcing industry knowledge from thought leaders.

The proposed e-healthcare group key management system minimizes the threats as much as possible. Hence, this proposed technology provides faster and secured data accessed to health care network applications such as telemedicine and healthcare information system. Healthcare systems are heterogeneous by nature, where each device is running on different architectures, platform and operating system. This heterogeneity affects the communication performance in-terms of delay and security is concerned. An optimized quantum key management technique has been proposed for the purpose of managing the keys with little overhead, which enhance the health care information security by reducing the threats. And also the communication with the key authority is simulated with the quantum channel. The generated key is distributed via a dedicated quantum channel in terms of quantum bits which decreases the eavesdropping rate, transmission error, and leakage to maximum extent which improves the security further. Numerical results are also provided to validate the performance of the proposed key generation, optimization and quantum distribution.

No. of Pages : 16 No. of Claims : 5
The present disclosure relates to a multi-purpose robotic system. The multi-purpose robotic system comprises: a memory for storing a predetermined set of rules, a microcontroller for receiving the predetermined set of rules and generating system processing commands, a plurality of sensors for sensing plurality of parameters with respect to the robotic system and generating plurality of digital signals, a navigation module for navigating the robotic system based on the digital signals, under the system processing commands and at least one robotic arm for receiving at least one attachment to perform at least one function, under the system processing commands.

No. of Pages: 23 No. of Claims: 6
The present disclosure relates to energy efficient ultra violet lamp for light therapy by the application of Quantum dot Cellular Automata (QCA) based nanotechnology. In conventional methodology, ultra violet lamp for light therapy applies 120 Volt AC supply and consumes about 100 watt power per lamp to radiate ultra-violet wave. The Quantum Dot Cellular Automata paradigm festivities a methodology which may radiate Ultra Violet wave bearing exact energy and frequency of 3.29 eV and 9.68X10^{14} Hz respectively ensuring a wavelength radiation of 310 nm. Such radiation is able to treat skin disorders, psoriasis, vitiligo, acne vulgaris, eczema and neonatal jaundice at per with prevalent technique. The proposed system employs a supply voltage of 1.13 Volt AC and power consumption in the range of 1 to 2 watt at the maximum and operates in room temperature.

No. of Pages : 18 No. of Claims : 9

The Patent Office Journal No. 24/2018 Dated 15/06/2018 21987
The present invention discloses an energy efficient ultra violet lamp by the application of Quantum dot Cellular Automata (QCA) based nanotechnology. In conventional methodology, ultra violet lamp for water purifier applies 100 Volt to 140 Volt supply and consumes 80 to 110 watt power to radiate ultra-violet wave. The Quantum Dot Cellular Automata paradigm executes a methodology which may radiate Ultra Violet wave bearing exact energy and frequency of 3.29 eV and $11.53 \times 10^{14}$Hz respectively ensuring a wavelength radiation of 260 nm. Such radiation is able to destroy microorganisms most. The proposed system employs a supply voltage of 1.5 Volt and power consumption in the range of 1 to 2 watt.
The present invention discloses a cost effective Bug Zapper system operating with the application of Quantum dot Cellular Automata (QCA) based nanotechnology. In conventional methodology, ultra violet bug zapper applies 6 Volt supply and consumes 15 to 150 watt power to radiate ultra-violet wave. The Quantum Dot Cellular Automata paradigm discloses herein a methodology which may radiate Ultra Violet wave bearing exact energy and frequency of 3.29eV and 8.219 X 10^{14} Hz respectively ensuring a wavelength radiation of 365 nm. Such radiation attracts insects most. The proposed system employs a supply voltage of 1 Volt and power consumption in the range of 1 to 2 watt as described in the Figure -700.
Title of the invention: A MOLECULAR QCA BASED UV LAMP FOR WATER PURIFICATION

Abstract:
The present invention discloses an energy efficient ultra violet lamp by the application of Quantum dot Cellular Automata (QCA) based nanotechnology. In conventional methodology, ultra violet lamp for water purifier applies 100 Volt to 140 Volt supply and consumes 80 to 110 watt power to radiate ultra-violet wave. The Quantum Dot Cellular Automata paradigm executes a methodology which may radiate Ultra Violet wave bearing exact energy and frequency of 3.29 eV and 11.53 x 10^{14} Hz respectively ensuring a wavelength radiation of 260 nm. Such radiation is able to destroy microorganisms most. The proposed system employs a supply voltage of 1.5 Volt and power consumption in the range of 1 to 2 watt.

No. of Pages: 18 No. of Claims: 9
The present invention relates to a method of preparing Newcastle disease vaccine. More particularly, the present invention relates to a method of preparing live attenuated thermostable Newcastle disease vaccine having lentogenic strain which is locally isolated. Moreover, this invention relates to the method for the preparation of the live attenuated thermostable Newcastle disease vaccine wherein selected viral isolates were serially exposed different higher temperature for longer period for heat adaptation. The present invention relates to a method of preparing live attenuated thermostable Newcastle disease vaccine having locally isolated lentogenic strain vaccine virus wherein this selected thermal adapted lentogenic strain virus is attenuated by serial passages in specific pathogen free (SPF) fowl eggs.

No. of Pages : 49 No. of Claims : 8
(54) Title of the invention : AN INTELLIGENT AND A SELF-LEARNING FLUID DETECTION APPARATUS AND METHOD THEREOF

| (51) International classification | :G01N21/00 |
| (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) Dr. Dillip Kumar Ghose
Address of Applicant : Department of Civil Engineering, NIT Silchar, Assam, India

2) Sandeep Samantaray

(72) Name of Inventor :
1) Dr. Dillip Kumar Ghose
2) Sandeep Samantaray

(57) Abstract :
The present invention provides an intelligent and a self-learning fluid detection apparatus and method thereof. The apparatus includes a topographic analyzer configured to monitor a plurality of topographical parameters, environmental parameters and historical environmental statistics of the predetermined area, a fluid detector adapted to be detachably couple to the apparatus and configured to survey each sub-area to detect streams of underground fluid flown within the each sub-area of the predetermined area; a controller configured to process data obtained from the survey to locate at least one point of operation within at least one sub-area of the predetermined area; a driving means to automatically drive the apparatus from the current location to the at least one point of operation to excavate ground at the point of operation; an actuator for activating at least one drilling shaft having a holding end and a drilling end to excavate the ground at the at least one point of operation; a communication module configured to receive empirical data from the operations of fluid detectors.

No. of Pages : 27 No. of Claims : 10
Title of the invention: MAGNETO-ELECTRIC GAS SENSOR ARRANGEMENT.

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Name of Applicant:
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Address of Applicant: SEMICONDUCTOR RESEARCH LAB INSTITUTE OF TECHNICAL EDUCATION & RESEARCH (ITER), SIKSHA 'O' ANUSANDHAN (DEEMED TO BE UNIVERSITY) BHUBANESWAR-751030 INDIA Orissa

Name of Inventor:
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2) DR. DILIP KUMAR MISHRA

Abstract:
The present invention relates to a gas sensor arrangement for determining a gas concentration. More specifically, the present invention discloses an improved high sensitive gas sensor arrangement suitable for detecting small amount of a gas in the ambient atmosphere by a suitable nanocrystalline transition metal doped oxide semiconductor in presence of external DC electric field applied along the longitudinal direction and also an external magnetic field applied transverse direction.

No. of Pages: 21 No. of Claims: 9
**Title of the invention**: BIODEGRADABLE DENTAL MOUTH EXAMINATION MIRROR.

- **International classification**: A61B1/00
- **Priority Document No**: NA
- **Priority Date**: NA
- **Name of priority country**: NA
- **Name of Applicant**: 1) SIKSHA 'O' ANUSANDHAN (DEEMED TO BE UNIVERSITY), BHUBANESWAR
  
  Address of Applicant: INSTITUTE OF DENTAL SCIENCES (IDS), SIKSHA 'O' ANUSANDHAN (DEEMED TO BE UNIVERSITY) BHUBANESWAR-751003, INDIA Orissa
- **Name of Inventor**: 1) DR. SWADHEENA PATRO 2) DR. RAJAT GOLAK PANIGRAHI

**Abstract**:

This invention relates to a biodegradable dental mouth examination mirror and in particular, this invention relates to a dental mouth examination mirror in which the few parts are made of totally biodegradable materials like wood (cane) wrapped with paper and mirror head made of glass which has been fixed with biodegradable latex based adhesive and wrapping paper. This invention relates to a biodegradable dental mouth examination mirror which is disposable. Furthermore, this invention also relates to a biodegradable dental mouth examination mirror has the beneficial effects that the structure is simple, convenient, and the work difficulty of dental personnel is lightened.

No. of Pages: 20  No. of Claims: 9
This invention relates to a self-aspirating endodontic irrigation and suctioning device and in particular, this invention relates to a self-aspirating endodontic irrigation and suctioning device by which simultaneous aspiration of debris and necrotic material from pulp chamber can be done during an endodontic procedure. This invention also relates to self aspirating endodontic irrigation and suctioning device and be more pointing to disposable self-aspirating endodontic irrigation and suctioning device, which will be reducing the chances of interpatient infection. This invention relates to a self-aspirating endodontic irrigation and suctioning device wherein two barrels are connected with two separate plungers. This invention relates to a self-aspirating endodontic irrigation and suctioning device wherein both the plungers are connected with a flexible non-stretchable synthetic sheath. Furthermore, this invention also relates to a self-aspirating endodontic irrigation and suctioning device which has the beneficial effects of simple to operate, easy to take out, the practicality is strong and having safety and reliability.
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<th>(54) Title of the invention: MULTIPURPOSE ORTHODONTIC BRACKET POSITIONER WITH CURING LIGHT</th>
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| (71) Name of Applicant: |
| 1) SIKSHA 'O' ANUSANDHAN (DEEMED TO BE UNIVERSITY), BHUBANESWAR |
| Address of Applicant: INSTITUTE OF DENTAL SCIENCES (IDS), SIKSHA "O" ANUSANDHAN (DEEMED TO BE UNIVERSITY) BHUBANESWAR-751003, INDIA Orissa |

| (72) Name of Inventor: |
| 1) DR. SNIGDHA PATTANAIK |
| 2) ER AMIT KHATUA |

(57) Abstract:
This invention relates to an orthodontic bracket positioner device and in particular, this invention relates to an orthodontic bracket positioner device which can place the orthodontic brackets properly. This invention relates to an orthodontic bracket positioner device which will place the bracket at proper position from initially holding the bracket to final bonding with only one instrument. This invention also relates to an orthodontic bracket positioner device which has a reverse tweezers on one side to hold the brackets. This invention relates to an orthodontic bracket positioner device by which the vertical height of the bracket is determined with a vertical measuring gauge with simultaneous evaluation of the midline position of the same is done with the help of a reflective surface. This invention also relates to an orthodontic bracket positioner device which has a light curing unit for the final bonding of the bracket. Furthermore, this invention also relates to an orthodontic bracket positioner device which has the beneficial effects of simple to operate, the practicality is strong and having safety and reliability.

No. of Pages: 22 No. of Claims: 9
This invention relates to a Chair side electrically driven vibrator for dental impression tray and in particular, this invention relates to a Chair side vibrator for dental impression tray having a holding metallic plate which holds the dental impression tray. More particularly, this present invention relates to a Chair side vibrator for dental impression tray wherein the plate has two coin vibrator attached with it. This present invention relates to a chair side vibrator for dental impression tray wherein Coin vibrator is connected parallelly with recepticle ports using connecting wires. Furthermore, this invention also relates to the chair side vibrator for dental impression tray which has the advantages of cost effective and reliable running, simple and convenient testing operation, and long service life and having safety and reliability.

No. of Pages : 27 No. of Claims : 10
Title of the invention: A SYSTEM FOR DATA ACQUISITION AND CONTROL WITH ELECTRO-OCULOGRAPHY SIGNALS.

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Abstract:
A system for data acquisition and control with Electrooculography signals comprising; a EOG signal pick up arrangement from the eye to a data acquisition system; a data acquisition system configured for receiving and conditioning the EOG signal; an Arduino module with EOG information processing unit which receives the converted EOG information including object motion information, extracts object control information including the object motion information from the converted EOG information, and transmits the extracted object control information to a pre-programmed microcontroller which provides signals for object motion.

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

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Name of Inventor:
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2. MITUL CHAKRABORTY
3. ASHISH SINGH
4. DR. KARABI GANGULY
5. DR. SANDIP BAG
6. SWATI SIKDAR
**Title of the invention:** METHOD FOR PUSHING PICTURE, MOBILE TERMINAL, AND STORAGE MEDIUM

| (51) International classification | : G06T3/40, G06F17/30 |
| (31) Priority Document No | : 201710401789.5 |
| (32) Priority Date | : 31/05/2017 |
| (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 |

**Abstract:**
A method for pushing an picture, a terminal and a storage medium are provided. The method includes the follows. An image containing a facial expression of a user is acquired, when a screen is lit; the image is analyzed to determine a emotion type of the user; and a target picture is pushed according to the emotion type of the user.

No. of Pages : 38 No. of Claims : 15
A reinforcing rebar bundling machine comprising of a plurality of hydraulic cylinders for actuating connected units; a single rebar feeding module configured for feeding rebar into the said machine; a cutting module configured for shear cutting the rebars; a shaping module including a plunger for holding the rebars and configured for guiding them to vice blocks; a bending module including a hammer configured for insertion of rebar inside a jaw to form a hook; and a clamping module including clamping jaws having single degree of freedom with rotating motion within one quarter of 360 degrees attached with helical gears configured to drive the jaw towards the center of said plunger with the energized clamping cylinder.
(51) International classification : G06F3/00
(31) Priority Document No : 201710465603.2
(32) Priority Date : 19/06/2017
(33) Name of priority country : China
(36) International Application No : NA
(86) International Application No : NA
(37) International Publication No : NA
(61) Patent of Addition to Application Number : NA
(62) Divisional to Application Number : NA
(57) Abstract :
The present disclosure provides a method and a device for adjusting color temperature of a screen, and an electronic device. The method includes: obtaining multiple groups of adjustment parameters corresponding to multiple adjustment operations on initial color temperature of a screen; performing calculation on the multiple groups of adjustment parameters according to a preset algorithm, to obtain an average color temperature difference; and calculating preference color temperature based on the initial color temperature and the average color temperature difference, and setting the color temperature of the screen of the user according to the preference color temperature.

No. of Pages : 33 No. of Claims : 10
The present disclosure provides a stretch release adhesive, a battery assembly and a housing assembly. The stretch release adhesive includes a first adhesive layer having viscosity; and a second adhesive layer having viscosity, the second adhesive layer and the first adhesive layer being superposed, and the second adhesive layer including a plurality of first adhesive portions spaced apart from one another.

No. of Pages : 27 No. of Claims : 10
The present disclosure provides a stretch release adhesive, a battery assembly, a housing assembly, and an electronic device. The stretch release adhesive includes a base; and a plurality of adhesive portions spaced apart from one another, each of the adhesive portions being provided on a surface of the base.
The present disclosure provides a stretch releasing adhesive assembly, a housing assembly, and a mobile terminal. The stretch releasing adhesive assembly includes: a stretch releasing adhesive layer, having a pull portion at an end of the stretch releasing adhesive layer; and a first pull layer, the first pull layer and the pull portion being superposed and connected, the first pull layer being provided with at least one tear line in a position corresponding to the pull portion.

No. of Pages: 31 No. of Claims: 13
The application relates to HFR (High Frequency Reconstruction/Regeneration) of audio signals. In particular, the application relates to a method and system for performing HFR of audio signals having large variations in energy level across the low frequency range which is used to reconstruct the high frequencies of the audio signal. A system configured to generate a plurality of high frequency subband signals covering a high frequency interval from a plurality of low frequency subband signals is described. The system comprises means for receiving the plurality of low frequency subband signals; means for receiving a set of target energies, each target energy covering a different target interval within the high frequency interval and being indicative of the desired energy of one or more high frequency subband signals lying within the target interval; means for generating the plurality of high frequency subband signals from the plurality of low frequency subband signals and from a plurality of spectral gain coefficients associated with the plurality of low frequency subband signals, respectively; and means for adjusting the energy of the plurality of high frequency subband signals using the set of target energies.

No. of Pages: 41
No. of Claims: 14
(54) Title of the invention : SYSTEM AND METHOD FOR GENERATING A PLURALITY OF HIGH FREQUENCY SUBBAND SIGNALS COVERING A HIGH FREQUENCY INTERVAL FROM A PLURALITY OF LOW FREQUENCY SUBBAND SIGNALS

(86) International Application No : PCT/EP2011/062068
Filing Date : 14/07/2011

(87) International Publication No : WO/2012/010494

(62) Divisional to Application Number : 2506/KOLNP/2012
Filed on : 04/09/2012

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(72) Name of Inventor :
1) KJOERLING, Kristofer

(57) Abstract :
The application relates to HFR (High Frequency Reconstruction/Regeneration) of audio signals. In particular, the application relates to a method and system for performing HFR of audio signals having large variations in energy level across the low frequency range which is used to reconstruct the high frequencies of the audio signal. A system configured to generate a plurality of high frequency subband signals covering a high frequency interval from a plurality of low frequency subband signals is described. The system comprises means for receiving the plurality of low frequency subband signals; means for receiving a set of target energies, each target energy covering a different target interval within the high frequency interval and being indicative of the desired energy of one or more high frequency subband signals lying within the target interval; means for generating the plurality of high frequency subband signals from the plurality of low frequency subband signals and from a plurality of spectral gain coefficients associated with the plurality of low frequency subband signals, respectively; and means for adjusting the energy of the plurality of high frequency subband signals using the set of target energies.

No. of Pages : 38 No. of Claims : 5
The application relates to HFR (High Frequency Reconstruction/Regeneration) of audio signals. In particular, the application relates to a method and system for performing HFR of audio signals having large variations in energy level across the low frequency range which is used to reconstruct the high frequencies of the audio signal. A system configured to generate a plurality of high frequency subband signals covering a high frequency interval from a plurality of low frequency subband signals is described. The system comprises means for receiving the plurality of low frequency subband signals; means for receiving a set of target energies, each target energy covering a different target interval within the high frequency interval and being indicative of the desired energy of one or more high frequency subband signals lying within the target interval; means for generating the plurality of high frequency subband signals from the plurality of low frequency subband signals and from a plurality of spectral gain coefficients associated with the plurality of low frequency subband signals, respectively; and means for adjusting the energy of the plurality of high frequency subband signals using the set of target energies.

No. of Pages: 38 No. of Claims: 5
The Patent Office Journal No. 24/2018 Dated 15/06/2018 22008

| (12) PATENT APPLICATION PUBLICATION |
| (19) INDIA |
| (22) Date of filing of Application :03/04/2017 |
| (21) Application No.201731011997 A |
| (43) Publication Date : 15/06/2018 |

| (54) Title of the invention : HAND-OPERATED MUSHROOM COMPACT STRAW-COMPOST BAG PREPARATION MACHINE |

| (51) International classification : A01G 1/04 |
| (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.NO.304, TENEMENT APARTMENT, UDAY PATH, ZOO ROAD, GUWAHATI-781024, ASSAM India |
| 2) REJAOON AL REJAH |

| (72) Name of Inventor : |
| 1) RAJIV LOCHAN BIKASH ROY |
| 2) REJAOON AL REJAH |

| (57) Abstract : |
| A Hand-Operated Mushroom Compact Straw-Compost Bag Preparation Machine to create compact straw-compost bags for mushroom cultivation using pasteurized straw and High Modulus Polyethylene (HMPE) bag to make the said compost bags with ease and in less time. An HMPE bag is placed inside the closed Holder(3) and straw is put in it and compacted by lowering the Tamper(18) on the straw layer and then pressed down using the radial Handles(15). Then mushroom spawn are put on and around the top of the Tamper(18) that slides down and deposits on the edge of the layer. This process is repeated for multiple of 3 inch layers measurable by the integrated vertical see through scale(8), till the bag is full. The bag is then easily removed from the side by opening one semi-cylindrical Piece(5). The dimensions, weight and gear ratio of the different components are standardized for the purpose. |

No. of Pages : 11 No. of Claims : 5
**Title of the invention:** METHOD AND SYSTEM CONFIGURED TO GENERATE A PLURALITY OF HIGH FREQUENCY SUBBAND SIGNALS COVERING A HIGH FREQUENCY INTERVAL FROM A PLURALITY OF LOW FREQUENCY SUBBAND SIGNALS

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<td>:PCT/EP2011/062068</td>
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<td>International Publication No</td>
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<td>Filing Date</td>
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<td>Divisional to Application Number Filed on</td>
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**Abstract:**

The application relates to HFR (High Frequency Reconstruction/Regeneration) of audio signals. In particular, the application relates to a method and system for performing HFR of audio signals having large variations in energy level across the low frequency range which is used to reconstruct the high frequencies of the audio signal. A system configured to generate a plurality of high frequency subband signals covering a high frequency interval from a plurality of low frequency subband signals is described. The system comprises means for receiving the plurality of low frequency subband signals; means for receiving a set of target energies, each target energy covering a different target interval within the high frequency interval and being indicative of the desired energy of one or more high frequency subband signals lying within the target interval; means for generating the plurality of high frequency subband signals from the plurality of low frequency subband signals and from a plurality of spectral gain coefficients associated with the plurality of low frequency subband signals, respectively; and means for adjusting the energy of the plurality of high frequency subband signals using the set of target energies.

No. of Pages : 38 No. of Claims : 5
Title of the invention: A WEARABLE SMART GLOVE

Abstract:
A wearable Smart Glove device is designed with a palm side and a top side. The wearable smart glove is made of cotton which allows full movements of fingers. The smart glove device is enabled with audio functionality to reproduce meaningful English letters. The Smart glove is powered by a 5 V DC power supply. A compact LCD display fixed to display English letters. A Wireless speaker is enabled. So that the display letter can be heard. One or more switches are configured to generate instructions on the upper area of the finger and upper area palm attached to the smart glove. A Rectifier circuit attached to the wrist area of the smart glove facing upward direction. The rectifier circuit is place in between the palm side and the top side of glove. A mother board or an emulator with storage capacity connected to the rectifier circuit. GPIO ports are configured for input/output electrical signals generated form the mother board or the emulator.
Title of the invention: ELECTROMAGNECTIC ALTERNATOR ENGINE

Abstract:
Now the modern world has been suffering global warming which is mainly occurring by the air pollution, and the air pollution is mainly done by the polluted gases, the polluted gases are came from automobiles, industries etc, and main thing is that in the automobiles IC engine is occurring the air pollution by its internal combustion of fuel, now I am trying to reduce the air pollution by rejecting the IC engine from the automobile sector, and I am introducing a better type of engine which is not harmful for the environment and which is more efficient rather than IC engine, the cost of my engine has been very low cost so it will be acceptable for maximum people in our society, last but not the least by this engine we prevent huge amount of air pollution as well as stop the global warming partially.

No. of Pages: 6 No. of Claims: 3
Methods for applying ultra-clean ammonia-based desulfurization technology in carbon capture process. A flue gas, after ultra-clean ammonia-based desulfurization, may be directly fed into a carbon capture device for subsequent processing to realize ultra-clean emissions and the integration of desulfurization and decarbonization. This may significantly reduce the investment and operating costs for carbon capture.
**Title of the invention:** PORTABLE SEWAGE & WASTE TREATMENT PLANT

**Abstract:**
This invention relates to an organic waste treatment system and in particular, this invention relates to an organic waste treatment system for the treatment of waste water (sewage) from house hold or live stock or commercial area or public places. More particularly, this present invention relates to the process for the treatment of organic waste in the organic waste treatment system. Furthermore, this invention also relates to an organic waste treatment system which has the beneficial effects of having saving manpower, safety and reliability.

No. of Pages : 18 No. of Claims : 6
**Title of the invention:** A SYSTEM FOR TRANSFERRING AUDIO AS TEXT MESSAGE APPLICANTS.

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<th>Priority Document No</th>
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<tr>
<td>NA</td>
<td>MR.PROLAY GHOSH</td>
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**Abstract:**

This invention relates to a system for Transferring Audio as Text Message and in particular, this invention relates to a system for Transferring Audio as Text Message wherein key is generated and Convert that taken key in to eight bit binary number as a binary key. This invention relates to a system for Transferring Audio as Text Message wherein XOR operation is performed between previous step result and binary key to get the CIPHERTEXT. This invention relates to a system for Transferring Audio as Text Message wherein the CIPHERTEXT is considered and perform XOR operation between it and the binary key. Furthermore, this invention also relates to a system for Transferring Audio as Text Message which has the beneficial effects of having portable and is easy to master, thereby bringing convenience of unlimited communication to a user and having safety and reliability.

No. of Pages : 28 No. of Claims : 6
(51) International classification : A61N2/00

(31) Priority Document No : NA

(32) Priority Date : NA

(33) Name of priority country : 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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2) MRIDULA GHOSH DASTIDAR

(72) Name of Inventor :

1) ASIF CHOWDHURY

2) MRIDULA GHOSH DASTIDAR

(57) Abstract :

This invention relates to a Therapeutic Magnetic Clip and in particular, this invention relates to a Therapeutic Magnetic Clip which can assist in healing of the stress or cramp or pain. More particularly, this present invention relates to a Therapeutic Magnetic Clip which directs a polarity of a permanent magnet into selected locations of the human body that can assist in healing of the stress or cramp or pain. Furthermore, this invention also relates to a Therapeutic Magnetic Clip which has the beneficial effects of having compact structure, enables the clip to be convenient and easy to use and not be easy to slip and having safety and reliability.

No. of Pages : 25 No. of Claims : 10
Malaria is considered as one of the most common protozoan infestations in human beings. Spread over almost 91 countries, malaria is considered as an endemic disease. The greatest burden of malaria in the world is borne by the poor, backward, and remote parts of the planet, with greater than ninety percent cases reported from rural areas and less than ten percent cases reported from urban areas. The high malaria incidence in rural areas may be due to the absence of surveillance and healthcare infrastructure. The Indian state of Orissa, with a population of 36.7 million, contributes about twenty-five percent cases of the total annual malarial cases reported in India. Nearly forty percent of the total malarial cases are caused by P. falciparum malaria. About twenty to thirty percent of the annual deaths are caused by malaria in Orissa, followed by Gujarat, Goa, Mizoram, Maharashtra, Meghalaya, Rajasthan, Karnataka, Madhya Pradesh, Jharkhand and Chhattisgarh. The disease malaria is caused by protozoan parasites which are transmitted by the female Anopheles mosquitoes. The mosquito bite transfers the parasites from the mosquito’s saliva into the victim’s bloodstream. Whilst the industrialized world has mostly been free of malaria-related fatalities, it remains a major source of fatalities in developing countries where healthcare facilities are lacking. A reason for this high mortality rate is delay in the disease’s diagnosis due to lack of infrastructure. The test results are also dependent upon the competence of the examiner and are thus prone to human errors. Lack of qualified technical support in rural areas only aggravates these situations. The present invention relates to a real-time system to detect the presence of malaria protozoans in a victim’s bloodstream using a low-cost, cell-phone mounted, microscope. This plug and play module is built to withstand harsh operating conditions and to give test results faster than their human counterparts making them suitable for usage in rural areas. All tests performed by the system are automatically logged on a remote server which serves as a dataset repository for future use by researchers and government agencies.
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 (21) Application No.201611041924 A
(19) INDIA
(22) Date of filing of Application :08/12/2016 (43) Publication Date : 15/06/2018

(51) Title of the invention : A method for preparation of glass product using tannery solid waste

(51) International classification :C10B
(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 :ANUSANDHAN BHAWAN 2, RAFI MARG NEW DELHI-110001, INDIA Delhi India

(72) Name of Inventor :
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2)HALDER AVIK
3)RAMRAKHIANI LATA
4)GHOSH SOURJA
5)SEN RANJAN

(57) Abstract :
The present invention provides a process for incorporation of tannery solid waste (TSW) generated in tannery industry into glass matrix and filter glasses particularly UV transmitting glass, green filter glass can be produced by optimizing glass composition and waste loading. The invention also discloses preparation of usable glass products such as ash tray, paperweight, and decorative glass ware using tannery waste. A zinc phosphate base glass composition has been melted incorporating different percentage of tannery waste to produce glass.

No. of Pages : 21 No. of Claims : 13
Title of the invention: A COMPOUND FOR THE DETECTION OF HNO IN BIOLOGICAL SYSTEMS

Abstract:
The present invention disclosed a compound of formula (I), process for preparation thereof and use of compound of formula (I) for detecting HNO in biological systems. Formula (I)
(54) Title of the invention: AN IMPROVED PROCESS TO PRODUCE FAST SETTING LIGHT WEIGHT GEOPOLYMER PRECAST

(51) International classification: C02F
(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 to an improved method for production of light weight geopolymer precasts for building material applications from fly ash and other industrial wastes. The processing scheme adopted using geopolymerisation allows retaining of the lightweightness and producing fast setting precast.

No. of Pages: 17 No. of Claims: 4
A fusion protein, method of producing and use thereof are disclosed. In one embodiment, the fusion protein includes a capsid protein of a virus and at least one receptor moiety. The at least one receptor moiety is arranged on the outer surface of the capsid protein.
The present invention provides a compact MIMO slot antenna for ultra-wideband (UWB) applications. The MIMO antenna according to the present invention has dimension 30 x 42 x 1.5 mm³ and fabricated on FR4 substrate with εr of 4.4 and tanσ of 0.02. The microstrip stepped feeding, reduced ground plane and stepped slots in the ground are used to obtain UWB antenna features. This UWB MIMO antenna has two semi-circle (Dtype) microstrip patches. The distance between two elements is 2 mm. The antenna covers the band of 1.5 - 10.3 GHz with an isolation higher than 15 dB.

No. of Pages : 16 No. of Claims : 6
The present invention provides noodles prepared from the Sweet Potato (Ipomoea batatas), Rice flakes (Oryza sativa) and Chickpea (Cicer arietinum) flour. All these flours are of high nutritive value i.e. good source of Proteins, Iron, Calcium and Folic acid. The noodles making involves processes such as drying, pressing, soaking, grinding, sieving and extrusion. Finally all the flours are mixed and dough is passed through an extruder to get the final product. The final product underwent sensory evaluation and nutritional testing for its acceptability.

No. of Pages : 16 No. of Claims : 5
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| (54) Title of the invention : | PROCESS FOR THE PREPARATION OF PURE PERFLUORINATED CARBOXYLIC ACID ESTERS |

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</tr>
<tr>
<td>Unicrest Building, Block-C, Sector 45, Gurgaon-122003, Haryana Haryana India</td>
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<td>6) KRISHNAN RAMACHANDIRAN</td>
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<td>7) ANAND RAJDEEP</td>
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(57) Abstract :
The present invention provides a process for the preparation of pure compound of Formula I. Formula I
The present disclosure relates to a system operable to check-in passenger baggage based on real-time information received from the passenger computing device, and from vehicle carrying said user baggage. In an aspect, the system includes a passenger information receipt module configured to receive, from the user computing device, at a server operatively coupled with the user computing device, passenger information attributes; a sensor-based signal receipt module configured to receive, from one or more sensors configured in a vehicle that picks up the passenger, at the server, passenger baggage parameters; and a baggage processing module configured to process, at the server, the received passenger information attributes and the received passenger baggage parameters so as to check-in the baggage™s before said passenger reaches airport.
Abstract:
Disclosed herein is a composite material that is formed from a polymer, acetylated collagen and graphene, which can be used as a super-capacitor material. Also disclosed herein are methods of making said composite material and its intermediates, as well as a supercapacitor made using said material.

No. of Pages : 30 No. of Claims : 19
The present invention is for the translucent concrete composition using pre-treated plastic optical fibers and a process thereof wherein the mix comprising white cement (430-460 kg/m³), standard sand (700-870 kg/m³), coarse aggregate (915-1050 kg/m³), pre-treated expanded polystyrene beads (0.02-0.03 kg/m³, for lightweight concrete), strontium aluminate (40-90 kg/m³), pre-treated plastic optical fiber (0.2-8% by weight) and superplasticizer (1.5-3 kg/m³). The salient features of the invented translucent concrete are: smooth finish, adequate translucency, high compressive strength, good illumination characteristic, adequate thermal insulation, freeze and thaw resistant (cold climate), energy efficient (green, energy) and good aesthetic appearance. The product made out of the present invention meet the existing specifications/guidelines and can be used to enhance energy efficiency of buildings as well as their aesthetic appearance. The product made out of the present invention is useful for making building panels, facades, perforated shear wall for window opening and blocks.
A modular cargo container (20) designed to be mounted on a loading carrying area of an automotive vehicle, and comprising a frame structure (30) delimiting an inner parallelepiped storage volume. Said modular cargo container (20) comprises at least one central rack (40) slidably connected to the frame structure (30) along a transversal axis (Y) for splitting the width of the inner storage volume into two storage compartments (48, 49); at least one vertical part it ion (50, 52) extending in at least one of the storage compartments (49) for splitting the length of the inner storage volume into two subcompartments (53, 54, 55), said vertical partition being extendable along the transversal axis (Y) and connected to the frame structure and the central rack so as to be slideable along a longitudinal axis (X) and rotatable around a vertical axis (Z) perpendicular to said longitudinal and transversal axis (X, Y); and at least one horizontal tray (60, 62) extending in at least one of the sub-compartments (53) of one of the storage compartments (49) for splitting the height of said subcompartment (53) into two stowage cells (63, 64, 65), said horizontal tray (60, 62) being extendable along the longitudinal and the transversal axis (X, Y). Reference: Figure 2
(54) Title of the invention : TEXTILE STRUCTURES FOR CONTROLLED IN VITRO BONE CELL DIFFERENTIATION

(51) International classification : C03C4/00
(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(86) International Application No : NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number : NA
(62) Divisional to Application Number : NA

(71) Name of Applicant :
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   Address of Applicant : Hauz Khas, New Delhi-110 016, Delhi
   India

(72) Name of Inventor :
1) Sourabh Ghosh
2) Swati Midha

(57) Abstract :
Described herein are in vitro methods and kits for controlled osteogenic differentiation, the methods comprising culturing progenitor cells in an osteogenic medium in the presence of silk textile braids having a three dimensional structure to obtain controlled differentiation of the progenitor cells to differentiated osteogenic cells.

No. of Pages : 27 No. of Claims : 13
In the present study, pluronic lecithin based organogels (PLO gels) were formulated as topical carrier for controlled delivery of mefenamic acid. Ten organogel formulations were prepared by a method employing lecithin as lipophilic phase and pluronic F-127 as hydrophilic phase in varying concentrations to study various parameters using in vitro diffusion study and in vivo studies. All formulations were found to be off-white, homogenous, and reluctant to be washed easily and have pH value within the range of 5.56-5.80 which is nonirritant. Polymer concentration increased in formulations of F1 to F5 (lecithin) and F6 to F10 (pluronic) resulted in decrease of the gelation temperature, increase of viscosity and reduction of spreadability of gels having polymer tendency to form rigid 3D network. Organogels with higher viscosity were found to be more stable and retard the drug release from the gel. The formulations of F2 and F3 were selected for kinetic studies and stability studies, as they found to have all physical parameters within acceptable limits, highest percent drug content and exhibited highest drug release in eight hours. The order of drug release from various formulations was found to be F24F34F104F44F14F94F84F54F74F6. The optimized formulation F2 was found to follow zero order rate kinetics showing controlled release of the drug from the formulations. In vivo anti-inflammatory activity of optimized mefenamic acid organogel (F2) against a standard marketed preparation (Volini gel) was found satisfactory and significant.
**Title of the invention:** METHOD FOR MITIGATING REPLICATION ATTACK IN MOBILE WIRELESS SENSOR NETWORK (WSN) USING WITNESS NODE

| (51) International classification | :H04L |
| (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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**Name of Inventor:**
1) Dr. Amit Verma
2) Prof. Iqbaldeep Kaur
3) Akshay Bhat

**Abstract:**
A method for mitigating replication attack in mobile wireless sensor network (WSN) using witness node, the method comprises:

1. Defining a wireless sensor network scenario, wherein the wireless sensor network includes a plurality of nodes; selecting nodes from said plurality of nodes to form clusters based on proximity of the nodes, wherein each of the clusters include a cluster head;
2. Determining a best cluster head from identified said cluster head of said clustered nodes; selecting a candidate node and at least one node having similar identity that of said candidate node from a cluster associated with best cluster head; selecting a witness node in proximity to said candidate node, using performance of said witness node based on throughput, packet delivery ratio, delay and overhead thereof;
3. Evaluating performance of said at least one node having similar identity that of said candidate node and said candidate node associated with polling supported by said witness node. Figure of the Abstract-Figure 1

No. of Pages: 18 No. of Claims: 5
The present invention refers to a method and apparatus for cutting blocks of granite, marble and other stone materials, conglomerate, concrete and similar and more particularly, relates to a multi-wire stone gang saw for cutting a stone block into number of slabs. The apparatus includes a post-tensioning assembly is activated when tension and pressure in the plurality of diamond wires becomes non-uniform, and on activation of said post-tensioning assembly, a pre-defined regulated flow of oil is permitted through an inlet to cause said one or more of said plurality of actuators get a forward movement, such that forward movement of the actuator causes movement to the bracket and the pulley and tensioning in said diamond wires, and said flow of oil is permitted until the tension and pressure in all said diamond wires becomes uniform.
The present disclosure provides a herbal pharmaceutical preparation as a composition for the therapeutic and prophylactic management of the neurological disorders including epilepsy and other seizure related neurological disorders and associated conditions comprising of herb Euphorbia helioscopia along with at least one pharmacaceutically acceptable carrier and a biological additive. The present disclosure further provides process(es) of preparing such composition and also demonstrates its efficacy to manage neurological disorders without any side effects.

No. of Pages : 20 No. of Claims : 14
**Title of the invention:** SYSTEMS, DEVICES, AND METHODS FOR GENERATING PERSONALIZED ELECTRONIC DOCUMENTS

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<td>7) HARMON, Kyle</td>
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**Abstract:**
Methodologies, systems, and computer-readable media provided for a system for generating personalized electronic documents and verifying user identity are discussed.

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No. of Pages : 26 No. of Claims : 20
Methodologies, systems, and computer-readable media are provided for processing pharmacy orders. A pharmacy services management module can receive a pharmacy order and transmit a first notification to a mobile electronic device once the pharmacy order is filled. The first notification can indicate that the pharmacy order is ready for pickup as well as a price associated with the pharmacy order. A broker computing system executes a user identification module and receives a location identifier and user identification data from an application executing on the mobile electronic device. A user check-in module receives the user identification data from the user identification module and retrieves the user’s pharmacy order from the pharmacy services management module. The user check-in module can process payment for the pharmacy order and transmit a second notification to the application once the payment is processed.
The problem to be solved is to provide a coupling device (10) that provides efficient engaging and disengaging of the nipple (62) with the coupling device (10) and especially that provides quick release of the nipple (62) with the coupling device (10) after flow of grease through it at high velocity and pressure without exerting excessive pressure on the coupling device (10) by the user, and the problem is solved by providing a coupling device (10) as in present invention that includes a lever (40) with a linkage mechanism that has a roller (48), which movably connects the lever (40) to the slider to move the slider axially forward and backward to disengage and engage the clamping unit (50) with the nipple (62) of the grease fitting by releasing and applying pressure exerted by a protrusion (32) structured at the end of the slider (30) opposite to the side facing the lever (40). Figure 1 is the representative figure.
(57) Abstract:
The present invention relates to a smart pole with plurality of integrated systems to manage operations including but not limited to public utility services, health services, transportation, security, waste management, law enforcement and other community services within an urban infrastructure. The invention provides a mountable device (hereinafter, the device) that comprises various modules including municipal facility module; wireless transmitter; power management module; waste management module; transport and law enforcement module; health services management module; power supply module; surveillance and security module in order to manage multiple operations within an urban infrastructure. Figure 3 on Sheet 3 of the drawings may accompany the abstract when published.
Title of the invention: NON-INVASIVE DEVICE TO ACCESS DIABETIC CONDITION

Abstract:
Non-Invasive Device to Access Diabetic condition Diabetes is world’s fastest growing chronic condition. According to WHO, diabetes patients have risen from 108 Million in 1980 to 422 Million in 2014. Its complication leads to heart attack, blindness, Stroke and Kidney failure. Diabetes occurs mainly due to imbalance of insulin hormone, secreted by pancreas. If insulin secretion is not enough, the blood glucose level maybe high or low in bloodstream. So blood glucose monitoring for diabetic person is required at regular intervals. Current devices for the blood glucose estimate are based on invasive techniques, requiring saliva sample. Present work shows the correlation between blood and salivary glucose level at different body status vis-à-vis after fasting and after different time gaps after meals. The current invention establishes a method to estimate blood glucose level by the analysis of the saliva samples. The technique requires very small sample quantity (microliter) and shows the results in few seconds. The device has micro-electrodes arrays; works on the principle of enzymatic electrochemical reaction and are fabricated using processes like lithography, etching, passivation, etc. The glucose sensitive molecules are immobilized in the reaction chamber with isolation with the substrate. Sensitivity and repeatability of device is established by the analysis of different saliva samples and controlled glucose samples using proprietary testing protocol. A device capable of estimating blood glucose vis-à-vis diabetic condition, a non-invasive way is claimed. (Fig.7)
AN IMPROVED PROCESS FOR THE PREPARATION OF SUBSTITUTED BENZYL ALCOHOL

The present invention provides an industrially advantageous, safe, eco-friendly and efficient process for the preparation of substituted benzyl alcohol by reduction of substituted benzoate.

No. of Pages : 10 No. of Claims : 6
A refrigerating control device of the invention for an air conditioner includes a control circuit connected to a compressor of the air conditioner through an electromagnetic switch including a control coil and a contact-switch element including a plurality of input contacts and a plurality of output contacts connected to the compressor and a motor of the compressor, wherein the control circuit includes a timing circuit connected to the control coil through an interval timing device and a soft start circuit connected to the input contacts.
The utility model discloses a flash lamp system with wireless receiving function, comprising a flash lamp and an emitter. The said flash lamp comprises a main control module, a channel setting module and a wireless receiving module, further comprising a pair of hot boots, a manual control module, and a flash module; the said emitter comprises a channel setting module and a wireless emitting module, further comprising a pair of hot boots, a manual control module. When the channel setting of the channel setting module of the emitter is consistent with that of the flash lamp, the main control module of the emitter receives signals of the hot boots or the manual control module and emits signals requiring flash to the flash lamp through the wireless emitting module. The wireless receiving module of the flash lamp receives flash signals and transmits them to the main control module, and then controls flash of the flash module after processing. When the flash lamp does not receive wireless signals, the hot boots can receive the flash signals of the camera or the manual control module to control flash of the flash module after processing of the main control module. It is convenient to use and take.
### Title of the invention:
PAVING SCREED WITH FASTENING DEVICE FOR A HEATING ELEMENT

| (51) International classification | :F16D65/02 |
| (31) Priority Document No | :16167878.4 |
| (32) Priority Date | :02/05/2016 |
| (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 |

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### Name of Inventor:
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2) Thorsten ECKART

### Abstract:
The invention relates to a paving screed (4) for a road paver (1) that comprises a screed plate (9), a heating element (11) and a fastening device (12) for pressing the heating element (11) onto the screed plate (9). The invention is characterized in that the fastening device (12) comprises an actuating member (13) and an elastic element (14), wherein the actuating member (13) is configured to deflect through its operation the elastic element (14) directly or indirectly by a predetermined amount, wherein the elastic element (14) applies a predetermined force directly or indirectly onto the heating element (11) and biases said heating element against the screed plate (9). Fig. 2

The Patent Office Journal No. 24/2018 Dated 15/06/2018 22041

No. of Pages: 20
No. of Claims: 16
Title of the invention: POWER CONVERTER AND POWER CONVERSION METHOD

Abstract:
It is difficult to downsize a power converter while suppressing the influence of a fault phase on sound phases in a short-circuit fault. An object of the present invention is to provide a power converter, the size of which can be reduced, and capable of suppressing the influence of a fault phase on sound phases and being restored by replacing only the fault phase when a fault occurs. [Solution] In a power converter in which one phase is composed of semiconductor switching elements, capacitors, wires and a fuse, a plurality of capacitors are connected in parallel for each phase and the fuse is inserted into a part of the wire that connects the capacitors in parallel, so that the size of the power converter can be reduced, and, when a short-circuit fault occurs, the influence of the fault phase on sound phases can be suppressed and restoration can be made by replacing a component of only the fault phase. [Selected Figure] Fig. 1
A rotating electrical machine (500) comprises: a rotor (10) including a rotor shaft (11) and a rotor core (12); a stator (20) including a stator core (21) and stator windings (22); a frame (40), two bearings (30); and a fan mechanism (100, 200) mounted on the rotor shaft (11) axially outside of the rotor core (12). The fan mechanism (100, 200) includes blades (101, 210) and elastic members (123). The blades (101, 210) are disposed around the rotor shaft (11) with circumferential intervals therebetween. The elastic members (123) apply restoring forces taking back the radial positions of the blades (101, 210) toward the center of the rotation axis against a centrifugal forces being imposed on the blades (101, 210) as the rotor shaft (11) rotates.
The present invention provides a jig for an on-site assembling type optical connector, including a main body including an upper face having a first slit and a lower face having a second slit; a first extension section elastically and deformably extending from the main body and including a cutter; and a second extension section extending from the main body and including a supporting part disposed to face the cutter, wherein the first extension section is disposed at one side of a reference line disposed along the first slit and the second extension section is disposed at the other side of the reference line.
Title of the invention: IN-VEHICLE BATTERY MODULE

Abstract:
An in-vehicle battery module includes a plurality of cylindrical battery cells (12), a battery cell holder (14), a protective case (16), a vent cover (20) provided such that the battery cell holder is positioned between the protective case and the vent cover, the vent cover and the battery cell holder disposed such that a vent space in which gas discharged from an end face on a second-electrode side of the cylindrical battery cell flows is provided between the vent cover and the battery cell holder, at least one first-electrode bus bar (23), at least one second-electrode bus bar (25) provided in the vent space, and a support member (50) disposed partially in the vent space and the support member being configured to support the second-electrode bus bar from the vent cover side. SELECTED DRAWING: FIG. 1

No. of Pages : 26 No. of Claims : 5
In a gas analysis apparatus including analyzers that need ignition, such as FIDs, in order to make it possible to surely ignite the analyzers while downsizing the entire apparatus, the apparatus includes first and second analyzers 11 and 12 to accept a sample gas, a first gas line L1 provided with the first analyzer 11, a second gas line L2 provided with the second analyzer 12 and joined downstream of the first analyzer 11 in the first gas line L1. At least one of the first analyzer 11 and the second analyzer 12 is configured to cause pressure fluctuations in the gas line L1, L2 including the analyzer 11, 12 when analyzing the sample gas. A first backflow prevention mechanism 21 is disposed between another of the analyzers 12, 11 and a junction X of the gas lines L1 and L2. The first backflow prevention mechanism is configured to prevent a fluid from flowing backward from the one of the analyzers 11, 12 through the junction X toward the another of the analyzers 12, 11. (FIG. 2)
Title of the invention: BI-DIRECTIONAL AUDIO GENERATION DEVICE FOR SPEECH QUALITY ASSESSMENT OF TELEPHONY NETWORKS AND SPEECH CODECS

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   Address of Applicant: 554 Burwood Road Level 1, Hawthorn, VIC, 3122, Australia

Name of Inventor:
1) Tony Dux
2) Geoff Willshire

Abstract:
A system for bi-directional quality testing of a telephony system or network using an audio generation device configured to automate Perceptual Evaluation of Speech Quality assessments and connect to a communication endpoint through computer telephony integration (CTI) instruction or system configuration to enable auto-answering of the communication endpoint, listen, record, and process signals and audio data, calculate Mean Opinion Scores (MOS), generate signals and audio for playback, compare files using a full reference algorithm, and store data with MOS results displayed in data naming structure.

No. of Pages: 42 No. of Claims: 3
A vehicle front hood 1 is equipped with a hood outer panel 2, a hood inner panel 3 attached to the hood outer panel 2, and an intermediate member 4 disposed between the hood outer panel 2 and the hood inner panel 3. The intermediate member 4 has a panel main body 5 opposed to the hood outer panel 2, a front fixing leg 6 which fixes a front edge 5a, in the vehicle front-rear direction, of the panel main body 5 to the hood inner panel 3, and side fixing legs 7 which fix respective side edges 5b, in the vehicle width direction, of the panel main body 5 to the hood inner panel 3. The panel main body 5 is fixed to the hood inner panel 3 only by the front fixing leg 6 and the side fixing legs 7.
Title of the invention: VEHICLE RUNNING TEST SYSTEM, PROGRAM FOR VEHICLE RUNNING TEST SYSTEM, AND VEHICLE RUNNING TEST METHOD

In order to reduce a driver-dependent variation in test result by enhancing the reproducibility of driving indices at the end of a test, a vehicle running test system 100 including a vehicle speed pattern display apparatus 2 adapted to display a prescribed speed pattern B and current vehicle speed on a graph G1 with one axis as vehicle speed and the other axis as time or running distance is adapted to, while a vehicle V is being driven, separately from the vehicle speed, display information based on driving indices indicating a driving state of the vehicle V, simultaneously with the graph G1. FIG. 3
**Title of the invention:** EXHAUST GAS ANALYSIS SYSTEM, RECORDING MEDIUM RECORDED WITH PROGRAM FOR EXHAUST GAS ANALYSIS SYSTEM, AND EXHAUST GAS ANALYZING METHOD

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**Abstract:**
In order to improve the efficiency of exhaust gas analysis by using an analysis result by a continuous analyzer to prevent the time spent for measuring exhaust gas introduced to a bag or a filter from being wasted and eliminate the need for steps before bag measurement, an exhaust gas analysis system is adapted to include: an exhaust gas circulation line 23 through which exhaust gas flows; an exhaust gas collection line 24 adapted to collect the exhaust gas from the exhaust gas circulation line 23 and introduce the collected exhaust gas into an exhaust gas analysis device 243; a continuous analysis line 26 adapted to, separately from the diluted exhaust gas collection line 24, collect the exhaust gas from the exhaust gas circulation line 23 for continuous analysis; a continuous analyzer 4 provided in the continuous analysis line 26; and an information processing unit 5 adapted to, on the basis of an analysis result by the continuous analyzer 4 at the time of the collection into the exhaust gas analysis device 243, determine whether a measurement result of the exhaust gas introduced into the exhaust gas analysis device 243 falls within a preset range, or determine a measurement range used to measure the exhaust gas introduced into the exhaust gas analysis device 243. Fig. 2.
A segment 31 for a sealing device according to the present invention is used in a sealing device 28 provided between a turbine rotor 12 and a stationary body 14 that covers the turbine rotor 12. The segment 31 for the sealing device is characterized by including a base 32 that engages with the turbine rotor 12 and a free-cutting layer 34 that covers a stationary body opposed surface 37, which is a surface of the base 32 opposed to the stationary body 14.
(12) PATENT APPLICATION PUBLICATION  
(21) Application No.201714018640 A

(19) INDIA  
(22) Date of filing of Application :26/05/2017

(24) Title of the invention : AIR PURIFIER

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| (57) Abstract :  
An air purifier includes a housing provided with an air inlet and an air outlet; an air passage communicating the air inlet with the air outlet; and an air blowing unit and an air filter unit provided in the air passage; wherein a panel is separated from the housing by a certain distance, and the air purifier is provided with a drive unit for moving the panel; and the housing comprises a first face on which the air inlet is provided; and the panel covers the air inlet and is moveable parallel to the first face and positioned in any position by means of the drive unit. The present invention has the advantages that two kinds of air flow modes can be provided without changing the speed of the motor, and the air intake area and the resultant purification efficiency can be improved.  |

No. of Pages : 14  No. of Claims : 3
(54) Title of the invention : EQUESTRIAN HEADPIECE

(51) International classification : F16D65/02
(31) Priority Document No : 1611539.6
(32) Priority Date : 01/07/2016
(33) Name of priority country : U.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 :
A headpiece for a bridle item for use with a horse or other equine animal is disclosed, which provides for improved communication between a horse and a rider, and/or improved comfort for the horse. Such a headpiece is connectable to a browband and has a first side piece and a second side piece wherein the first and second side pieces are connected by an articulated linkage above a connection between the headpiece and said browband. Articulation provides a degree of freedom of movement so that the first side piece and second side piece may move relative to one another and in doing so reduce the amount of tension transmitted between them and thus between reins, in use. (Fig. 2)

No. of Pages : 19  No. of Claims : 12
Title of the invention: SYSTEM FOR INSPECTING ROPE OF ELEVATOR

Abstract:
According to one embodiment, a system for inspecting a rope of an elevator includes a mark detection unit which detects a plurality of marks provided at regular intervals in a longitudinal direction of the rope to be inspected, a pulse generation unit which generates a pulse signal in synchronization with movement of the rope, and a calculation unit which calculates intervals between the marks based on detection timing of the marks by the mark detection unit and count values of pulse signals output from the pulse generation unit, and determines a state of degradation of the rope from a result of calculation. REFER TO FIGURE 1

No. of Pages : 33 No. of Claims : 10
A vehicle (Ve) includes a vehicle body (1), a tire (2) held by the vehicle body (1), an electric power control unit (S) including at least one of an inverter (I) and a converter (C), a case (26) housing the electric power control unit (S), a first predetermined member connected to the vehicle body (1) in an insulated state, a self-discharge static eliminator (50) configured to reduce the positive potential of the first predetermined member by elimination of static electricity, and a transfer member (52) electrically connecting a first connecting portion (54) and a second connecting portion (55) to each other. Accordingly, static electricity charged to the electric power control unit (S) is transferred to a portion, where static elimination is performed by the self-discharge static eliminator (50), of the first predetermined member via the case (26) and the transfer member (52) so as to be neutralized and eliminated. Selected drawing: FIG. 7
A Zn-Al layered double hydroxide (LDH) composition is added to a solution including a corrosion inhibitor and stirred, and a precipitate of the solution is collected, washed, and dried to form a corrosion inhibiting material (CIM), in which the LDH composition is intercalated with the corrosion inhibitor. An inorganic CIM and/or an organic CIM may be formed. The organic CIM may be added to a sol-gel composition to form an organic CIM-containing sol-gel composition, and the inorganic CIM may be added to a sol-gel composition to form an inorganic CIM-containing sol-gel composition. Further, the organic CIM-containing sol-gel composition may be applied on a substrate (e.g., an aluminum alloy substrate) to form an organic CIM-containing sol-gel layer and cured by ultraviolet (UV) radiation, the inorganic CIM-containing sol-gel composition may be applied on the substrate to form an inorganic CIM-containing sol-gel layer and cured by UV radiation, and the sol-gel layers may be thermally cured.
The present invention pertains to bridge rectifier circuits having active switching elements with protective functions. In an aspect, an electronic device having a bridge rectifier is disclosed. The bridge rectifier includes at least five transistors, and a single magnetic core having at least three windings wherein at least one low-side winding of said three windings provides a base current to at least three bipolar transistors of said five transistors, and at least two independent windings of said three windings provides a base current to at least a fourth transistor and at least a fifth transistor of said five transistors.

No. of Pages: 30 No. of Claims: 10
Title of the invention: DIFFERENTIAL PRESSURE FLOW METER, EXHAUST GAS ANALYSIS DEVICE AND FLOW RATE MEASUREMENT METHOD

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Abstract:
In order to make highly accurate flow rate measurements over a broad range, the present invention provides a differential pressure flow meter 2 that detects differential pressures in a fluid body flowing along a flow path, and calculates a flow rate of the fluid body from those differential pressures, and that includes at least two differential pressure detecting portions 22 and 23 that have mutually different measurement ranges. Fig. 2

No. of Pages: 26
No. of Claims: 9
The present invention provides a big data analysis and processing system and method for a passenger transport apparatus, wherein the big data analysis and processing system comprises: a data collection module, the data collection module comprising: an imaging sensor and/or depth sensing sensor, configured to constantly collect image data and/or depth map data of at least one region of the passenger transport apparatus; and an image processing module, configured to process the image data and/or depth map data to acquire a plurality of types of data of the passenger transport apparatus, comprising one or more of device running data, load data, abnormal behavior data and contingency data; a database, the database gathering and storing the plurality of types of data; and a statistical analysis unit, the statistical analysis unit performing classification and statistics on the plurality of types of data according to a statistical analysis method, and generating an analysis report.
Title of the invention: GAS ANALYSIS DEVICE, GAS SAMPLING DEVICE AND GAS ANALYSIS METHOD

A gas analysis device is provided that is able to accurately measure a concentration or a quantity of methane contained in a sample gas even if there are variations in the pressure in the sample gas line. This gas analysis device 1 has a sample gas line 11 through which a sample gas flows, a pressure loss mechanism 20 that is provided on the sample gas line 11, a pressure control mechanism 21 that refers to the pressure on the forward side of the pressure loss mechanism and, by either discharging a portion of the sample gas from the rearward side of the pressure loss mechanism 20, or by supplying a predetermined gas to the rearward side of the pressure loss mechanism 20, controls pressure differences in the sample gas line 11 between the front and the rear of the pressure loss mechanism 20, and an analyzer that analyzes the sample gas flowing through the sample gas line 11.
A corrosion-resistant coating on an aluminum-containing substrate such as an aluminum substrate, an aluminum alloy substrate (e.g., AA 2024, AA 6061, or AA7075), or other aluminum-containing substrate includes a corrosion inhibitor-incorporated Zn-Al layered double hydroxide (LDH) layer and a sol-gel layer. A zinc salt and a corrosion inhibitor (e.g., a salt of an oxyanion of a transition metal such as vanadate) is dissolved to form a zinc-corrosion inhibitor solution, and the substrate is immersed in or otherwise contacted with the solution to form the corrosion inhibitor-incorporated Zn-Al LDH layer on the substrate. A sol-gel composition is applied on the corrosion inhibitor-incorporated Zn-Al LDH layer of the substrate to form a sol-gel layer, and the sol-gel layer is cured.
An alkoxysilane is contacted with water and an inorganic acid to form a first composition. A zirconium alkoxide is contacted with an organic acid to form a second composition. One or more alkoxysilanes and an organic acid are contacted with a mixture of the first and second compositions to form a sol-gel composition, to which a photoinitiator is added. The sol-gel composition has a ratio of a number of moles of silicon to a number of moles of zirconium (ns/ nzr) ranging from about 2 to about 10. The sol-gel composition is applied on a substrate (e.g., an aluminum alloy substrate) multiple times to form multiple sol-gel layers, and at least one of the sol-gel layers is cured by UV radiation. The multiple sol-gel layers are then thermally cured.
Title of the invention: IMPROVING AIR QUALITY BY ELIMINATING GREENHOUSE GAS EMISSIONS AND OTHER HAZARDOUS POLLUTANTS THROUGH A PROCESS OF CONVERSION OF FLUE GASES INTO LIQUID OR SEMI-SOLID CHEMICALS

Abstract:
A system for removing Greenhouse Gases and other Pollutants from combustion of fossil and non-fossil fuels, including hydrocarbons and biomass fuels, is disclosed. The system includes: a vessel containing a liquid medium; a circulation system with a pump; a plurality of positively charged metal plates, each with a plurality of apertures; a negatively charged discharge pipe connected to the circulation pipe; a refrigeration system on the outside of the vessel; and a power source. The system uses the process of electrolysis and electrostatic induction to form covalent bonding among various constituents of Greenhouse Gases and thereby converts and condenses all or most of Greenhouse Gases in the emission. The apparatus has a working prototype. The system can be used in converting and condensing all or some Greenhouse Gases from emissions of power plants and all types of industrial plants which generate Greenhouse Gases as emissions, as well as from various sources of vehicular emissions. Fig. 1

No. of Pages: 21 No. of Claims: 7
Title of the invention: ELEVATOR SYSTEM

Abstract:
To provide an elevator destination floor reservation system which obviates the breakage or defacement of a destination floor registration device during a work period, maintains convenience for site workers and negates the need for adding a group controller for temporary call buttons. An elevator system includes: a plurality of elevators; a group controller for control of the operations of the plurality of elevators; and a destination floor registration device as a device which is used for registering a destination floor and is installed at an elevator hall. The group controller includes an elevator assignment section which assigns any one of the plurality of elevators to a call from the destination floor registration device or a temporary call button. When the destination floor registration device is not connected to the group controller but the temporary call button is connected to the group controller, the elevator assignment section assigns any predetermined one of the plurality of elevators to an input from the temporary call button.
The invention relates to a method for applying a plurality of vehicles (10) each including an onboard server (20) and at least two apparatuses (25A, 25B), an onboard server (20) and each of the apparatuses (25A, 25B) storing initial data, each onboard server (20) being connected to the apparatuses (25A, 25B) mounted in the same vehicle (10) with a local network (R1). The method includes the steps of: - transferring modified data, through an extended radiofrequency communication network (R2), from a server on the ground towards the onboard servers (20), - when the modified data have been stored in memory in each onboard server (20), emitting via the extended network (R2), an updating command, and - transmitting modified data to at least one apparatus (25A, 25B) through the corresponding local network (R1), the modified data replacing, in said apparatus (25A, 25B), the initial data. Fig. 1
**Title of the invention:** METHOD AND APPARATUS FOR MANAGING POWER SUPPLY OF ELECTRONIC DEVICE

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**Abstract:**

A method for managing an input power supply of an electronic device includes measuring an input voltage that is input from an input power supply; generating an approximate fundamental wave with respect to the input voltage using a maximum value of the input voltage and values of a fundamental wave; calculating at least one of an index value or an index variance with respect to the input power supply using differences between the input voltage and the approximate fundamental wave; and identifying a type of the input power supply based on the at least one of the index value and the index variance. When the input power supply is identified as an uninterruptable power supply, the electronic device may be controlled to operate in a minimum power consumption mode.
A control apparatus for a hybrid vehicle includes a controller configured to determine an amount of power generation to be generated by a generator based on a sensed accelerator pedal position and a sensed vehicle speed. The controller determines the amount of power generation by changing the amount of power generation in response to a shift between a case when the sensed vehicle speed is equal to or greater than a predetermined vehicle speed and a case when the sensed vehicle speed is less than the predetermined vehicle speed such that the amount of power generation when the sensed vehicle speed is equal to or greater than the predetermined vehicle speed (map B) is greater than the amount of power generation when the sensed vehicle speed is less than the predetermined vehicle speed (map A). Fig. 04
Title of the invention: GEAR SHIFT CONTROL DEVICE FOR VEHICLE

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<td>F16D65/02</td>
<td>1) SUZUKI MOTOR CORPORATION</td>
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<td>2016-135092</td>
<td>1) Hayato IINO</td>
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Abstract:
A gear shift control device for a vehicle that reduces a variation in torque at the time of start of gear shift to suppress a sense of discomfort of a driver. The gear shift control device includes an electric motor that generates electric power by using regenerative torque of a drive wheel, or engine torque generated by an engine, and generates power running torque for the drive wheel by using electric power of a rechargeable battery; a transmission that transmits the engine torque to the drive wheel; a clutch that transmits and cuts off the engine torque; and a controller that controls the power running torque of the electric motor, disengagement and engagement of the clutch, and gear shift of the transmission, wherein when the controller allows the transmission to change speed while the electric motor performs power generation, the controller decreases torque of the electric motor, starts disengagement of the clutch, and thereafter starts gear shift of the transmission. Fig. 01

No. of Pages: 29
No. of Claims: 5
(54) Title of the invention : TRABECULAR MESHWORK EXTENSION DEVICE

(31) Priority Document No : 15/237,944
(32) Priority Date : 16/08/2016
(33) Name of priority country : U.S.A.
(36) Name of Applicant : 1) Novartis AG
Address of Applicant : Lichtstrasse 35, 4056 Basel, Switzerland
(37) Name of Inventor : 1) Andrew David Johnson
(54) Title of the invention : TRABECULAR MESHWORK EXTENSION DEVICE

Described herein is an extension device to extend ocular tissue within an irideocorneal angle of an eye of a patient, comprising a flexible body and a plurality of tensioning features disposed on the body. The body is sized and configured to be disposed within the irideocorneal angle. The body has a curved longitudinal axis, a channel extending from a first end to a second end, an inner convex side, and an outer concave side. The body is flexible between a first flexed condition and a second unfiexed condition. The body has a first radius of curvature in the first flexed condition and a second radius of curvature in the unfiexed condition. Each tensioning feature is shaped and sized to grasp the ocular tissue within the irideocorneal angle.

No. of Pages : 55 No. of Claims : 34
If the capacitance of a snubber capacitor (22), the inductance of a coil (23) and the magnitude of a resistor (21) are specified such that the resonance frequency of the snubber circuit (20) coincides with the ringing frequency of the transistor (16), and the impedance of the first loop at the resonance frequency becomes smaller than the impedance of the second loop at the resonance frequency, a current component due to ringing flows in the snubber circuit (20), and energy is consumed by the resistor (21). Therefore, it is possible to quickly converge ringing. SELECTED DRAWING: FIG. 1

No. of Pages : 29 No. of Claims : 3
According to one embodiment, a weather prediction apparatus includes a storage configured to store weather data of a rain cloud observed by a weather radar; and a processor configured to predict a torrential rain. The processor is configured to detect a core of the rain cloud, based on the weather data; to acquire position information of the core, based on a detection result of the core; to determine a movement direction of the core, based on the position information; and to calculate information for predicting, as an area of occurrence of the torrential rain, an area on a ground, the area on the ground corresponding to the movement direction of the core.
According to one embodiment, a weather data processing apparatus includes a storage configured to store weather data observed by a weather radar, and a processor. The processor is configured to acquire three-dimensional data of a cumulonimbus from the weather data; to detect a core of the cumulonimbus by using a principal component analysis process of the three-dimensional data; to calculate core detection data for displaying the core; and to execute a display process for effecting three-dimensional display of the cumulonimbus, and display of the core, based on the three-dimensional data of the cumulonimbus and the core detection data.
A pore sealing treatment is performed in order to enhance the heat-shielding property of an anode oxide film by blocking at least the openings of open pores. In the first step of the pore sealing treatment, a solvent-typed pore sealing agent (first pore sealing agent) is used, and a first silicon-based oxide film is formed. In the second step of the pore sealing treatment, a non-solvent-typed pore sealing agent (second pore sealing agent) is used, and a second silicon-based oxide film is formed. In contrast to the first pore sealing agent, the second pore sealing agent is substantially free from the volume contraction in the application step or in the firing step. Consequently, even when the incompletely blocked openings remain after the first step, these incompletely blocked openings can be certainly blocked by the second silicon-based oxide film.
Title of the invention: POWER SUPPLY APPARATUS FOR ELECTRICALLY DRIVEN VEHICLES

Abstract:
Disclosed is a power supply apparatus for an electric vehicle having a plurality of secondary cell modules (3). The power supply apparatus includes: a connection circuit (8) for the plurality of secondary cell modules (3). The connection circuit provides one connection selected from a series connection of the plurality of secondary cell modules (3) and a parallel connection of the plurality of secondary cell modules (3). The power supply apparatus includes a switching controller (20) for controlling the connection circuit (8), and a connector for fast charge (4) connectable to a fast charger for fast charging of the plurality of secondary cell modules (3). The switching controller (20) causes the connection circuit (8) to provide the parallel connection of the plurality of secondary cell modules (3) in the case that the connector for fast charge (4) is connected to the fast charger.
A variable diameter fastener for a railway rail fastening assembly, wherein the fastener comprises a shaft, a first end of the shaft being configured for placement in an underlying foundation, a second end of the shaft being configured for engagement with the fastening assembly, wherein the shaft comprises a variable diameter portion between the first and second ends, the variable diameter portion having a diameter that varies along a longitudinal axis of the shaft such that an outer surface of the variable diameter portion is convex in a plane containing the longitudinal axis of the shaft.

No. of Pages : 34 No. of Claims : 31
An exhaust gas control apparatus for an internal combustion engine in the present invention includes: an SCR catalyst including transition metal ions for reducing NOX in exhaust gas with NH3 as a reducing agent; detection means for detecting temperature of the SCR catalyst; and a heater configured to heat the SCR catalyst. When NOX does not flow into the SCR catalyst, and the temperature detected by the detection means is below a first temperature that is a temperature causing exhibition of valence recovery of transition metal ions, the heater is controlled such that the SCR catalyst is heated up to a first temperature or above and that the SCR catalyst is maintained at or above the first temperature for a prescribed period so as to achieve valence recovery of the transition metal ions put in a deteriorated state.
The object of the invention is to specify a process for dehydrogenating alkanes in which such feedstock mixtures may be used having a high proportion of olefins, i.e. approximately 1% by weight to 10% by weight. Specifically, alkenes having two to five carbon atoms should be generated from alkanes having the same chain length and therefore the number of carbon atoms should not be changed by the dehydrogenation. The process is intended to be feasible on an industrial scale. A basic concept of the invention consists of hydrogenating alkenes present in the feedstock mixture to the corresponding alkanes before they come into contact with the dehydrogenation catalyst. An undesired coke deposit is thus avoided. The hydrogenation is effected by minimal addition of hydrogen (80% to 120% of the stoichiometrically required amount). The hydrogenation is effected either over a hydrogenation catalyst specifically provided therefor, which differs from the dehydrogenation catalyst, or over the dehydrogenation catalyst itself.
A magnetic pole diagnostic apparatus for a permanent magnet synchronous motor for an elevator is provided in the elevator driven by the permanent magnet synchronous motor controlled by a motor current in a phase according to a magnetic pole position of the permanent magnet synchronous motor that is detected by a rotary encoder. The magnetic pole diagnostic apparatus is configured to diagnose a shift of the magnetic pole position and includes a magnetic pole abnormality diagnostic unit configured to diagnose the existence or nonexistence of abnormality of the magnetic pole position on the basis of a comparison between an initial value of a motor current and a measurement value that are acquired in a predetermined elevator operating state and a magnetic pole position adjustment unit configured to correct the magnetic pole position when the magnetic pole abnormality diagnostic unit determines that there is abnormality of the magnetic pole position.
A transaction card construction and a method for making transaction cards. provides increased security for transaction card magnetic strips. The transaction card construction includes a card inlay and a clear card body. The card inlay is formed via a lamination press process with the magnetic strip attached to a back surface of the card inlay. The card body may have a window through which a data storage element may be exposed for accessing, such as by a magnetic stripe reader or EMV chip reader. The card body may be formed by adhering the card inlay to the clear card body.
## Title of the invention
AUTOMATIC HAPTIC GENERATION BASED ON COLOR FEATURES AND MOTION ANALYSIS

## International classification
G06F3/016

## Priority Document No
15/378,929

## Priority Date
14/12/2016

## Name of priority country
U.S.A.

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## Name of Inventor
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2) SABOUNE, Jamal
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## Abstract
Examples of devices, systems, and methods to automatically generate haptics based on visual color features and motion analysis are disclosed. In one example, a video having a plurality of frames is received and masked frames for the video are generated by applying a color mask to the plurality of frames. An event between two of the masked frames is detected and an optical flow estimate is generated for these masked frames. At least one haptic effect corresponding to the event is generated based on the optical flow. The generated haptic effect(s) may be output to a haptic file or a haptic output device or both.

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No. of Pages: 61 No. of Claims: 21
A controller for a vehicle (10) including a continuously variable transmission mechanism (18), a mechanical stepped transmission mechanism (20), and a drive wheel (28) is provided. The controller includes an electronic control unit. The electronic control unit (80) is configured to execute gear change control of the mechanical stepped transmission mechanism so as to establish any simulated gear stage of a plurality of simulated gear stages and to change a gear ratio of the continuously variable transmission mechanism stepwise.

When determining that the mechanical stepped transmission mechanism has failed, the electronic control unit is configured to fix the mechanical stepped transmission mechanism at a limp-home mode mechanical gear stage, prohibit a stepped gear change of the continuously variable transmission mechanism, and change the gear ratio of the continuously variable transmission mechanism in a stepless manner on the basis of a vehicle state.
**Title of the invention:** VENT CUTTER AND METHOD FOR CUTTING LOOSE TISSUE AROUND A VENT OF POULTRY

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**Abstract:**
ABSTRACT VENT CUTTER AND METHOD FOR CUTTING LOOSE TISSUE AROUND A VENT OF POULTRY Vent cutter comprising a rotatable cutter (22) with at least a forward cutting edge (22") for cutting tissue around a vent (13) of poultry (14), a centering pin (20) inside the cutter (22) with a thickened end portion (21) for insertion into the vent (13) prior to cutting, a clamping sleeve (23) inside of the cutter (22) and surrounding the centering pin (20), wherein the centering pin (20) and the clamping sleeve (23) are movable with respect to each other and arranged to cooperate for clamping tissue of the poultry (14) which the cutter (22) has cut loose, and wherein the clamping sleeve (23) is movable with respect to the cutter (22).

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**Name of Inventor:**
1) BUSCH, Cornelis

No. of Pages: 19
No. of Claims: 6
A heat exchanger assembly comprises first and second heat sink elements enclosing fluid flow passages, and a clamping assembly. The heat sink elements are separated by a space in which at least one heat-generating electronic component is located, with outer side surfaces of each electronic component being in thermal contact with the heat sink elements. The clamping assembly comprises first and second spring elements arranged in contact with an outer surface of the heat sink elements. The spring elements are joined together to apply compressive forces to the heat sink elements and to cause the electronic components to be clamped between the heat sink elements. Each spring element comprises discrete force application regions for applying force to a heat sink element, and a plurality of fastening regions for compressing and maintaining the positions of the spring elements relative to the outer surfaces of the heat sink elements.
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201714043263 A
(19) INDIA
(22) Date of filing of Application: 01/12/2017
(43) Publication Date: 15/06/2018

(54) Title of the invention: TELEMATICS SYSTEM

(51) International classification: G05B23/00
(31) Priority Document No: 1620903.3
(32) Priority Date: 08/12/2016
(33) Name of priority country: U.K.
(86) International Application No: NA
(87) International Publication No: NA
(61) Patent of Addition to Application Number: NA
(62) Divisional to Application Number: NA

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Address of Applicant: Ravenshaw Way, Solihull West Midlands, B91 2SU, United Kingdom U.K.

(72) Name of Inventor:
1) WARMINGTON, Mark David
2) PILE, Timothy Robin
3) MANNING, Alan Edward

(57) Abstract:
Waste management apparatus comprising: means for receiving and storing organic waste, processing means configured to process the organic waste into feedstock, and a programmable logic controller in communication with the processing means, wherein the programmable logic controller is configured to: determine values of one or more properties of the feedstock using the processing means, determine one or more new operational parameters of the processing means based on the determined values of the one or more properties of the feedstock, and output instructions to the processing means, wherein the instructions are based on the determined one or more new operational parameters.

No. of Pages: 21 No. of Claims: 18

The Patent Office Journal No. 24/2018 Dated 15/06/2018 22084
Title of the invention: VEHICLE SIDE SECTION STRUCTURE

Abstract:
ABSTRACT VEHICLE SIDE SECTION STRUCTURE A vehicle side section structure capable of stabilizing the deployment behavior of an airbag that inflates and deploys from a side door toward a vehicle width direction outer side is obtained. An impact beam is attached to a door inner panel. The impact beam includes a support portion that supports an inflator and that includes a sidewall portion disposed at the vehicle width direction inner side of the inflator. Accordingly, reaction force from the deployment of the airbag is able to be supported by the support portion of the impact beam when the airbag inflates and deploys.
A display device includes a substrate including a bent area, and a flat area including a plurality of pixels, a plurality of island-shaped inorganic insulating patterns arranged on the substrate in the bent area to be separate from each other, an organic insulating layer including a concavo-convex surface covering the inorganic insulating patterns in the bent area, and wiring lines arranged on the organic insulating layer and overlapping the inorganic insulating patterns.
Title of the invention: MOUNTING STRUCTURE OF VEHICLE PERIPHERY MONITORING DEVICE

Abstract:

ABSTRACT MOUNTING STRUCTURE OF VEHICLE PERIPHERY MONITORING DEVICE

There is provided a mounting structure of a vehicle periphery monitoring device, the structure including:
(i) a front bumper reinforcement of a vehicle,
(ii) a headlamp having a lamp housing, the headlamp being disposed further in a vehicle body upward direction than the front bumper reinforcement and at an outward end section in the vehicle width direction of the vehicle,
(iii) a vehicle component disposed further in a vehicle body downward direction than the headlamp, and
(iv) a vehicle periphery monitoring device disposed further in a vehicle body downward direction than a lower surface of the lamp housing, the vehicle periphery monitoring device separated by a first gap from an outward end surface in the vehicle width direction of the front bumper reinforcement, and being separated by a second gap from an upward end surface of the vehicle component.

No. of Pages: 20
No. of Claims: 3
The method for controlling a railway vehicle comprises the following steps: moving the rail vehicle forward wherein the railway vehicle is driven by a traction system, and reception by a control system of the railway vehicle, a stop command defining an extreme stop position (Pa) located in front of the railway vehicle. The method also comprises the following steps: determining a traction inhibition zone extending behind the extreme stop position (Pa), and activation of a traction inhibition module preventing the traction system from driving the railway vehicle forward when the railway vehicle is in the traction inhibition zone.
An irrigated balloon catheter, includes a balloon carrying contact electrodes, wherein a user can vary the balloon's configuration by manipulating an elongated expander that extends along the catheter and through the balloon's interior, with its distal end coupled to a distal end of the balloon. The expander may pass through an irrigation lumen to save on space within the catheter, and the expander itself may be hollow in providing a lumen for cables or lead wires. The expander may include flexure slits for increased flexibility. The distal end of the balloon includes a housing for components, e.g., a position sensor. The distal end of the balloon and the manner by which the balloon membrane is attached to the housing present a generally flat atraumatic surface suitable for direct head-on contact with tissue. Longitudinal spines extend along the outer surface of the balloon to provide support.
Title of the invention: ORGANIC LIGHT EMITTING DISPLAY DEVICE AND METHOD OF MANUFACTURING THE SAME

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Abstract:
An organic light emitting display device can include an anode electrode disposed on a substrate; an auxiliary electrode disposed on the anode electrode, the auxiliary electrode having a first height and a second height being different from the first height; a bank disposed on one side of the auxiliary electrode and another side of the auxiliary electrode; an organic light emitting layer disposed on an upper surface of the auxiliary electrode in an opening area exposed by the bank; and a cathode electrode disposed on the organic light emitting layer, in which the auxiliary electrode has the first height in a covered area overlapping with the bank and the second height in the opening area exposed by the bank.

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Address of Applicant: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea
Name of Inventor: 1) WOO, JoungWon
A solar power generation system (100) includes a solar module (1), a power converter, and a control device (6). The power converter is configured to control an output voltage of the solar module (1) such that the output voltage matches a target output voltage. The control device (6) is configured to determine a lower limit value of the target output voltage based on the following general formula.

In the general formula, \( I_r \) denotes a used light intensity, and \( T \) denotes a temperature. \( V_{TL}(I_r, T) \) denotes the lower limit value of the target output voltage. \( V_{OC}(I_r, T) \) denotes an open-circuit voltage of the solar module (1). The number of the solar cells (10) connected in series is denoted by \( n \). \( V_{BD}(T) \) denotes a positive value of a reverse breakdown voltage of one solar cell (10). A tolerable error is denoted by \( \epsilon \). SELECTED DRAWING: FIG. 3
Apparatuses and methods are provided for manufacturing a transaction card. The disclosed apparatuses and methods may be used to form a transaction card frame configured to house a data storage component. The card frame may be formed of a resin mixture comprising a thermoplastic elastomer (TPE). The card frame may also have a Shore D hardness in the range of 20-80.
**Title of the invention**: METHOD FOR OPERATING A REAGENT METERING SYSTEM

### (51) International classification
F01N9/00

### (31) Priority Document No
102016224667.4

### (32) Priority Date
12/12/2016

### (33) Name of priority country
Germany

### (86) International Application No
NA

### (87) International Publication No
NA

### (61) Patent of Addition to Application Number
NA

### (62) Divisional to Application Number
NA

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### (72) Name of Inventor:
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2) NEUFELD, Marc

### Abstract:
The present subject matter relates to a method of operating a reagent metering system (12) in which at least one metering valve (14, 16) meters a reagent upstream of at least one SCR catalyst (18), disposed in an exhaust passage of an internal combustion engine (10) or automotive internal combustion engine (10). Two metering valves (14, 16) are provided so that the maximum predefined metering rate (26) of the reagent metering system (12) is higher than the maximum possible metering rate (27, 52) of each metering valve (14, 16).

No. of Pages : 14  No. of Claims : 9
Title of the invention: HYBRID FABRIC-LAMINATED BELT FOR ELEVATOR SYSTEM

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Abstract:
A traction-driven belt for moving a load includes a plurality of tension elements extending longitudinally along a length of the belt, and a plurality of yarns interlaced with the plurality of tension elements forming a composite belt structure. A laminate material layer is affixed to at least one surface of the composite belt structure to improve one or more performance properties of the composite belt structure. A belt for suspending and/or driving an elevator car includes a plurality of tension elements extending longitudinally along a length of the belt, and a plurality of yarns interlaced with the plurality of tension elements forming a composite belt structure. A sheath encloses at least one tension element of the plurality of tension elements. The sheath is formed from a flowable material to bind the tension element to the plurality of yarns, and/or adjacent tension elements.
(54) Title of the invention: SHIFT REGISTER AND GATE DRIVER INCLUDING THE SAME

(51) International classification: G11C19/28, 310-2016-0169402

(31) Priority Document No: 10-2016-0169402
(32) Priority Date: 13/12/2016
(33) Name of priority country: Republic of Korea

(36) Name of Applicant: LG DISPLAY CO., LTD.
Address of Applicant: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, 07336, Republic of Korea

(37) Name of Inventor: KIM, Nakwoo

(57) Abstract:
A gate driver includes a shift register including a plurality of stages. The nth stage among the stages includes a buffer switching element having a gate electrode connected to a Q-node and a drain electrode to receive a first clock, a first switching element having a gate electrode to receive a second clock and a drain electrode to receive a start pulse, and a second switching element having a gate electrode to receive the second clock and a drain electrode to receive a gate high voltage, a first capacitor connected between the Q-node and a source electrode of the buffer switching element, and a second capacitor connected between the drain electrode of the first switching element and the Q-node. The number of switching elements included in the gate driver is drastically reduced, such that the numbers of clock signals and voltage signals required for driving the gate driver can be reduced.

No. of Pages: 52 No. of Claims: 16
Title of the invention: METHOD, APPARATUS AND USER TERMINAL FOR DISPLAYING AND CONTROLLING INPUT BOX

Abstract:
The present invention provides a method, an apparatus and a user terminal for displaying and controlling an input box, and relates to the field of computer technology. The method for displaying and controlling an input box includes: hiding an input box of an operation interface in response to a user’s touch operation; displaying or collapsing an input area in the operation interface; and redisplaying the input box according to the input area displayed or collapsed. The method, the apparatus and the user terminal for displaying and controlling an input box provided in the present invention, in the case when the input area is popped up or collapsed, allows the input box to interact properly with the input area, so as to avoid the operation interface, during the course of displaying or collapsing the input area, from being compressed or shifted in response due to the influence from the operation interface, thereby improving the user experience.
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**Title of the invention:** IMAGE PICKUP MODULE AND THE MANUFACTURING METHOD THEREOF

**Name of Applicant:** ALTEK SEMICONDUCTOR CORP.
Address: 5F., NO.12, LIXING RD., EAST DIST., HSINCHU CITY 30078, TAIWAN (R.O.C.) Taiwan

**Name of Inventor:** CHANG, JUI-HSIN

**Abstract:**
An image pickup module includes a frame, two or more than two image pickup devices including electric circuit board and plural affixing gel layers. The frame includes two or more than two image pickup openings, and each of the image pickup devices is disposed in one of the image pickup openings. Each of the image pickup devices is adhered to an inner edge of one of the image pickup openings through one of the affixing gel layers, so as to affix the image pickup devices to the frame. A manufacture method of an image pickup module is also provided. Fig. 1 A

No. of Pages: 22 No. of Claims: 20
An image pickup module and an electronic apparatus are provided. The image pickup module includes at least two image pickup units, circuit boards with a number equal to a number of the at least two image pickup units, a fixing member including a fixing cover with an image pickup through hole and a fixing frame arranged side by side and fixed to the fixing cover, and at least two fixing gel layers. One image pickup unit is connected to one circuit board, each circuit board has a connector, and each image pickup unit has a lens. The at least two fixing gel layers respectively adhere and fix the image pickup units to the fixing cover and adhere and fix the image pickup units to the fixing frame. A distance between central points of lenses of two adjacent image pickup units is less than or equal to 10 mm. Fig. 1
Title of the invention: ANTI CORROSION COMPOSITION COMPRISING POLYISOBUTYLENES

Abstract:
An anti-corrosion composition comprising at least a first polyisobutylene having a Staudinger index J0 in a range of approximately 15 cm³/g to approximately 98 cm³/g and an average relative molar mass (formula A) in a range of approximately 32,000 g/mol to approximately 280,000 g/mol and at least a second polyisobutylene having a Staudinger index J0 in a range of approximately 105 cm³/g to approximately 238 cm³/g and an average relative molar mass (formula A) in a range of approximately 350,000 g/mol to approximately 900,000 g/mol.
Provided are: a solvent composition that has an excellent ability to dissolve various organic substances, has excellent cleaning performance and drying properties, does not cause detrimental effects to the global environment, and has superior stability; a cleaning method using the solvent composition; a coating film formation method; a heat transfer medium that includes the solvent composition; and a heat cycle system using the heat transfer medium. A solvent composition that includes 1-chloro-2,3,3-trifluoro-1-propene and 1-chloro-3,3-difluoro-1-propene; a cleaning method in which the solvent composition is brought into contact with an article to be cleaned; a method in which a non-volatile organic compound is dissolved in the solvent composition to prepare a coating film-forming composition, the coating film-forming composition is applied upon an object to be coated, and thereafter the solvent composition is evaporated to form a coating film comprising the non-volatile organic compound; a heat transfer medium that includes the solvent composition; and a heat cycle system using the heat transfer medium.
Title of the invention: SOLVENT COMPOSITION CLEANING METHOD COATING FILM FORMATION METHOD HEAT TRANSFER MEDIUM AND HEAT CYCLE SYSTEM

Abstract:
Provided are: a solvent composition that has an excellent ability to dissolve various organic substances has excellent cleaning performance does not cause detrimental effects to the global environment has superior stability and can suppress the corrosion of metals; a cleaning method using the solvent composition; a coating film formation method; a heat transfer medium that includes the solvent composition; and a heat cycle system using the heat transfer medium. A solvent composition that includes HCFO 1233yd and HCFC 244ca wherein the ratio of the HCFC 244ca content to the total HCFO 1233yd content and HCFC 244ca content is 0.0001 to 1 mass%; a cleaning method in which the solvent composition is brought into contact with an article to be cleaned; a method in which a non volatile organic compound is dissolved in the solvent composition to prepare a coating film forming composition the coating film forming composition is applied upon an object to be coated and thereafter the solvent composition is evaporated to form a coating film comprising the non volatile organic compound; a heat transfer medium that includes the solvent composition; and a heat cycle system using the heat transfer medium.
(51) International classification : C07C17/25, C07C21/18, C07B61/00
(31) Priority Document No : 2015148070
(32) Priority Date : 27/07/2015
(33) Name of priority country : Japan
(86) International Application No : PCT/JP2016/071877
Filing Date : 26/07/2016
(87) International Publication No : WO 2017/018412
(61) Patent of Addition to Application Number : NA
Filing Date : NA
(62) Divisional to Application Number : NA
Filing Date : NA

(57) Abstract :
There is provided a method of efficiently manufacturing 1-chloro-2,3,3-trifluoropropene by an industrially feasible method by using a raw material 5 which is easy to obtain. A method of manufacturing 1-chloro-2,3,3-trifluoropropene, including subjecting 3-chloro-1,1,2,2-tetrafluoropropane to a dehydrofluorination reaction in the presence of a base

No. of Pages : 28 No. of Claims : 14
Title of the invention: IMAGE PICKUP MODULE AND THE MANUFACTURING METHOD THEREOF

Abstract:
An image pickup module includes a cover, a plurality of image pickup units, a self-curing gel, and a photopolymer gel. The cover includes an upper shield, a side shield, and illumination openings and image pickup openings on the upper shield, and the upper shield and the side shield surround an accommodation space where the image pickup units are disposed. The cover at least covers a portion of upper surfaces of the image pickup units. The photopolymer gel is disposed on positions corresponding to the illumination openings that expose the photopolymer gel. The self-curing gel is disposed between the upper surfaces of the image pickup units and the upper shield. The photopolymer gel is configured to fix relative positions between the image pickup units and the cover. A manufacturing method of an image pickup module is also provided.

No. of Pages: 25 No. of Claims: 15
Title of the invention: IMAGE PICKUP MODULE AND ELECTRONIC APPARATUS

| (51) International classification | :G06T7/00, |
| (31) Priority Document No | :201621373422.4 |
| (32) Priority Date | :14/12/2016 |
| (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 |
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| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

(71) Name of Applicant :
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Address of Applicant : 5F., NO.12, LIXING RD., EAST DIST., HSINCHU CITY 30078, TAIWAN (R.O.C.) Taiwan

(72) Name of Inventor :
1) CHANG, JUI-HSIN

Abstract:
An image pickup module and an electronic apparatus are provided. The image pickup module includes at least two image pickup units and circuit boards with the number equal to the number of the at least two image pickup units. Each of the circuit board has a connector, and each of the image pickup units has a lens. The image pickup module further includes a cover plate having a plurality of through holes. The image pickup module further includes at least two fixing gel layers, and the image pickup units are adhered and fixed to a plate surface of the cover plate through the at least two fixing gel layers. Each of the lenses are exposed from each of the through holes, such that the image pickup units are fixed to the cover plate. The electronic apparatus includes the image pickup module. FIG. 1

No. of Pages : 17 No. of Claims : 10
METHOD AND APPARATUS FOR MONITORING DOWNLINK CONTROL CHANNEL IN WIRELESS COMMUNICATION SYSTEM

The present disclosure relates to a communication method and a system for converging a 5th-generation (5G) communication system for supporting higher data rates beyond a 4th-generation (4G) system with a technology for Internet of Things (IoT) is provided. The present disclosure may be applied to intelligent services based on the 5G communication technology and the IoT-related technology, such as smart home, smart building, smart city, smart car, connected car, health care, digital education, smart retail, security and safety services. A decoding method for a terminal is provided. The method includes receiving a downlink control channel, receiving a reference signal in respective physical resource block (PRB) pairs, performing a correlation operation between a first sequence for the received reference signal and a second sequence for a predetermined reference signal for decoding the downlink control channel, and performing decoding of a search space for the downlink control channel in the PRB pair determined based on a result of the correlation operation.
A synchronizer includes a hub with booster ramps synchronizer cones synchronizer rings and a slide sleeve. The slide sleeve has a gear on an inner surface that is engageable with the synchronizer cones and the hub. The slide sleeve includes a slot. An inner lock contains the synchronizer rings causing the synchronizer rings to move in an axial direction when axial pressure is applied. An insert is positioned within the slot and has pins extending radially inward. When the slide sleeve is shifted in the axial direction the insert moves axially and a pin rides along one of the boosted ramps causing the synchronizer ring to engage against the synchronizer cone causing the synchronizer ring and the synchronizer cone to rotate at the same speed such that the slide sleeve can be positioned over both the gears of the hub and the synchronizer cone.
Nitrogen titanium complex having general formula (I) or (II), wherein: - R1 represents a hydrogen atom; or is selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, optionally halogenated, cycloalkyl groups optionally substituted, aryl groups optionally substituted; - R2, R3, R4 and R5, identical or different, represent a hydrogen atom; or are selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, optionally halogenated, cycloalkyl groups optionally substituted, aryl groups optionally substituted, nitro groups, hydroxyl groups, amino groups; - Y represents a NH-R6 group wherein R6 represents a hydrogen atom, or is selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, optionally halogenated, cycloalkyl groups optionally substituted, aryl groups optionally substituted, or a N-R7 group wherein R7 is selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, optionally halogenated, cycloalkyl groups optionally substituted, aryl groups optionally substituted; - X1, X 2, X 3 and X 4, identical or different, represent a halogen atom, such as, for example, chlorine, bromine, iodine, preferably chlorine; or are selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, -OCOR8 or -OR8 groups wherein R8 is selected from linear or branched C1-C20 alkyl groups, preferably C1-C15; or one of X3 is selected from ethers, such as, for example, diethylether, tetrahydrofuran (THF), dimethoxyethane, preferably tetrahydrofuran (THF); - n is 1 in the case wherein Y represents a NH-R6 group wherein R6 has the same meanings reported above; or is 0 in the case wherein Y represents a N-R7 group wherein R7 has the same meanings reported above, or in the case wherein one of X1, X2 and X3 is selected from ethers; - R"1, R" 2, R"3, R"4, R"5, R"6 and R"7, identical or different, represent a hydrogen atom; or are selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, optionally halogenated, cycloalkyl groups optionally substituted, aryl groups optionally substituted; - X"1 and X"2, identical or different, represent a halogen atom such as, for example, chlorine, bromine, iodine, preferably chlorine; or are selected from linear or branched C1-C20 alkyl groups, preferably C1-C15, -OCOR"8 groups or -OR"8 groups wherein R"8 is selected from linear or branched C1-C20 alkyl groups, preferably C1-C15; - Y" is selected from ethers such as, for example, diethylether, tetrahydrofuran (THF), dimethoxyethane, preferably tetrahydrofuran (THF); or Y" represents a group having general formula (III), wherein R"1, R" 2, R"3, R"4, R"5, R"6 and R"7, have the same meanings as reported above; - m is 0 or 1. Said nitrogen titanium complex having general formula (I) or (II) can be advantageously used in a catalytic system for the (co)polymerization of conjugated dienes.
Abstract:
Embodiments provide in-flight configuration of satellite pathways to flexibly service "terra link" and "cross link" traffic in a constellation of non-processed satellites for example, to facilitate flexible forward channel and return channel capacity in a satellite communications system. For example, each satellite in the constellation can include one or more dynamically configurable pathways and switching and/or beamforming can be used to configure each pathway to be a forward channel pathway or a return channel pathway in each of a number of time slots according to a pathway configuration schedule. At least some of the pathways can be further selectively configured in each time slot to carry "terra link" traffic to and/or from terrestrial terminals and "cross link" traffic to and/or from one or more other satellites of the constellation.
A magnetic bearing device according to one embodiment of the present invention may comprise: a support unit which is disposed to be adjacent to a roll shaft and forms a magnetic field toward the roll shaft; and a magnetic force receiving unit which is coupled to the roll shaft and only a part of which faces the support unit is made of a magnetic body wherein the magnetic force receiving unit magnetizes by mean of a magnetic force.
Title of the invention : FOREIGN MATERIAL REMOVAL DEVICE

Abstract:
The present invention relates to a foreign material removal device for removing foreign material attached to the surface of a rotating roll such as a strip transfer roll and the foreign material removal device comprises: a housing disposed in the width direction of an object; a foreign material separating means provided at the housing and separating the foreign materials from the surface of the rotating object; and an air guide unit disposed at the housing so as to form a gap from the object and supplying air to the gap so as to guide to the inside of the housing the foreign materials separated from at least the object. Therefore the present invention can obtain an effect of completely removing the foreign material with respect to the entire width direction of the strip transfer roll.

No. of Pages : 28 No. of Claims : 25
The present disclosure pertains to systems and methods for obtaining and processing high frequency electric power system measurements for control and monitoring of an electric power system. High frequency measurements may be used to detect traveling waves and/or to detect faults in the electric power system. In various embodiments a processing device may receive high frequency electric power system measurements from each of a local location and a remote location and may process the high frequency electric power system measurements to identify and locate a fault. The occurrence of and location of a fault and may be used to implement protective actions to remediate identified faults.
Title of the invention: TWO PIECE PISTON WITH VENTING

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<td>(57)</td>
<td>Abstract: A piston assembly for a tensioner which has a hollow piston body having a first end and a second end; and a cap. At least a portion of the cap fits into the first end of the piston body. The cap has a head and may also have a stem connected to an underside of the head. The cap may also have at least one slit for venting fluid having a width and a depth. The slit may extend from an outer circumference of the stem and across the underside of the head. The slits may be parallel to a centerline of the cap or angled relative to the centerline of the cap. A plurality of slits may be present on the cap. At least two of the plurality of slits may have different widths or different depths. The slits may be evenly spaced around the cap.</td>
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<td>(71)</td>
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<td>Address of Applicant: 3850 Hamlin Road Auburn Hills MI 48326 U.S.A.</td>
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<td>2) HONG SeongDo</td>
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<td>3) YAO Ganggang</td>
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No. of Pages: 12 No. of Claims: 18
A connector assembly having an upper connector a pin coupling the upper connector to a lower connector and a gusset plate sandwiched between the upper and lower connectors. Also disclosed is a hoistable connector assembly a lifting frame assembly a coupling system for modular frame units a method for assembling a module unit using the connector assembly and a modular frame unit and building having the connector assembly.
Title of the invention: METHOD AND ELECTRONICS FOR SETTING UP A LOCAL AREA BROADBAND NETWORK

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Abstract:
The invention provides a method (10) for setting up a local area broadband network having the following features: electronics determine the geographical location (12) of the electronics; the electronics measure an actual state (13-17) of the broadband network at the location (12); the electronics take the location (12) and the actual state (13-17) as a basis for choosing an external function (18) in the broadband network; the electronics report at least the location (12) and the external function (18) to a central database (26) via a common communication backbone; and the electronics comply with a communication protocol of the broadband network that is dependent on the external function (18). The invention further provides corresponding electronics, a corresponding computer program and a corresponding storage medium.

No. of Pages: 7
No. of Claims: 9
Title of the invention: INTELLIGENT CONTINUOUS MANUFACTURING METHOD VIA LIQUID COOLING OF DRIPPING PILLS

Abstract:
An intelligent continuous manufacturing method via liquid cooling of dripping pills comprises the following steps: (1) feeding: weighing and transferring multiple materials respectively; (2) material combining: performing staged heating on the materials transferred in step (1), and mixing the same to obtain a material mixture, wherein an RSD of an effective ingredient in the material mixture ≤ 5%; (3) homogenizing: pressurizing the material mixture obtained in step (2), and increasing the temperature, so as to obtain a homogenized material having the RSD of the effective ingredient in the material mixture ≤ 5%; (4) dripping: performing vibration dripping on the homogenized material obtained in step (3) to obtain dripping pills, delivering the dripping pills into a cooling liquid to be cooled and then transferred; and (5) de-oiling: removing the cooling liquid on surfaces of the dripping pills obtained in step (4) via tilting centrifugation. The manufacturing method not only shortens the manufacturing process, but also ensures the dripping pill product to be more stable and homogeneous. In addition, high-speed centrifugation is used to reasonably de-oil the dripping pills to prevent contamination of the dripping pills and improve the circulation utilization rate of the cooling liquid.

No. of Pages : 13 No. of Claims : 11
Title of the invention: METHODS AND SYSTEMS FOR UPLINK POWER ALLOCATION TECHNIQUES IN MULTICARRIER SCENARIOS

Abstract:
Systems and methods for controlling uplink (UL) power allocation in a user equipment (UE) operating in a communication network are provided. The method includes: selecting between at least a first UL power allocation technique and a second power allocation technique for use in the UE; and using the selected power allocation technique in the UE to transmit uplink data by allocating transmit power between at least two carriers on which the uplink data is transmitted.
A composition comprises a polyol and a polyethylenimine compound. A method for reducing the volatile aldehyde content of a polyol comprises the steps of: (a) providing a polyol the polyol containing a first amount of volatile aldehyde compounds; (b) providing a polyethylenimine compound; and (c) adding the polyethylenimine compound to the polyol to produce a composition.
The invention relates to a ladle lifting device (22) for a metallurgical plant (258). In order to be able to produce the ladle lifting device (22) cost effectively the ladle lifting device (22) includes a lifting arm (34) with a rotatably mounted arm element (36) a first driving element (24) for driving the rotatably mounted arm element (36) of the lifting arm (34) and a first ladle holding unit (42) connected to the lifting arm (34) for gripping a ladle (16) containing molten metal.
### Title of the invention: ADJUSTMENT DEVICE

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### Abstract:

The invention relates to an adjustment device for adjusting a roll in a roll rack (13) of a roll stand said adjustment device comprising a cylinder housing (2) that can be secured to a roll rack (13) and a piston (1) guided such that it can move translationally therein wherein the position of the piston (1) can be determined via a travel measurement device (9) connected to a coupling rod (6) wherein the coupling rod (6) is secured directly to the piston (1) wherein the piston (1) has a guide element (3) extending from the piston head (4) in the direction of the travel measurement device (9) and the coupling rod (6) is secured to the guide element (3). According to the invention in order to reduce the sensitivity of the adjustment device to a tipping the guide element (3) is guided in a guide opening (14) of the cylinder housing (2) and a sliding guide (7) is provided for the coupling rod (6) which can be arranged on an end of a borehole (15) in the roll rack facing the travel measurement device (9).

No. of Pages : 19 No. of Claims : 10
An Mg containing Zn alloy coated steel material provided with a steel material and a metal coating layer disposed on a surface of the steel material the metal coating layer being a layered structure of flat metal particles having a particle diameter of 5 100 μm and a thickness of 0.5 30 μm the composition of the metal particles being in terms of mass% 11 80% Zn 3 80% Al 8 45% Mg and 1 5% Ca the remainder comprising impurities and the Zn content the Al content and the Mg content satisfying the expression Zn + Al > Mg in terms of mass% the metal particles comprising a quasi crystal phase an MgZn2 phase and a residual composition the total area fraction of the quasi crystal phase and the MgZn2 phase being 45% or greater the area fraction of the residual composition being 0 55% the area fraction of the quasi crystal phase being 20% or greater and the area fraction of the MgZn2 phase being 3% or greater.

No. of Pages : 29 No. of Claims : 5
**Title of the invention:** PREPARATION OF POLYAMIDOIMIDES

**Abstract:**
A liquid composition comprising (a) a solvent or solvent mixture containing at least 50% by weight based on the total amount of solvents of a dioxabicycloalkane derivative (b) an aromatic tricarboxylic acid anhydride and (c) an aromatic diisocyanate can be used as coating composition for metal surfaces.

**No. of Pages:** 10  **No. of Claims:** 12
(21) Application No.201817008956 A
(22) Date of filing of Application : 12/03/2018
(43) Publication Date : 15/06/2018

(54) Title of the invention : MULTIDIMENSIONAL CHROMATOGRAPHY METHOD FOR ANALYSIS OF ANTIBODY DRUG CONJUGATES

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(57) Abstract :
The present disclosure relates to a sensitive multidimensional chromatography method for extraction detection and quantification of non conjugated cytotoxic agents and associated linker molecules used in cysteine based antibody drug conjugate production.

No. of Pages : 39 No. of Claims : 19

(71) Name of Applicant :
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(72) Name of Inventor : 
1) BIRDSALL Robert
# COMPOSITIONS COMPRISING UROLITHIN COMPOUNDS

**Title of the Invention**

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**Name of Inventor**

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2. RINSCH Christopher
3. BLANCO BOSE William

**Abstract**

The invention provides compositions comprising a medium chain triglyceride and a urolithin. The invention also provides uses and methods associated with or making use of the compositions such as a medicament, dietary supplement, functional food or medical food and in the treatment and/or prophylaxis of a muscle related pathological condition.

No. of Pages: 29
No. of Claims: 29
Title of the invention: CONVEYOR ROLL ASSEMBLY TORQUE TRANSMISSION AND SUPPORT MEANS AND PROCESS FOR MAKING A CONVEYOR ROLL ASSEMBLY USED IN A HIGH TEMPERATURE ENVIRONMENT

Abstract:
A conveyor roll assembly (1) for use at high temperature comprising a) a ceramic spool (2) having a flexural strength of at least 15 MPa and an external diameter D and b) a torque transmission and support means (3) of a general cylindrical shape and having a longitudinal axis comprising a body and b1. a supporting portion comprising at least one cylindrical supporting surface (10) and b2. a connecting portion that is mechanically and resiliently deformed comprising at least two distinct connecting surfaces frictionally connecting the torque transmission and support means (3) to the ceramic spool (2) characterized in that at least one end of the ceramic spool has an axial centered bore of a diameter 10mm d 3/4 D preferably 1/3D and a depth Dd 1.5 d and in that the torque transmission and support means (3) is provided in the at least said bore of the ceramic spool (2).

No. of Pages : 8 No. of Claims : 10
Title of the invention: POLYMERIZABLE COMPOSITION METHOD FOR PRODUCING ORGANIC GLASS USING SAID COMPOSITION AND ORGANIC GLASS

Abstract:
This polymerizable composition includes: (A) a compound that is represented by general formula (1) and includes two or more allyloxycarbonyl groups; (B) at least one polymerization initiator selected from the group consisting of peroxyketal radical polymerization initiators, peroxymonocarbonate radical polymerization initiators and peroxyester radical polymerization initiators; and (C) at least one photochromic compound selected from a group of naphthopyran compounds.

No. of Pages: 73 No. of Claims: 16
According to the present invention when during a cooling operation the load of an indoor space (500) is higher than a prescribed value a control unit (90) executes a swing control action that swings an air direction adjustment blade (51) such that the direction in which air is blown out fluctuates within a limited movement range (R2). The air direction angle with respect to a horizontal plane of the lower end air direction of the limited movement range (R2) is smaller than the air direction angle with respect to the horizontal plane of the lower end air direction of a normal movement range (R1) which is preset to be the vertical movement range for the direction in which air is blown out when during the cooling operation the load of the indoor space (500) is lower than the prescribed value.

No. of Pages : 49 No. of Claims : 12
An apparatus and method are provided for controlling instruction execution behaviour. The apparatus includes a set of data registers for storing data values and a set of bounded pointer storage elements where each bounded pointer storage element stores a pointer having associated range information indicative of an allowable range of addresses when using that pointer. A control storage element stores a current instruction context and that current instruction context is used to influence the behaviour of at least one instruction executed by processing circuitry that at least one instruction specifying a pointer reference for a required pointer where the pointer reference is within at least a first subset of values (in one embodiment the behaviour is influenced irrespective of the value of the required pointer). In particular when the current instruction context identifies a default state the processing circuitry uses the pointer reference to identify one of the data registers whose stored data value forms the required pointer. However when the current instruction context identifies a bounded pointer state the processing circuitry instead uses the pointer reference to identify one of the bounded pointer storage elements whose stored pointer forms the required pointer. This allows an instruction set to be provided that can be used for both bounded pointer aware code and bounded pointer unaware code without significantly increasing the pressure on instruction set encoding space.

No. of Pages : 30 No. of Claims : 27
The present utility model relates to a testing apparatus used for a mobile phone camera module and comprises a housing a power supply board a mainboard a camera module data interface and multiple connection ports; said power supply board and said mainboard are arranged in said housing; the power supply board is electrically connected to the camera module data interface and the multiple connection ports; the housing has reserved thereon openings corresponding to the camera module data interface and the multiple connection ports; the housing is also internally provided with a heat sink a power supply switch and an indicator lamp; the heat sink power supply switch and indicator lamp all are electrically connected to the mainboard and the power supply board. The technical solution of the present utility model provides a mobile phone camera module testing apparatus which may be conveniently mounted on a testing device for testing a camera module and the arrangement of multiple connection ports enriches the functionality of the testing apparatus.
The invention is related to a turbomachine component (1) particularly a gas turbine combustor component or burner component comprising a body (2) with a first (20) a second (21) and a third section (22) the first second and third section (20 21 22) being integrally formed with another and built from a same material and an end face (23) of the first section (20) wherein the end face (23) during operation is exposed to a first temperature higher than a second temperature of a cooling fluid. The second section (21) is located between the first (20) and the third section (22) and is formed in parts as a lattice structure (25). The lattice structure (25) comprises a plurality of rod shaped struts (30) wherein each of a first set of the plurality of struts (30) has a first end (31) the first end (31) being connected to the first section (20) and a void (35) penetrated by the plurality of struts (30) the void (35) providing at least one fluid passage via which the cooling fluid is guidable through an interior of the second section (21) during operation. The invention also relates to a method of operation of that turbomachine component (1). Furthermore the invention is related to a method for manufacturing such a turbomachine component (1) comprising the steps of generating the turbomachine component (1) as defined before as an integrally formed component via additive manufacturing techniques particularly selective laser sintering or selective laser melting or electron beam melting.
Title of the invention: PUMP DEVICE AND FUEL SUPPLY DEVICE FOR AN INTERNAL COMBUSTION ENGINE AND MIXING DEVICE IN PARTICULAR FOR A MOTOR VEHICLE

Abstract:
The invention relates to a pump device (11) for an internal combustion engine in particular of a motor vehicle having a high pressure fuel pump (10) for supplying a first injection device (14) of the internal combustion engine with fuel said pump device comprising: at least one low pressure inlet (31) via which the fuel from a low pressure fuel pump (28) can be delivered to the high pressure fuel pump (10); at least one low pressure outlet (37) for conducting fuel conveyed by means of the low pressure fuel pump (28) and delivered to the high pressure fuel pump (10) via the low pressure inlet (31) from the high pressure fuel pump (10); and at least one low pressure connection (39) for conducting fuel conveyed by means of the low pressure fuel pump (28) to a second injection device (20) provided in addition to the first injection device (14) wherein the pump device is provided with at least one mixing region (64) for mixing the fuel flowing through the low pressure outlet (37) with fuel supplied by the low pressure fuel pump (28) to the mixing region (64) upstream of the high pressure fuel pump (10) the low pressure connection (39) is fluidically connected to the mixing region (64) and the low pressure inlet (31) can be supplied with fuel from the mixing region (64).
This sliding member 1 is formed of a steel sintered body that contains chromium molybdenum and carbon with the chromium content being 5% by mass or less. This sliding member 1 comprises: a compound layer 11 that has a sliding surface 1a and is mainly composed of a nitride of steel; and a diffusion layer 12 that is adjacent to the compound layer 11 and is composed of a steel structure into which nitrogen and carbon are diffused. The concentrations of carbon and nitrogen in the diffusion layer 12 gradually decrease with the depth from the sliding surface 1a.
**Title of the invention**: PRE HEATING AND THERMAL CONTROL OF WORK ROLLS IN METAL ROLLING PROCESSES AND CONTROL SYSTEMS THEREOF

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<td>1) NOVELIS INC.</td>
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<tr>
<td>Address of Applicant :3560 Lenox Road Suite 2000 Atlanta Georgia 30326 U.S.A.</td>
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<td>1) GAENSBAUER David Anthony</td>
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<td>2) CARVALHO Francisco</td>
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<td>3) MINNITI Eduardo</td>
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<td>4) MORAES Tiago</td>
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<td>5) EBOLI Carlos</td>
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**Abstract**:
Systems and methods for using full width hot sprays 118 to pre heat rolling mills 100 prior to processing of metal sheet or plate are described herein. The hot sprays 118 may be individually controlled. Using hot sprays can allow the rolling mill 100 to reach operating temperature and achieve a desired thermal crown so that metal sheet or plate 102 may be processed immediately within tolerances for flatness and gauge accuracy. Pre heating of rolling mills 100 can eliminate the need of the rolling mill 100 to operate in a transitional period of work roll heating and can increase efficiency by eliminating or reducing scrap material and mill downtime. Hot sprays 118 may also be incorporated with existing coolant systems to provide thermal control systems for rolling mills 100 with bi directional temperature controls.

No. of Pages : 18 No. of Claims : 35
(54) Title of the invention : SECURITY DEVICE

(51) International classification :B42D25/30,B42D25/324,B42D25/342

(31) Priority Document No :1517401.4
(32) Priority Date :02/10/2015
(33) Name of priority country :U.K.

(86) International Application No Filing Date :PCT/GB2016/053000 27/09/2016
(87) International Publication No :WO 2017/055827

(61) Patent of Addition to Application Number Filing Date :NA
(62) Divisional to Application Number Filing Date :NA

(57) Abstract :
A security device comprises a plurality of viewing regions or windows (4 5 6). Each region includes a lenticular device (4A 5A 6A) the lenticular devices being constructed so that at different respective first viewing angles or first viewing angle ranges the lenticular device in each viewing region generates substantially the same first image the first viewing angles or first viewing angle ranges of the lenticular devices being substantially non overlapping.

No. of Pages : 13 No. of Claims : 21
Title of the invention: FLOOR COATING COMPOSITION

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<th>DOW GLOBAL TECHNOLOGIES LLC</th>
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<tr>
<td>Address:</td>
<td>2040 Dow Center Midland Michigan 48674 U.S.A.</td>
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| Name of Inventor:  | ZHANG Liang, XU Haipeng, HUA Zhigang, LI Wei, JIANG Jingui, ZHANG Xiaohong |

Abstract:
A floor coating composition that has a long pot life and dries fast and a coating made therefrom having good slip resistance and high adhesion strength to the floor.

No. of Pages: 20, No. of Claims: 11
An apparatus (200) for providing non contact application of fluids (110) onto web materials (500) and articles is disclosed. The apparatus comprises a gravure roll (200) having a hollow rotating shell (250) having a plurality of cavities (210) disposed within the outer surface thereof and a stationary cylindrical core (260) having a central bore (290) and a channel (270) disposed therein. A fluid disposed within a respective cavity of the plurality of cavities disposed within the outer surface of the hollow rotating shell is removed from the respective cavity by the positive pressure when the positive pressure is fluidly communicated from the central bore through the channel and into the cavity from the surface of the stationary cylindrical core.
Title of the invention: X/HARD CARBON COMPOSITE MATERIAL AND METHOD OF PREPARING THE X/HARD CARBON COMPOSITE MATERIAL

Abstract:
The invention relates to novel material comprising X/hard carbon composite and to a process for their preparation the process comprising the steps: a) forming a mixture comprising i) one or more hard carbon starting materials ii) one or more starting materials which comprise one or more of the component elements of X and optionally iii) one or more secondary carbon containing materials; and b) heating the resulting mixture at 100C to 1500C to yield the material comprising the X/hard carbon composite; wherein X comprises one or more component elements selected from antimony tin phosphorus sulfur boron aluminium gallium indium germanium lead arsenic bismuth titanium molybdenum selenium tellurium cobalt and nickel and wherein X is present in an amount of at least 5% by weight of the material comprising the X/hard carbon composite.

No. of Pages: 29 No. of Claims: 18
A method implemented using an authentication monitoring (AM) computer device for monitoring an execution of a digital authentication program is provided. The method includes receiving an authentication data file from an authenticating computer device executing the digital authentication program wherein the authenticating computer device is associated with an authenticating entity processing the authentication data file to extract at least one authentication value testing the authentication value against at least one authentication rule associated with the digital authentication program determining that a stored metric for the authenticating computer device fails to meet a predefined benchmark wherein the stored metric is associated with the digital authentication program and initiating an authentication remediation process wherein the authentication remediation process causes an update to the digital authentication program used by the authenticating computer device.
Title of the invention: METHOD AND SYSTEM FOR MANAGING AUTHENTICATION SERVICES CUSTOMER DATA

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5) GILBERT Craig
6) GIESELMAN Karen Jeanne
7) PIEL Brian John

Abstract:
Methods, media and systems directed to a platform for receiving from at least one external user of an authentication system a record including customer information for the external user and associated with at least an enrollment of the at least one external user to the authentication system; receiving by a computer interfaced with an authentication database storing historical external user customer information the record including the customer information for the external user; validating the record including customer information for the external user and the historical external user customer information; and storing an indication of the validated record.

No. of Pages: 23  No. of Claims: 21
The present invention relates to a stable liquid formulation of etanercept that efficiently reduces the production of etanercept byproducts stably maintaining the pharmaceutical efficiency of the medication during long term storage. The liquid composition of the invention is provided in pre filled syringes ready for immediate use in areas requiring treatment with etanercept.
Abstract:
Provided are an electronic apparatus in which a normal operating system (OS) and a secure OS are installed and a method for controlling the electronic apparatus. The method for controlling the electronic apparatus includes searching for at least one external terminal in which a secure OS is installed selecting a first terminal from among the at least one external terminal in which a secure OS is installed in response to a first terminal being selected from the retrieved at least one external terminal performing communication connection with the first terminal searching for at least one terminal in which only a normal OS is installed from among at least one external terminal that is capable of being communication connected to the first terminal and performing communication with a second terminal of the at least one terminal in which only the normal OS is installed through the first terminal.

No. of Pages: 33 No. of Claims: 15
(57) Abstract:
The present disclosure relates to new compounds and their use as fluorescent labels. The compounds may be used as fluorescent labels for nucleotides in nucleic acid sequencing applications.

No. of Pages : 75 No. of Claims : 32
Provided is an electronic device. The electronic device comprises a display and a processor for displaying through the display a UI on the basis of use patterns of a plurality of devices connected to the same network wherein the UI includes a device axis and a time axis and provides information related to the use of at least one device in a region where the device axis and the time axis intersect each other.
(54) Title of the invention: SEALING MATERIAL AND SEALING MECHANISM

(51) International classification: F16J15/24, F16J15/20, G03G15/00
(31) Priority Document No.: 2015181608
(32) Priority Date: 15/09/2015
(33) Name of priority country: Japan
(86) International Application No.: PCT/JP2016/075502
   Filing Date: 31/08/2016
(87) International Publication No.: WO 2017/047386
(61) Patent of Addition to Application No.: NA
   Filing Date: NA
(62) Divisional to Application No.: NA
   Filing Date: NA

(57) Abstract:
Provided are a sealing material 1 and a sealing mechanism using same the sealing material 1 being provided with: a tubular sliding layer 2 having an insertion hole 21 in which a rod shaped body is slidably inserted and comprising a material obtained by integrating fibers and an elastic material; an elastic outer skin layer 3 that is laminated on the outer circumferential surface 22 of the sliding layer 2; and fastening fibers 4 which are continuously wrapped around at least once along the circumferential direction on the inside of the elastic outer skin layer 3 or on the outer circumferential surface of the elastic outer skin layer 3 in a state in which contact is not made with the outer circumferential surface 22 of the sliding layer 2.

No. of Pages: 19  No. of Claims: 8
Sealing material 10 for sealing between a hole 21 in a structure 20 and a shaft 30 inserted into the hole 21 comprises: a sliding layer 11 that has a ring or cylindrical shape wherein the inner circumferential face thereof slides on the shaft 30 during motion of the shaft 30 relative to the structure 20 and wherein fibers and an elastomer are integrated; and an elastic external skin layer 12 that is layered on the external circumferential face of the sliding layer 11 and that has a porous structure.
An illumination control system according to an embodiment of the present invention is characterized by comprising a sensor unit that acquires human information indicating the presence or absence of a human being, a plurality of instruction value calculation units that calculates a dimming ratio instruction value on the basis of the human information acquired by the sensor unit and an instruction value selection unit that selects one of the instruction values transmitted from the plurality of instruction value calculation units.
Optimizing power generation from waste heat in large industrial facilities such as petroleum refineries by utilizing a subset of all available hot source streams selected based in part on considerations for example capital cost ease of operation economics of scale power generation a number of ORC machines to be operated operating conditions of each ORC machine combinations of them or other considerations are described. Recognizing that several subsets of hot sources can be identified from among the available hot sources in a large petroleum refinery subsets of hot sources that are optimized to provide waste heat to one or more ORC machines for power generation are also described. Further recognizing that the utilization of waste heat from all available hot sources in a mega site such as a petroleum refinery and aromatics complex is not necessarily or not always the best option hot source units in petroleum refineries from which waste heat can be consolidated to power the one or more ORC machines are identified.
The Patent Office Journal No. 24/2018 Dated 15/06/2018

| No. of Pages | 26 |
| No. of Claims | 26 |

A power generation system includes two heating fluid circuits coupled to multiple heat sources from multiple sub units of a petrochemical refining system. The sub units include an integrated diesel hydro treating plant and aromatics plant. A first subset and a second subset of the heat sources includes diesel hydro treating plant heat exchangers coupled to streams in the diesel hydro treating plant and aromatics plant heat exchangers coupled to streams in the aromatics plant respectively. A power generation system includes an organic Rankine cycle (ORC) including a working fluid that is thermally coupled to the two heating fluid circuits to heat the working fluid and an expander to generate electrical power from the heated working fluid. The system includes a control system to activate a set of control valves to selectively thermally couple each heating fluid circuit to at least a portion of the heat sources.
Title of the invention: POWER GENERATION FROM WASTE HEAT IN INTEGRATED HYDROCRACKING AND DIESEL HYDROTREATING FACILITIES

International classification: F01K25/08
Priority Document No: 62/209217
Priority Date: 24/08/2015
Name of priority country: U.S.A.
International Application No: PCT/US2016/048207
Filing Date: 23/08/2016
International Publication No: WO 2017/035146
Patent of Addition to Application Number: NA
Filing Date: NA
Divisional to Application Number: NA
Filing Date: NA

Abstract:
A power generation system includes a heating fluid circuit thermally coupled to multiple heat sources from at least an integrated hydrocracking plant and diesel hydro treating plant of a petrochemical refining system. A first subset of the heat sources includes diesel hydro treating plant heat exchangers coupled to streams in the diesel hydro treating plant. A second subset of the heat sources includes hydrocracking plant heat exchangers coupled to streams in the hydrocracking plant. The heat exchangers are connected to a power generation system that includes an organic Rankine cycle (ORC) including a working fluid that is thermally coupled to the heating fluid circuit to heat the working fluid an expander configured to generate electrical power from the heated first working fluid and a control system configured to activate a set of control valves to selectively thermally couple the heating fluid circuit to at least a portion of the heat sources.

No. of Pages: 25 No. of Claims: 25
**Title of the invention:** RECOVERY AND RE USE OF WASTE ENERGY IN INDUSTRIAL FACILITIES

**Abstract:**
Configurations and related processing schemes of direct or indirect (or both) inter plants heating systems synthesized for grassroots medium grade crude oil semi conversion refineries to increase energy efficiency from specific portions of low grade waste heat sources are described. Configurations and related processing schemes of direct or indirect (or both) inter plants heating systems synthesized for integrated medium grade crude oil semi conversion refineries and aromatics complex for increasing energy efficiency from specific portions of low grade waste sources are also described.

No. of Pages : 27  No. of Claims : 29
A power generation system includes two heating fluid circuits coupled to multiple heat sources from multiple sub units of a petrochemical refining system. The sub units include an integrated hydrocracking plant and aromatics plant. A first subset and a second subset of the heat sources includes diesel hydro treating plant heat exchangers coupled to streams in the diesel hydro treating plant and aromatics plant heat exchangers coupled to streams in the aromatics plant respectively. A power generation system includes an organic Rankine cycle (ORC) including a working fluid that is thermally coupled to the two heating fluid circuits to heat the working fluid and an expander to generate electrical power from the heated working fluid. The system includes a control system to activate a set of control valves to selectively thermally couple each heating fluid circuit to at least a portion of the heat sources.
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/03/2018
(21) Application No.201817009039 A
(43) Publication Date : 15/06/2018

(54) Title of the invention : RECOVERY AND RE USE OF WASTE ENERGY IN INDUSTRIAL FACILITIES

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<td>NA</td>
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(57) Abstract :
Configurations and related processing schemes of inter plants and hybrid intra and inter plants direct or indirect heating systems synthesized for grassroots medium grade crude oil semi conversion refineries to increase energy efficiency from specific portions of low grade waste heat sources are described. Configurations and related processing schemes of inter plants and hybrid intra and inter plants direct or indirect heating systems synthesized for integrated medium grade crude oil semi conversion refineries and aromatics complex for increasing energy efficiency from specific portions of low grade waste sources are also described.

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No. of Pages : 46 No. of Claims : 40
Optimizing power generation from waste heat in large industrial facilities such as petroleum refineries by utilizing a subset of all available hot source streams selected based in part on considerations for example capital cost ease of operation economics of scale power generation a number of organic Rankine cycle (ORC) machines to be operated operating conditions of each ORC machine combinations of them or other considerations are described. Subsets of hot sources that are optimized to provide waste heat to one or more ORC machines for power generation are also described. Further recognizing that the utilization of waste heat from all available hot sources in a mega site such as a petroleum refinery and aromatics complex is not necessarily or not always the best option hot source units in petroleum refineries from which waste heat can be consolidated to power the one or more ORC machines are identified.
A treated particulate inorganic pigment is provided. The treated particulate inorganic pigment comprises a plurality of pigment particles and a polyol ester deposited on the surfaces of the pigment particles. A method of forming a treated particulate inorganic pigment and a polymer composition are also provided.

No. of Pages : 17 No. of Claims : 38
Title of the invention: COMPOSITION FOR TREATING AND PREVENTING VIRAL INFECTIONS

Abstract:
The present invention relates generally to compositions and methods of use that include compounds that treat and prevent viral infections.

No. of Pages: 64 No. of Claims: 47
Title of the invention: ROBOTIC SURGICAL ASSEMBLIES AND INSTRUMENT DRIVE CONNECTORS THEREOF

Abstract:
An instrument drive connector includes a housing assembly an elongated shaft extending distally from the housing assembly and a first drive assembly at least partially disposed within the housing assembly and the elongated shaft. The first drive assembly includes a first drive screw a first input drive coupler non rotatably coupled to a proximal end of the first drive screw a first drive nut threadedly engaged with a threaded body portion of the first drive screw and longitudinally movable relative thereto in response to rotation of the first drive screw and a locking link. The locking link includes an elongated body having a proximal end portion coupled to the first drive nut and longitudinally movable relative thereto between a proximal non locking position and a distal locking position and a distal end portion including a switch actuation assembly including a switch actuating arm biased towards the distal locking position.
An actuation mechanism for actuating an electromechanical end effector includes a housing and a shaft assembly extending distally from the housing. The shaft assembly includes a shaft a longitudinal knife bar a first hub and a second hub. The shaft is axially movable relative to the housing and configured to be coupled to the electromechanical end effector. Rotation of a first screw of the housing moves the first hub to effect longitudinal movement of the shaft. The longitudinal knife bar is axially movable relative to the shaft and configured to be coupled to a knife blade of the electromechanical end effector. Rotation of a second screw of the housing moves the second hub to effect axial movement of the longitudinal knife bar.
Title of the invention: IMPROVED PRODUCTION OF HEAVY API GROUP II BASE OIL

Abstract:
A process for heavy base oil production comprising: a. performing an aromatic extraction of a first hydrocarbon feed to produce an aromatic extract and a waxy raffinate; b. mixing the aromatic extract with a second hydrocarbon feed to make a mixed feed having greater than 2000 wt ppm sulfur; c. feeding the mixed feed to a hydroprocessing unit to produce a heavy API Group II base oil having a kinematic viscosity at 70°C from 22.6 to 100 mm²/s. An integrated refinery process unit for making heavy base oils comprising: a. an aromatic extraction unit fluidly connected to a solvent dewaxing unit and a hydroprocessing unit; b. a first line from the aromatic extraction unit that feeds an aromatic extract to a second hydrocarbon feed to make a mixed feed having greater than 2000 wt ppm sulfur; and c. a connection that feeds the mixed feed to the hydroprocessing unit.
A solid particulate formulation comprising soluble ferric pyrophosphate and a sachet comprising the solid particulate formulation of soluble ferric pyrophosphate for adding to a dialysis solution are provided. Improved methods of administering soluble ferric pyrophosphate comprising the solid particulate formulations and kits comprising the solid particulate formulation and a dialysis concentrate formulation are also disclosed.
Electrosurgical instrument for applying radiofrequency and/or microwave frequency energy to tissue comprising: a distal part comprising an instrument tip for applying radiofrequency and/or microwave frequency energy to tissue the instrument tip comprising first and second conductive elements; a coaxial feed cable comprising an inner conductor a tubular outer conductor coaxial with the inner conductor and dielectric material separating the inner and outer conductors the coaxial feed cable being for conveying radiofrequency and/or microwave frequency energy to the distal part; wherein: the inner conductor is electrically connected to the first conductive element and the outer conductor is electrically connected to the second conductive element through a rotatable connection between the distal part and the coaxial feed cable that allows rotation of the distal part relative to the coaxial feed cable; and the instrument comprises an actuator for rotating the distal part in a first rotational direction relative to the feed cable.
The present invention relates to compounds with an extended duration of action at the glucagon receptor as compared to native glucagon. Specifically provided are glucagon receptor agonists with modifications to the structure of native glucagon introduced to selectively agonize the glucagon receptor over an extended period of time.
Title of the invention: TERMINAL ENCLOSURE WITH MODULAR ASPECTS AND MODULES FOR INTERFACING WITH THE TERMINAL ENCLOSURE

(51) International classification: G02B6/44, G02B6/38
(31) Priority Document No: 62/218373
(32) Priority Date: 14/09/2015
(33) Name of priority country: U.S.A.
(86) International Application No: PCT/EP2016/071740
Filing Date: 14/09/2016
(87) International Publication No: WO 2017/046190
(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) FREDERICKX Maddy Nadine
4) CLAES Paul Joseph
5) VAN GENECHTEN Geert
6) AZNAG Mohamed
7) HOUBEN Diederik
8) DIEPSTRATEN Patrick Jacques Ann

Abstract:
Aspects of the present disclosure relate to a modular fiber optic distribution system for enhancing installation flexibility and for facilitating adding components to a terminal housing over time so as to delay cost. The system is configured to allow components (e.g. inserts add on modules etc.) to be readily added to the terminal housing over time to expand capacity provide upgrades and to provide forward and backward compatibility.

No. of Pages: 102 No. of Claims: 31
Title of the invention: MEANS FOR THE TREATMENT OF HIV

Abstract:
The invention relates to a non-coding sequence of deoxyribonucleic acids comprising at least one sequence motif N1N2CGN3N4 wherein N is a nucleotide comprising A, C, T or G and C is deoxycytidine, G is deoxyguanosine, A is deoxyadenosine, and T is deoxythymidine for the treatment of viral infections. In particular, the non-coding sequence of deoxyribonucleic acids is used in combination with antiretroviral therapy and/or histone deacetylase inhibitors.
Title of the invention: FRICTION PAD ASSEMBLY FOR DISC BRAKES

Priority Document No: 2015181143
Priority Date: 14/09/2015
Name of priority country: Japan

Priority Application Number: PCT/JP2016/077084
Priority Filing Date: 14/09/2016

International Application No: WO 2017/047629

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7) MIYAHARA Yosuke

Abstract:
A friction pad assembly for disc brakes wherein a plurality of lining assemblies (27) supported in a guide plate (25) press on a disc rotor. A lining assembly (27) comprises friction material (45) and a backing plate (33). A plate fitting portion (47) of the lining assembly (27) is mounted to a guide hole (43) by being inserted therein and braking torque is transmitted from the plate fitting portion (47) to the guide plate (25). A plurality of link plates (21 23) that cause the pressing force from a torque receiving plate (17) that is anchored to the guide plate (25) to act on the lining assembly (27) are provided between the torque receiving plate (17) and the backing plate (33). On the back face (21a 23a) sides of the link plates (21 23) a damping layer (53) is provided sandwiched between the inner face (17a) of the torque receiving plate (17) and the back faces (21a 23a) of the link plates (21 23).

No. of Pages: 29
No. of Claims: 6
**Title of the invention:** ARTHROSCOPIC SURGICAL DEVICE

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**Abstract:**
An arthroscopic bone channel forming and suturing system useful following formation of a first and a second generally straight channel in a bone the second channel not intersecting the first channel the system including a curved bone puncture needle configured to be insertable into the first channel a curved needle driving assembly configured to manipulate the curved needle to form a curved junction between the first channel and the second channel a suture snare wire assembly configured to insert a suture snare wire to a suture snare wire pick up location via the second channel in the bone and a coordinated multi function driving assembly operative to operate the curved needle driving assembly and the suture snare wire assembly in coordinated operation to cause the suture snare wire to be pulled from the suture pick up location and through the first channel via the junction.

No. of Pages : 61 No. of Claims : 36

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3) RAZ Ronen
4) MRAZ Paul
The present invention concerns a composition comprising a combination of biocides having synergistic effect. The composition is useful for plant protection in particular the composition is useful as a biocide such as a pesticide e.g. useful as a fungicide. The composition can be used alone or in combination with other pesticides/fungicides for plant protection by enhancing the effect of said other pesticide/fungicide.

No. of Pages : 32 No. of Claims : 26
## Title of the invention
CONTROLLING OPERATION OF A RADIO NETWORK SERVING A TRANSPORT SYSTEM

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<td>(62) Divisional to Application Number</td>
<td>NA</td>
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   Address of Applicant: SE 164 83 Stockholm Sweden

### Name of Inventor
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2. PONZINI Filippo
3. IOVANNA Paola

<table>
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<td>A radio network comprises a plurality of service areas (11 12). A method of controlling operation of a radio network (10) comprises receiving a first input (81) relating to a transport system (30) the transport system (30) providing for at least one vehicle (40). The radio network comprises a plurality of service areas (11 12). The first input is indicative of a position of the vehicle (40) in the transport system (30). The method further comprises determining on the basis of the first input (81) and data which is indicative of the plurality of service areas (11 12) which of the service areas (11 12) will next serve one or more radio terminals associated with the vehicle (40). The method further comprises outputting a control signal (83) for use in controlling operation of the radio network (10) based on the determination of which of the service areas (11 12) will next serve the one or more radio terminals associated with the vehicle (40).</td>
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No. of Pages: 23 No. of Claims: 18
### Patent Application Publication

**Title of the Invention:** FOAMING SUNSCREEN COMPOSITION CONTAINING AN ULTRAVIOLET RADIATION ABSORBING COMPOUND AND A SUPERHYDROPHILIC AMPHIPHILIC COPOLYMER

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(57) Abstract:

Foaming sunscreen compositions of the present invention include a continuous water phase containing from about 0.75% to about 6% of a superhydrophilic amphiphilic copolymer and a discontinuous oil phase dispersed in the water phase which oil phase contains a UV absorbing compound and which foaming sunscreen compositions are essentially free of monomeric surfactants and substantially free of oil soluble polymers.

No. of Pages : 55 No. of Claims : 35
The present invention relates to devices and methods for treating reducing and preventing adverse skin/scalp conditions and enhancing the topical application of a benefit agent. The devices are ultrasonic with transducers positioned at an angle other than 90 relative to the surface at which the ultrasound is to be applied.
Title of the invention: FILLET WELDING METHOD AND FILLET WELDED JOINT

Abstract:
Provided is a welding method for obtaining a lap fillet welded joint which has excellent tensile strength and which is not broken by a weld metal when subjected to a tensile load without increasing the welding deformation. In this method a first steel plate having a tensile strength of 780 MPa or more is overlapped with at least a location to be welded of a second steel plate and then fillet welding is performed between the end of the first steel plate and the surface of the second steel plate. A reinforcing part is provided on the surface of the first steel plate at the side opposite the surface overlapping the second steel plate and fillet welding is performed between one end of a reinforcing material and the surface of the first steel plate. Further fillet welding is performed so that a weld metal covers the end of the reinforcing part and a space between the end of the first steel plate and the surface of the second steel plate.

No. of Pages: 32  No. of Claims: 14
This disclosure concerns compositions and methods for targeting peptides, polypeptides, and proteins to plastids of plastid containing cells. In some embodiments, the disclosure concerns chloroplast transit peptides that may direct a polypeptide to a plastid and nucleic acid molecules encoding the same. In some embodiments, the disclosure concerns methods for producing a transgenic plant material (e.g., a transgenic plant) comprising a chloroplast transit peptide as well as plant materials produced by such methods and plant commodity products produced therefrom.
Methods for collapsing a tubular organ such as the esophagus involve inserting a device into the tubular organ at least partially sealing off a section of the tubular organ and drawing in the wall of the tubular organ by application of suction. The devices may be used to move the wall of the tubular organ away from an area undergoing treatment or therapy such as to minimize damage to the tubular organ by application of radiofrequency energy or to limit temperature increase of the tubular organ.

No. of Pages : 15 No. of Claims : 18
Title of the invention: METHOD OF CHROMATOGRAPHIC SEPARATION

Abstract:
A means of isolating specific stereoisomers and enantiomers from a complex mixture containing a possibility of 32 different stereoconfigurations thus concentrating the stereoisomer or enantiomer to a high degree of purity.

No. of Pages: 29 No. of Claims: 9
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :13/03/2018
(21) Application No.201817009137 A
(43) Publication Date : 15/06/2018

(54) Title of the invention : SYNTHESE OF CYCLOHEXANE CARBOXAMIDE DERIVATIVES USEFUL AS SENSATES IN CONSUMER PRODUCTS

| (51) International classification | :C07C269/06,C07C231/02 |
| (31) Priority Document No | :62/245192 |
| (32) Priority Date | :22/10/2015 |
| (33) Name of priority country | :U.S.A. |
| (86) International Application No | :PCT/US2016/058024 |
| Filing Date | :21/10/2016 |
| (87) International Publication No | :WO 2017/070418 |
| (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) SREEKRISHNA Koti Tatachar
8) LIN Yakang

(57) Abstract :
Synthesis methods to produce a series of carboxamides built off of an (S) 2 amino acid backbone or an (R) 2 amino acid backbone depending upon the desired diastereomer of the end product.

No. of Pages : 74 No. of Claims : 8
A one piece heat exchanger manufactured using an additive manufacturing process is described. The heat exchanger includes a plurality of channels formed therein. At least some of the plurality of channels may be configured to provide structural support to the heat exchanger to reduce its weight. Different coolant media may be used in a first set and a second set of the plurality of channels to provide different types of cooling in an integrated one piece heat exchanger structure.
A method of and an apparatus for picking up cut gemstones which have been orientated table down is provided. A vacuum wand has a generally cylindrical body with a central bore culminating in a nozzle through which a vacuum may be applied. The wand comprises a retractable outer sleeve configured to slide axially over the nozzle and a biasing mechanism for biasing the sleeve towards a position in which it extends beyond the nozzle.
Title of the invention: METHODS FOR ENHANCING TOPICAL APPLICATION OF A BENEFIT AGENT

| (51) International classification  | :A61N7/00,A61M37/00 |
| (31) Priority Document No         | :62/221889          |
| (32) Priority Date                | :22/09/2015        |
| (33) Name of priority country     | :U.S.A.             |
| (86) International Application No | :PCT/US2016/052923 |
| Filing Date                      | :21/09/2016       |
| (87) International Publication No | :WO 2017/053456   |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date                      | :NA                |
| (62) Divisional to Application Number | :NA |
| Filing Date                      | :NA                |

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Name of Inventor:
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2)SUN Ying
3)PATURI Jyotsna
4)WU Jeffrey M.

Abstract:
The present invention relates to methods for treating reducing and preventing follicular related adverse skin/scalp conditions. The methods comprise providing and orienting a device the device being ultrasonic with transducers positioned at an angle other than 90 relative to the surface at which the ultrasound is to be applied.

No. of Pages : 40 No. of Claims : 24
**Title of the invention:** VAGINAL RING SENSOR

**International classification:** A61B5/00, A61B5/145, A61K9/00

**Priority Document No:** 62/221786

**Priority Date:** 22/09/2015

**Name of priority country:** U.S.A.

**International Application No:** PCT/US2016/051444

**Filing Date:** 13/09/2016

**International Publication No:** WO 2017/053122

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**Abstract:**
A vaginal ring sensor device adapted to be placed within the vaginal vault of a user the device including a ring body at least one through hole that passes through the ring body and at least one biosensor structured and arranged to sense and/or measure a parameter of vaginal fluid as such fluid passes through the at least one through hole.

No. of Pages: 21  No. of Claims: 32
The present invention provides compositions utilizing a first zwitterionic ammonio alkanamide and/or zwitterionic ammonio alkanoate surfactant according to Formula 1 and an ingredient selected from the group consisting a surfactant other than the first zwitterionic surfactant emulsifiers conditioning agents emollients moisturizers humectants thickeners lubricants chelating agents anti oxidants preservatives active ingredients fragrances dyes buffering agents exfoliates pH adjusters inorganic salts solvents viscosity controlling agents and opacifying agents wherein the composition is substantially free of alkylamidoamine and aminooalkyamine.

No. of Pages : 70 No. of Claims : 20
The sunscreen compositions of the present invention include a phase stable oil in water emulsion that includes a continuous water phase containing a superhydrophilic amphiphilic copolymer and a suspension of styrene/acrylate copolymer particles; and a discontinuous oil phase homogeneously dispersed in the continuous water phase where the discontinuous oil phase includes a UV absorbing compound and the sunscreen composition is essentially free of monomeric surfactant and has a viscosity of about 2000 cps or less.
Title of the invention: METHODS FOR ENHANCING TOPICAL APPLICATION OF A BENEFIT AGENT

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Abstract:
The present invention relates to methods for treating, reducing and preventing adverse skin/scalp conditions and enhancing the topical application of a benefit agent. The methods comprise providing and orienting a device, the device being ultrasonic with transducers positioned at an angle other than 90° relative to the surface at which the ultrasound is to be applied.

No. of Pages: 39  No. of Claims: 19
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<th>(21) Application No.201817009146 A</th>
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<td>(22) Date of filing of Application : 13/03/2018</td>
<td>(43) Publication Date : 15/06/2018</td>
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(54) Title of the invention: PLATELET PRODUCTION METHOD USING ROTARY AGITATION CULTURING METHOD

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<th>:C12N5/078,A61K35/14,A61K35/19</th>
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(57) Abstract:
The present invention provides a production method for platelets including a step in which megakaryocytic cells are cultured in a culture solution inside a culture vessel. The culture solution is agitated using an agitator in said culturing step.

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

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   Address of Applicant: Kyoto Research Park 93 Awatacho Chudoji Shimogyo ku kyoto shi Kyoto 6008815 Japan

(72) Name of Inventor:
1) SHIGEMORI Tomohiro
2) OKAMOTO Haruki
The invention relates to an adapter comprising an interior which accommodates a single serve capsule and which has an opening at a first end for introducing the capsule into the interior and a receptacle for a pricking spike at the opposite end.
The invention relates to the organic chemistry pharmacology and medicine and concerns the prevention and treatment of human and animal diseases associated with the disruption of the activity of various kinases in particular Abl kinase for example diseases such as leukemia acute myelogenous leukemia chronic myelogenous leukemia acute lymphocytic leukemia breast cancer non small cell lung cancer gastrointestinal stromal tumors ovarian cancer lymphoma using a new salt form of 3 (1 2 4 triazolo[4 3 a]pyridine 3 ylethynyl) 4 methyl N (4 ((4 methylpiperazin 1 yl)methyl) 3 trifluoromethylphenyl)benzamide. The salt of this compound with methanesulfonic acid formula (I) or its hydrate solvate as well as polymorphic modifications that have the ability to inhibit the activity of kinases in particular Abl kinases. The present invention also relates to pharmaceutical compositions comprising a therapeutically effective amount of a salt of the invention to a method for preparing a crystalline salt of the invention as well as to a method for treating oncological diseases in a subject.
Compositions and methods for inducing or promoting repair of a bone fracture.
A device and method for rotating a wind turbine rotor and a wind turbine are provided. The device comprises at least one rotating unit (50). The rotating unit (50) comprises an extensible cylinder (51) a mounting seat (52) and a pin (53). When the device is used for mounting or repairing blades (31) the extensible cylinder (51) drives by means of the pin (53) the rotor (28) to rotate along a circumferential direction to reach a position suitable for mounting or repairing the blades (31). The extensible cylinder (51) can be locked in a particular working state by controlling a driving source of the extensible cylinder (51) thereby locking positions of the pin (53) and the rotor (28). The position of the rotor (28) can be locked without any additional locking device improving safety when mounting or repairing the blades (31) and facilitating mechanism simplification. After the blades (31) are mounted or repaired the extensible cylinder (51) can be separated from a machine base (27) and the extensible cylinder (51) can be separated from the rotor (28) by removing the pin (53) from a pin hole (28a) in the rotor (28). The device is independent of the wind turbine and so the overall weight of the wind turbine can be reduced.
A power generation system includes four heating fluid circuits thermally coupled to heat sources from sub units of a petrochemical refining system. The sub units include a hydrocracking plant an aromatics plant and a diesel hydro treating plant. Subsets of the heat sources includes hydrocracking plant heat exchangers coupled to streams in the hydrocracking plant aromatics plant heat exchangers coupled to streams in the aromatics plant and diesel hydro treating plant heat exchangers coupled to streams in the diesel hydro treating plant. A power generation system includes three organic Rankine cycles each including a working fluid that is thermally coupled to at least one heating fluid circuit to heat the working fluid and an expander to generate electrical power from the heated working fluid. The system includes a control system to activate a set of control valves to selectively thermally couple each heating fluid circuit to at least a portion of the heat sources.

No. of Pages : 34 No. of Claims : 30
### Title of the invention: RECOVERY AND REUSE OF WASTE ENERGY IN INDUSTRIAL FACILITIES

### Abstract:
Configurations and related processing schemes of specific interplants and hybrid intra and interplants waste heat recovery schemes for thermal energy consumption reduction in integrated refining petrochemical facilities synthesized for grassroots medium grade crude oil semi conversion refineries to increase energy efficiency from specific portions of low grade waste sources are described. Configurations and related processing schemes of specific interplants and hybrid intra and interplants waste heat recovery schemes for thermal energy consumption reduction in integrated refining petrochemical facilities synthesized for integrated medium grade crude oil semi conversion refineries and aromatics complex for increasing energy efficiency from specific portions of low grade waste sources are also described.

### No. of Pages: 27  No. of Claims: 25
A platform for creating engineered tissues includes a vascular tube that defines a vascular diameter and is configured to receive vascular system seed cells; a non-vascular tube that defines a non-vascular tube diameter and is configured to receive organ system seed cells and a barrier formed between the vascular tube and the non-vascular tube.

No. of Pages: 11  No. of Claims: 19
A system includes a waste heat recovery heat exchanger configured to heat a heating fluid stream by exchange with a heat source in a crude oil associated gas processing plant; and an Organic Rankine cycle energy conversion system. The Organic Rankine cycle energy conversion system includes a heat exchanger configured to heat a first portion of a working fluid by exchange with the heated heating fluid stream; and a cooling subsystem including one or more cooling elements each configured to cool one or more process streams from the crude oil associated gas processing plant and a cooling water stream for ambient air cooling by exchange with a second portion of the working fluid. The Organic Rankine cycle energy conversion system includes an ejector configured to receive the second portion of the working fluid from the cooling subsystem and a third portion of the working fluid; a turbine and a generator configured to generate power by expansion of a fourth portion of the working fluid; and a cooling element configured to cool a stream of working fluid including an output stream of working fluid from the ejector and the expanded fourth portion of the working fluid from the turbine and generator.

No. of Pages: 62 No. of Claims: 29
### Title of the invention: SMART DEVICE DISTRIBUTED SECURITY SYSTEM

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### Name of Applicant:
1) HONEYWELL INTERNATIONAL INC.,
   Address of Applicant: 115 Tabor Rd, Morris Plains, NJ 07950, USA, U.S.A.

### Name of Inventor:
1) PROBIN, Robert J.
2) CRISP, Martin
3) BROWN, William J.

### Abstract:
A security system incorporating one or more sensors and one or more smart devices connected together via the Internet, other network or media. The one or more smart devices may have an alarm application (app) that permits a user to set and unset an alarm, monitor a status change of an event, have access to video information associated with the event, take remote or local action relative to the event, and more. The processing may be more than moving processing to one smart device. Core control may reside in more than one device, and thus result in a whole system robustness.

No. of Pages : 31 No. of Claims : 15
**Title of the invention:** INFORMATION PROCESSING APPARATUS AND INFORMATION PROCESSING METHOD

| (51) International classification | :F16D65/02 |
| (31) Priority Document No | :2016-166055 |
| (32) Priority Date | :26/08/2016 |
| (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 |

**Abstract:**
An information processing apparatus (10) capable of communicating with a vehicle (2) includes a storage unit (33) configured to store a location of an autonomous driving prohibition section on a map in association with a release condition set based on a traveling state of the vehicle (2); and a control unit (32) configured to acquire the traveling state of the vehicle (2) including the location of the vehicle (2) on the map from the vehicle (2) through communication, the control unit (32) being configured to determine whether or not to release the autonomous driving prohibition section based on the acquired traveling state of the vehicle (2), the location of the autonomous driving prohibition section and the release condition of the autonomous driving prohibition section, the location and the release condition being stored in the storage unit (33).

No. of Pages: 40 No. of Claims: 14
The present invention relates to a polypeptide comprising a human binding domain capable of binding to an epitope of human and non-chimpanzee primate CD3 (epsilon) chain as well as to a process for the production of the mentioned polypeptide. The invention further relates to nucleic acids encoding for the polypeptide, to vectors comprising the same and to host cells comprising the vector. In another aspect, the invention provides for a pharmaceutical composition comprising the mentioned polypeptide and medical uses of the polypeptide. In a further aspect the invention provides a method for the identification of polypeptides comprising a cross-species specific binding domain capable of binding to an epitope of human and non-chimpanzee primate CD3ε (CD3 epsilon).
Title of the invention: INTERACTIVE COLOR CENTER DISPLAY APPARATUS

| (51) International classification | :G04B19/065 |
| (31) Priority Document No | :61/330,505 |
| (32) Priority Date | :03/05/2010 |
| (33) Name of priority country | :U.S.A. |
| (86) International Application No | :PCT/US2011/035055 |
| Filing Date | :03/05/2011 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :7851/DELNP/2012 |
| Filed on | :07/09/2012 |

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Address of Applicant: 3400 W. Segerstrom Ave., Santa Ana, CA 92704-6405 United States of America (US) U.S.A.

Name of Inventor: 1) REYNOLDS, Damien 2) WOELFEL, Erika

Abstract:
A display unit comprising a plurality of display modules arranged in a row and having an upper display section and a lower display section. One of the display modules includes an interactive Kiosk, and a second of the display modules includes at least one computer controlled card reading video station. A consumer may pass a coded paint color sample card past a code reader in the video station and is thereafter presented with a display of a color present on the sample card followed by a selectable sequence of video display screens, which may comprise part of a color selection application program. [Fig. 7]
| (51) International classification | :G01N33/5094 |
| (31) Priority Document No | :2009-213645 |
| (32) Priority Date | :15/09/2009 |
| (33) Name of priority country | :Japan |
| (86) International Application No Filing Date | :PCT/JP2010/065903 :15/09/2010 |
| (61) Patent of Addition to Application Number Filing Date | :NA :NA |
| (62) Divisional to Application Number Filed on | :2642/DELPN/2012 :27/03/2012 |

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(72) Name of Inventor :
1) KOJI ETO
2) NAOYA TAKAYAMA
3) SOU NAKAMURA
4) HIROMITSU NAKAUCHI

(57) Abstract :
Disclosed is a method for producing specific cells by amplifying cells at a desired differentiation stage. The disclosed method is for inducing the differentiation of cells to produce specific cells. In order to amplify cells at a desired differentiation stage, oncogenes are forcibly expressed within cells at the desired differentiation stage, producing specific cells. Furthermore, the disclosed method suppresses oncogene-induced senescence (OIS), which is induced by the oncogenes expressed within the cells at the desired differentiation stage.

No. of Pages : 85 No. of Claims : 7
The Patent Office Journal No. 24/2018 Dated 15/06/2018

| (12) PATENT APPLICATION PUBLICATION | (21) Application No.201611038234 A |
| (19) INDIA | |
| (22) Date of filing of Application :09/11/2016 | (43) Publication Date : 15/06/2018 |

(54) Title of the invention : MANUALLY OPERATED LOAD CARRYING EQUIPMENT THAT CAN BE MODIFIED INTO SEATING ARRANGEMENTS AND MULTIPLE APPLICATIONS

| (51) International classification | :B63B25/22 |
| (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) SAROJ KUMAR SHAKYA
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5) NA
6) NA
7) NA

(72) Name of Inventor :
1) BIPIN BHASKARAN NAIR
2) PUSHPENDER KUMAR
3) SAROJ KUMAR SHAKYA
4) NA
5) NA
6) NA
7) NA

(57) Abstract :
In all its embodiment the subject invention consist of a manually operated load carrying equipment which consist of a rigid base and surrounding frames for preventing the load from falling out. The base and the frame are made of rigid solid materials conventionally available in the market. It consists of multiple secondary foldable frames joined to the base structure. There are holding elements on the secondary frames which can be set at convenient angle for applying force to move the equipment. The secondary foldable frames are designed and built in such a manner that it can be folded into multiple orientations. In all its embodiment, the secondary foldable frame can be folded up into a seating arrangement as indicated in the diagram in the following pages. The secondary foldable frame can also be folded up to utilize the equipment as patient transport equipment as shown in the diagram in the following pages. The secondary foldable frame can also be oriented to use the equipment as multiple load carrying equipment. In all its embodiment as indicated in the diagrams in the following pages, the subject invention consists of limiting elements attached to the base frame that enable the secondary folding frame to be oriented at predefined angles as found suitable by the inventors during preliminary analysis.

No. of Pages : 3 No. of Claims : 4
The present invention relates to method (700) and device (100) for audio management in multiple tabs of one or more web browsers. In accordance with one embodiment the method (700) comprises the step of detecting (701) switching from a first tab to a second tab. Upon detecting the switching, the method comprises determining (702) a category of the second tab after. Based on the determined category, the method comprises controlling (703) an audio of the first tab and/or the second tab and/or a further tab. <>
Title of the invention: METHOD AND APPARATUS TO PROCESS OMR SHEETS IN SECURE MANNER

Abstract:
Disclosed is a process of OMR evaluation where the OMR sheets are scanned and processed at the venue of the exam itself on a computer or a mobile computing device, leaving little scope for any manipulation in the scanned image thereafter. Any manipulation in the sheets can be detected without fail. OMR sheets are scanned on the finishing of the exam or as soon as the candidate submits his sheets. A unique signature code of his sheet is generated and given back to him (emailed, or messaged/sent electronically or in the form of printout) and published on a public domain/Website (preferably) immediately on a real time basis. This unique code is generated for each sheet and block of sheets and is published in public/private domain.

No. of Pages: 26
No. of Claims: 4
Title of the Invention: AN INTRAMEDULLARY TELESOCOPIC NAIL SYSTEM WITH ROTATIONAL STABILITY AND A METHOD OF TREATING DEFORMITIES AND FRACTURES IN GROWING LONG BONES USING SAID INTRAMEDULLARY NAIL ASSEMBLY

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Name of Inventor:
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2. Dr. Jitendra Prasad
3. Mr. Subham Badhyal

Abstract:
An intramedullary telescopic nail system with rotational stability and a method of treating deformities and fractures in growing long bones using said intramedullary nail assembly. A Rotationally Stable Telescopic Intramedullary Nail system is used for the fixation of long bone fractures in children. The nail assembly consists of female hollow nail, a male solid nail and the bone fixation screws. The female component is usually fixed to proximal cortex and the male component is attached to the distal cortex with screws. This system allows longitudinal extension of the nail with healing and natural growth of bone in patients where it provide rotational stability through engagement of protrusion in the male component into slot in the female component to bone by restraining relative rotation between male and female components. This nail is particularly advantageous for children suffering from bone deformity such as Osteogenesis Imperfecta (OI). This nail will reduce the rate of re-surgery and frequent failures of implant.

No. of Pages: 26
No. of Claims: 17
The present invention relates in part a to multiparticulate sprinkle dosage form comprising duloxetine or a pharmaceutically acceptable salt thereof, having higher acid resistance as compared to commercially available delayed release formulations. It further relates to various methods of administering the said multiparticulate sprinkle dosage forms.

No. of Pages : 27 No. of Claims : 14
Provided is a synthetic fiber treatment agent capable of providing drop off preventive properties of a fiber oligomer in a synthetic fiber production step. Provided is a synthetic fiber treatment agent containing an ester compound (A) being at least one compound selected from an alditol fatty acid ester compound (A1) and an ester compound of dianhydride alditol and a fatty acid and a smoothing agent (B) wherein the total weight percentage of the compound (A) and the smoothing agent (B) with respect to the non volatile content of the treatment agent is 30 90 weight% the hydroxyl value of the alditol constituting the compound (A1) is 5 or more and the kinematic viscosity of the non volatile content of the treatment agent at 25°C is 100 250 mPas.

No. of Pages : 27 No. of Claims : 8
Title of the invention: PROTEIN BIOMARKER PANEL FOR DETECTING NON SMALL CELL LUNG CANCER AND METHOD FOR DIAGNOSING A NON SMALL CELL LUNG CANCER BY THE USE THEREOF

Abstract:
The present disclosure relates to biomarker panel which includes biomarkers and method for the detection of a lung cancer from a human. Methods are provided for diagnosing a lung cancer where the methods include detecting in a sample at least one biomarker value corresponding to at least one biomarker selected from the biomarkers provided in table 2 wherein the human is classified as an Asian having a non small cell lung cancer or the likelihood of having lung cancer is determined based on the at least one biomarker value.

No. of Pages : 54 No. of Claims : 28
No. of Pages : 24 No. of Claims : 6
The Patent Office Journal No. 24/2018 Dated 15/06/2018

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/02/2018
(21) Application No.201817005990 A
(43) Publication Date : 15/06/2018

(54) Title of the invention : MOTOR VEHICLE FRONT SUSPENSION

(31) Priority Document No :102015000039549
(32) Priority Date :29/07/2015
(33) Name of priority country :Italy
(86) International Application No :PCT/IB2016/054524
   Filing Date :28/07/2016
(87) International Publication No :WO 2017/017639
(61) Patent of Addition to Application Number :NA
   Filing Date :NA
(62) Divisional to Application Number :NA
   Filing Date :NA

(57) Abstract :
A motor vehicle forecarriage (8) comprising a forecarriage frame (16) a pair of front wheels (10 10") kinematically connected to the forecarriage frame (16) by means of an articulated quadrilateral comprising a pair of cross members hinged to the forecarriage frame (16) in correspondence of middle hinges said cross members being connected together in correspondence of opposite transverse ends by means of uprights pivoted to said transverse ends in correspondence of side hinges each of the uprights guides and supports a stub axle of a front wheel (10 10") mechanically connected to a rotation pin of the front wheel (10 10") each upright extending from an upper end to a lower end and wherein each rotation pin of the front wheel (10 10") is comprised between the upper end and the lower end of the corresponding upright.

No. of Pages : 21 No. of Claims : 28
In one embodiment, a power generation plan developing apparatus includes an operation state enumerator configured to identify one or more types of operation states in which each generator among generators can operate in a predetermined period, to enumerate one or more operation states in which each generator can operate in the predetermined period in a case where the operation state of the generator concerned is of the identified types. The apparatus further includes a power generation plan creator configured to create a power generation plan for the generators based on the identified types and the enumerated operation states.
ROBOT CONTROL DEVICE, STUDENT ROBOT, TEACHER ROBOT, LEARNING SUPPORT SYSTEM, ROBOT CONTROL METHOD, AND PROGRAM RECORDING MEDIUM

Title of the invention:

The robot control device (a communication terminal) is a robot control device controlling a student robot playing a role of a student learning with a user and includes acquirer (a learning performance acquirer) that acquires an indicator presenting academic ability of the user, determiner (a student robot operation controller) that determines an operation of the student robot based on the indicator presenting the academic ability of the user acquired by the acquirer, and executor (the student robot operation controller) that makes the student robot execute the operation determined by the determiner.

No. of Pages: 50
No. of Claims: 19
The present invention provides a topical composition comprising (a) 0.5 to 25 weight percent of glycerin; (b) 0.1 to 5 weight percent of cetearyl olivate; (c) 0.1 to 5 weight percent of sorbitan olivate; and (d) 0.01 to 1 weight percent of extract of Pichia anomala; wherein the composition is substantially free of fatty alcohols and is in the form of a gel cream.
A synchronous rotating electrical machine (100) comprises: a rotor (10) including a rotor shaft (11b), rotor core (11a) with rotor slots (11c), field winding conductors (12a) penetrating the slots, and two field winding end portion retaining structures (13); a stator (20) including a cylindrical stator core (21), and stator windings (22); a frame (40); two bearings (30); and two internal fans (18). The field winding end portion retaining structures (13) hold the field winding conductors (12a) at both axially outer sides of the rotor core (11a). Each of field winding end portion retaining structures (13) includes: a cylindrical retaining ring (15) with a first end connected to an axial end of the rotor core (11a); an annular retaining ring support portion (16) connected to a second end of the retaining ring (15); and support brackets (17) that support circumferential portions of the retaining ring support portion (16) from the rotor shaft (11b). The retaining ring support portion (16) facing the internal fan (18) is formed into a convex shape.
The present invention intends to reduce the contamination level of an introduction path, miniaturize a circuit board, and improve measurement accuracy by adjusting the number of molecules of a measurement target component to flow into an analysis part, and includes: a detector 2 for detecting the concentration of the measurement target component contained in fluid; an introduction path 3 connected to the detector 2 to introduce the fluid into the detector 2; and a flow rate switching mechanism 4 adapted to, depending on the concentration of the measurement target component, switch the flow rate of the fluid to be introduced into the detector 2. Fig. 1

No. of Pages : 24
No. of Claims : 9
**Title of the Invention:** AUTONOMOUS INDOOR EXPLORATION USING MOBILE VEHICLE AND SIMULTANEOUS MAPPING OF INDOOR ENVIRONMENT

| (51) International classification | :B60R21/12 |
| (31) Priority Document No | :NA |
| (32) Priority Date | :NA |
| (33) Name of priority country | :NA |
| (36) International Application No | :NA |
| Filing Date | :NA |
| (87) 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 is a computer-implemented method and device for autonomous exploration, localizing and mapping by a mobile vehicle. The said method comprising: Scanning the environment to generate sensor data, using a plurality of sensors; Estimating a circular arc from the said sensor data to map the free regions and the obstacle regions for navigation by vehicle; Generating, from the circular arc, a plurality of preliminary estimate of the next positions of the said vehicle in the said free region; Calculating heuristically the next best target point in planar space; Moving the mobile vehicle to the target position and performing autonomous localization and mapping at the new position; Repeating the sequence of steps to explore the navigable space and generating a map of environment is also generated simultaneously. Fig. 1

No. of Pages: 22
No. of Claims: 10
The present subject matter relates to conducting transactions during voice calls. In accordance with the present subject matter, an option of initiating the transaction between first user device (108-1) and second user device (108-2) may be provided to the first user device (108-1), during an active voice call. In response to the providing, a service number associated with the transaction may be received from the first user device (108-1). Next, the transaction between the first user device (108-1) and the second user device (108-2) may be performed, based on the service number received from the first user device (108-1), and an in-call announcement may be made in the active voice call to notify successful completion of the transaction.
A device for sensing the relative rotary position of first and second parts about a rotation axis, the device comprising a follower constrained to move on a first track fast with the first part and on a second track fast with the second part, the first track being linear and the second track comprising a plurality of circular arcs and at least one transition section connecting one of the circular arcs to another. The tracks are arranged so as to convert relative rotation of the parts into linear motion of the follower wherein the second track is generally spiral, each circular arc is of constant radius about the rotation axis, and the first track is perpendicular to the rotation axis.
The Patent Office Journal No. 24/2018 Dated 15/06/2018

(54) Title of the invention: MODIFIED GOSWAMI CYCLE BASED CONVERSION OF GAS PROCESSING PLANT WASTE HEAT INTO POWER AND COOLING WITH FLEXIBILITY

(51) International classification: F01K23/08
(31) Priority Document No: 62/209147
(32) Priority Date: 24/08/2015
(33) Name of priority country: U.S.A.
(86) International Application No: PCT/US2016/030063
    Filing Date: 29/04/2016
(87) International Publication No: WO 2017/034628
(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) KAMEL Akram Hamed Mohamed

(57) Abstract:
A system includes a waste heat recovery heat exchanger configured to heat a heating fluid stream by exchange with a heat source in a crude oil associated gas processing plant; and a modified Goswami energy conversion system. The modified Goswami energy conversion system includes a first group of heat exchangers configured to heat a first portion of a working fluid by exchange with the heated heating fluid stream; and a second group of heat exchangers configured to heat a second portion of the working fluid. The modified Goswami energy conversion system includes a rectifier configured to receive the heated first and second portions of the working fluid and a third portion of the working fluid and to output an overhead discharge stream and a liquid stream the third portion of the working fluid being at a lower temperature than the heated first and second portions of the working fluid. The modified Goswami energy conversion system includes a cooling subsystem including one or more cooling elements configured to cool a chilling fluid stream by exchange with the overhead discharge stream; and a turbine configured to generate power from the liquid stream of the working fluid.

No. of Pages: 63 No. of Claims: 34
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<th>(54) Title of the invention: FUSED PYRAZOLE DERIVATIVES AS KINASE INHIBITORS</th>
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<td>(51) International classification: C07D487/04, C07D491/107, C07D491/08</td>
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<td>(31) Priority Document No: 1517263.8</td>
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<td>(32) Priority Date: 30/09/2015</td>
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<td>(33) Name of priority country: U.K.</td>
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<td>(86) International Application No: PCT/EP2016/073028</td>
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<td>(61) Patent of Addition to Application Number: NA</td>
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<td>(62) Divisional to Application Number: NA</td>
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(57) Abstract:
A series of substituted pyrazolo[1,5-a]pyrimidine and pyrazolo[1,5-a][1,3,5]triazine derivatives of formula (I) as defined herein being selective inhibitors of phosphatidylinositol 4 kinase (I4) activity are beneficial in the treatment and/or prevention of various human ailments including inflammatory autoimmune and oncological disorders; viral diseases and malaria; and organ and cell transplant rejection.

No. of Pages: 113 No. of Claims: 11
(54) Title of the invention: MICROBIOCIDAL OXADIAZOLE DERIVATIVES

| (51) International classification: | C07D413/12, C07D417/12, C07D271/06 |
| (31) Priority Document No: | 15188238.8 |
| (32) Priority Date: | 02/10/2015 |
| (33) Name of priority country: | EPO |
| (87) International Publication No: | WO 2017/055473 |
| (61) Patent of Addition to Application Number Filing Date: | NA, NA |
| (62) Divisional to Application Number Filing Date: | NA, NA |

(57) Abstract:
Compounds of the formula (I) wherein the substituents are as defined in claim 1 useful as a pesticides especially fungicides.

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3) BEAUGENIES Renaud
4) POULIOT Martin

No. of Pages: 300 No. of Claims: 15
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application : 13/03/2018

(43) Publication Date : 15/06/2018

(54) Title of the invention : MICROBIOCIDAL OXADIAZOLE DERIVATIVES

(51) International classification : C07D271/06, A01N43/82, C07D413/04

(31) Priority Document No : EP15188234.7

(32) Priority Date : 02/10/2015

(33) Name of priority country : EPO

(86) International Application No : PCT/EP2016/073290

Filing Date : 29/09/2016

(87) International Publication No : WO 2017/055469

(61) Patent of Addition to Application Number : NA

Filing Date : NA

(62) Divisional to Application Number : NA

Filing Date : NA

(57) Abstract :
Compounds of the formula (I) wherein the substituents are as defined in claim 1 useful as a pesticides especially as fungicides.

No. of Pages : 108 No. of Claims : 15

(71) Name of Applicant :
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In order to simplify an inspection of an in-vehicle exhaust gas analysis system as well as to inspect the entirety of the system combining a flowmeter and exhaust gas analyzer, an in-vehicle exhaust gas analysis system 10, which is provided with a flowmeter 2 to measure a flow rate of exhaust gas, and an exhaust gas analyzer 3 to analyze a concentration of a measurement target component contained in the exhaust gas, includes a standard gas supply mechanism 5 to supply a standard gas containing a predetermined component to the flowmeter 2 and the exhaust gas analyzer 3. The system 10 is configured to include a detected mass calculation section 63 to calculate a detected mass of a predetermined component by using a flow rate obtained by the flowmeter 2 and a concentration of the predetermined component obtained by the exhaust gas analyzer 3; a supply mass acquisition section 64 to acquire a supply mass of the predetermined component supplied from the standard gas supply mechanism 5 to the flowmeter 2 and the exhaust gas analyzer 3; and a mass comparison section 65 to compare a detected mass calculated by the mass calculation section 63 and a supply mass acquired by the supply mass acquisition section 64. Fig. 2
Title of the invention: INSERT MEMBER

Abstract:
An object is to provide an insert member applicable as a cylinder sleeve, which has improved adhesion and thermal conductivity to another metal (for example, a cylinder block) for inserting the insert member. [Solution] An insert member for being inserted into another metal by casting, including: a plurality of protrusions on an insert surface that comes into contact with the other metal being melted during casting, the protrusions protruding toward the other metal and being independent of each other on the insert surface, wherein each of the plurality of protrusions includes a base part constituting a portion of the protrusion close to the insert surface, a top part constituting a portion of the protrusion close to the other metal, and a constricted part between the base part and the top part. The constricted part provides each of the plurality of protrusions with a constricted shape from the base part to the top part, and the top part has a branching structure. [Selected Drawing] FIG. 1
NOBLE-METAL POWDER AND THE USE THEREOF FOR PRODUCING COMPONENTS

The present invention relates to a powder composed of spherical noble-metal 5 particles having a particle size distribution with a d10 value of ≥ 10.0 μm and a d90 value of <80.0μm.

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Name of Inventor:
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2) Stephan Humm

No. of Pages: 26  No. of Claims: 14
A control system includes a supercharged engine (10) and an electronic control unit (34). The supercharged engine (10) includes: a combustion chamber (17); an exhaust passage (18); a turbine (20); and an exhaust catalyst (22). The turbine (20) includes a turbine wheel (27), and a turbine control valve (29). The electronic control unit (34) is configured to calculate a first exhaust gas temperature and a second exhaust gas temperature that are temperatures of exhaust gas flowing into the exhaust catalyst (22). The electronic control unit (34) is configured to control the turbine control valve (29) such that: the turbine control valve (29) is set to the first valve opening degree when the first exhaust gas temperature is higher than the second exhaust gas temperature; and that the turbine control valve (29) is set to the second valve opening degree when the second exhaust gas temperature is higher than the first exhaust gas temperature. FIG.8
A vehicle underbody structure includes a bumper, a sub frame, and a frame. The frame interconnects the bumper and the sub frame. The frame includes first and second symmetrical halves spaced at a distance. The frame is attached to the bumper at front segments of each of the halves, and to the sub frame at rear segments of each of the halves. The halves are defined by a plurality of legs formed with the front and rear segments such that the first and second halves define load paths configured to transfer energy throughout the frame.
An air cleaner is provided that may include a first air cleaning module including a first fan that generates air flow toward a first discharge outlet from a first suction inlet; a second air cleaning module including a second fan that generates air flow toward a second discharge outlet from a second suction inlet; and a divider provided between the first air cleaning module and the second air cleaning module, the divider being configured to block air discharged through the first discharge outlet from being suctioned into the second suction inlet.

No. of Pages : 79 No. of Claims : 20
A central-string inverter device is provided, including a container and multiple string inverters installed in the container. The multiple string inverters are arranged in two rows located respectively on two opposite sides of the container. An intermediate duct is formed between the two rows of string inverters. An air outlet is arranged on each of side walls of the two opposite sides of the container. An air inlet is arranged on each of side walls of the other two opposite sides of the container or on a bottom wall of the container. Pulling structures corresponding to the multiple string inverters are arranged on the side walls of the two opposite sides of the container. Each string inverter is installed or removed through the pulling structure. The central-string inverter device according to the present disclosure has 20 or more MPPTs. In addition, since the string inverters are integrated into a container, the installation, maintenance and heat radiation is a big issue. The central-string inverter device according to the present disclosure can be easily installed, maintained and is advantageous for heat radiation.
Title of the invention: LIGHTNING SYSTEM FOR WIND TURBINE BLADES WITH OPTIMIZED MEANS FOR INJECTING LIGHTNING CURRENTS IN CONDUCTIVE COMPONENTS OF THEIR SHELLS

Abstract:
The invention provides a lightning protection system for wind turbine blades with optimized injection means of lightning currents in conductive components of their shells. The injection means comprise a current receptor element (27; 47; 67) connected to the input cable of lightning currents and arranged over an area of a shell close to an electrically conductive component (22; 42; 62) and a current injection element (28; 48; 68; 69, 69") arranged over the electrically conductive component (22; 42; 62) and connected to the current receptor element (27; 47; 67) by at least two distribution cables (31, 32; 51, 52, 53; 71, 72, 73, 74). Fig. 3a

No. of Pages: 15 No. of Claims: 12
**Title of the invention:** BASKET CATHETER WITH PRESTRAINED FRAMEWORK

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<td>15/098,175</td>
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<td>2) MIN, Sungwoo</td>
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<td>4) AUJLA, Vishav Manak Singh</td>
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**Abstract:**
A catheter having a basket-shaped electrode assembly at the distal end of the catheter body formed from a plurality of spines with electrodes. The plurality of spines are formed by a framework which is prestrained to have a diameter greater than the diameter of the expanded arrangement of the basket-shaped electrode assembly and a length less than the length of the expanded arrangement of the basket-shaped electrode assembly.
**Title of the invention:** PROTECTION STRUCTURE FOR BATTERY PACK

**Abstract:**
A battery-pack protection structure that does not affect functionality of a battery pack is provided. [Solution] A battery-pack protection structure includes a battery pack 7 disposed from a space between right and left seats 2 and 3 toward a front side, a high-voltage cable 10 routed on a front side of the battery pack 7, an attachment member 19 provided to a member provided on the front side of the battery pack 7 and extended upward from a floor, and a pair of protection members C provided to the attachment member 19 and extended to a rear side along side surfaces of the battery pack 7. The pair of protection members C is extended to cover part of the side surfaces of the battery pack 7 beyond an energization unit E of the battery pack 7. [Selected Drawing] Figure 9

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| (12) | PATENT APPLICATION PUBLICATION |
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| (22) | Date of filing of Application: 15/03/2017 |
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| (31) | Priority Document No: 2016-114419 |
| (32) | Priority Date: 08/06/2016 |
| (33) | Name of priority country: Japan |
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| (38) | Name of Inventor: 1) Koji TAKIZAWA |
| (51) | International classification: F01K27/00 |
| (54) | Title of the invention: PROTECTION STRUCTURE FOR BATTERY PACK |

| (57) | Abstract: |
| (61) | Patent of Addition to Application Number: NA |
| (62) | Divisional to Application Number: NA |
| (66) | No. of Pages: 20 |
| (69) | No. of Claims: 3 |
The present invention relates to a smart card body, a smart card and a manufacturing process for same, and in particular to smart cards used for subscriber identity modules (SIM) cards. To improve a process for the manufacture of a smart card body and a process for the assembly of a smart card in such a manner that a simple and adaptable process can be achieved for the manufacture of a smart card, a process for the manufacture of a smart card body (10) for incorporating a semiconductor chip is described, wherein the process comprises the formation of a lead frame in a conductive layer (1), wherein the lead frame has first contacts (2) on a first surface and can be connected to the semiconductor chip on a second surface opposite the first surface, and the formation of an electrically insulating casing layer (11) on the second surface of the smart card body, wherein the casing layer (11) has a recess (12) for incorporating the semiconductor chip.

No. of Pages : 18  No. of Claims : 14
Electromagnetic fuel injector (1) for gaseous fuels comprising: an injection nozzle (3) controlled by an injection valve (8); a movable shutter (10) to regulate the flow of fuel through the injection valve (8); an electromagnetic actuator (7), which is suitable to move the shutter (10) between a closed position and an open position of the injection valve (8) and comprises a fixed magnetic pole (16), a coil (14) suitable to induce a magnetic flux in the magnetic pole (16), and a movable anchor (17) suitable to be magnetically attracted by the magnetic pole (16); an absorption element (28), which is made of an amagnetic elastic material and is arranged between the magnetic pole (16) and the anchor (17); and a protective element (29), which is made of a magnetic metal material having high surface hardness and is interposed between the absorption element (28) and the anchor (17).
Method of Producing Sulfide Solid Electrolyte

Provided is a method of producing a sulfide solid electrolyte with which the capacity retention of an all-solid-state battery can be improved. The method of producing a sulfide solid electrolyte comprises synthesizing material for a sulfide solid electrolyte from raw material for an electrolyte; and after said synthesizing, heating the material for a sulfide solid electrolyte in a flow of a gas at a temperature of no less than a melting point of elemental sulfur, the gas being able to form a chemical bond with the elemental sulfur.
Title of the invention : OIL DISCHARGE STRUCTURE OF ROTATIONAL BODY

Abstract:

To provide an oil discharge structure of a rotational body capable of effectively suppressing occurrence of air entrainment. The oil discharge structure of a rotational body 95 includes a fixing tool 115 that is fixed to an external case 53, the external case 53 storing the rotational body 95 in an inside thereof in a rotatable manner. The fixing tool 115 includes a cutout portion 117 that is formed along a protruding portion 63 of the external case 53, a first gap 139 is formed between the cutout portion 117 and the protruding portion 63, and oil flowing out by rotation of the rotational body 95 passes through the cutout portion 117 and the first gap 139 so as to be discharged to the external case 53 side.
The present invention relates to a power electronics system for charging at least one electrically operated vehicle, wherein the power electronics system has at least two modules each having at least one terminal pair with DC output, at least one rectifier (420), at least one AC input, at least one DC link and a number of switching elements (422, 423), wherein the switching elements (422, 423) are arranged at and/or between the DC outputs of the at least two modules in such a way that, between the at least two modules, at least one series and one parallel circuit configuration can be selectively dynamically set by suitable switching states of the switching elements (422, 423).
The present invention is directed to an organic polymerizable composition for producing a molded polymeric article. The composition includes a mold release agent of ionic fluoride and/or ionic fluoride precursor present in an amount sufficient to effect at least partial demolding of the polymeric article from a mold. Molded articles also are provided.
A desalinator and a method of manufacturing thereof is provided. The desalinator comprises a reactor configured to receive an effluent and a nanoparticle system. The nanoparticle system having a core and a charged species coated on the core, and the charged species has an ionizable group. The pH value of the nanoparticle system is optimized based on an ionization value (pKa) of the ionizable group of the charged species. The nanoparticle system is configured to cause desalination of the effluent by binding with oppositely charged ions of the effluent. ProdyoVidhi Ref.: ARVD.0014.IN
Title of the invention: APPARATUS FOR SYNTHESIS OF NANOPARTICLE SYSTEM FOR DESALINATION AND METHOD THEREOF

(51) International classification: A61K9/14, A61K47/42

(31) Priority Document No: NA

(32) Priority Date: NA

(33) Name of priority country: NA

(86) International Application No Filing Date: NA

(87) International Publication No: NA

(61) Patent of Addition to Application Number Filing Date: NA

(62) Divisional to Application Number Filing Date: NA

(57) Abstract:
An apparatus and a method of manufacturing thereof are provided. The apparatus comprises a reactor configured to receive a solution of metal salts and a pH controller. The reactor is configured to cause precipitation of metal salts in a pH controlled environment resulting in formation of a core. A temperature controller coupled to the reactor. The temperature controller is adapted to heat treat the solution during formation of the core. The reactor is further configured to receive a charge species for coating on the core to form a nanoparticle system. The nanoparticle system has a charged surface and the pH value of the nanoparticle system is based on at least one ionization value (pKa) of the ionizable group of the charged species. The nanoparticle system is configured to cause desalination of an effluent. ProdyoVidhi Ref.: ARVD.0013.IN

No. of Pages: 26 No. of Claims: 14
The present subject matter provides a nanoparticle based desalination system and a method of desalination thereof. The subject matter provides a nanoparticle system having a core and a positively charged species coated on the core. The positively charged species has an ionizable group. The pH value of the nanoparticle system is more than the pKa value of the ionizable group and the nanoparticle system is configured to cause desalination of negatively charged ions from an effluent. ProdyoVidhi Ref: ARVD.0012.IN

No. of Pages : 16 No. of Claims : 20
Title of the invention: ANIONIC NANOPARTICLE SYSTEM FOR DESALINATION AND METHOD THEREOF

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<tr>
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<td>1) GUPTA, Ajay Kumar</td>
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<td></td>
<td>2) YADAV, Dinesh Kumar</td>
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<td></td>
<td>3) RATHOD, Mihir Kanjibhai</td>
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Abstract:
The present subject matter provides a nanoparticle based desalination system and a method of desalination thereof. The subject matter provides a nanoparticle system having a core and a negatively charged species coated on the core. The pH value of the nanoparticle system is less than the pKa values of the negatively charged species. The nanoparticle system is configured to cause desalination of positively charged ions of an effluent. ProdyoVidhi Ref.: ARVD.0011.IN

No. of Pages: 18 No. of Claims: 20
Two wheeler interlocking brake system which relates to the bracket arrangement (200) which is compatible with new as well as pre-existing models of two wheelers. Two wheeler interlocking brake system comprising; a holding spring (211) is connected to a push rod fork (213) the said push rod fork (213) is connected with a master cylinder (215), a delay valve (217) and an oil reservoir (219) both coupled with said master cylinder assembly (215) present at a suitable inclination to the horizontal of the vehicular body. The bracket arrangement (200) is detachably supported on the vehicle body by screw joints (315, 317). The brake pedal (113) supported on the vehicular body those upper segment (113a) is hinged with a equaliser’s middle segment (255b). When the brake pedal (113) is pressed the pedal force is transferred to the equaliser (255). The equaliser (255) then proportionately distributes the force between a rear brake rod (111) and the master cylinder assembly (215) through the push rod fork (213). The variable mechanical ratio on the equaliser (251) allows that the rear brake application to start first with a delayed front brake application.
The present invention provides a novel process for the preparation of Teneligliptin and its pharmaceutically acceptable salts thereof.

The present invention further provides a novel intermediate compound structural formula, V of Teneligliptin and process for the preparation thereof.

No. of Pages : 30 No. of Claims : 10
NEW SIGNAL STAPLER PIN.

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2) MANAS L. YERAGI

(57) Abstract:
Paper stapler useful for the making bundle of paper. During process of stapling the papers, we do not know when pins are finishing and suddenly they finish and make disturbance in the stapling work. To avoid this inconvenience we can colour last nine pins in three sets of signal as last three pins with red colour, second to three set with yellow colour. This will indicate as like signal while green colour. This will indicate as like signal while finishing the stapler pin and aware during work. Also middle pin (single pin) with yellow colour (middle pin of whole set of pin) can indicate interval or half finish of set of pins.
**Title of the invention:** SIMCARD WITH SD-CARD.

**International classification:**
- H04M 1/00
- G06K 19/00
- H04W 8/00

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2) MANAS LAXMIKANT YERAGI

**Abstract:**
Mobile cell phone is now become essential thing for the daily life. Each person also searching for more internal memory phone along with the external s.d. card slot in mobile phone. Normal simcard size and microsimcard size differ from each other and normal simcard contain large unused free part made up of plastic. Also simcard can store only phone numbers and not other data. If we make combination of both S.D. card and sim card it will beneficial to the people and save space in phone. It will increase memory and also when transfer to new phone data will be always with the simcard. For this slight changes must applicable in conventional phone simcard slot for the attachment of sim-SD. It offer persons to store phone number and rest of data in single sim-SD. From the two slots of phone for simcard we can develop 1st like this for the sim-SD card.
The present disclosure relates to a process for preparation of carbon forms from biomass. The process of the present disclosure undergoes two stage hydrothermal treatment (HTT) process. The process of the present disclosure is safe, simple, and environment friendly.

No. of Pages : 18 No. of Claims : 14
A hotel winding arrangement for a locomotive transformer, the winding arrangement comprising at least two coils of a predetermined power capacity arranged axially one above the other on a second limb of the locomotive transformer wherein each of the coil serves an electrical load. Reference Figure 2.

No. of Pages : 15 No. of Claims : 8
Title of the invention: SUTURE PACKAGING DEVICE

(51) International classification: B65B61/28
(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

Abstract:
A suture tray having an upper component with a top surface and a bottom surface is disclosed. The tray also includes a plurality of flexible members integrally coupled to the upper component such that the flexible members have a clearance for assisting easy lift-press mechanism and a lower component having an outer peripheral wall and inner peripheral wall. The outer and inner peripheral wall mate with the upper component to form a winding channel. The tray also includes a secondary female locking member integrally coupled to the inner peripheral wall, the secondary female locking member mates with a secondary male locking member integrally formed on the upper component to additionally lock the assembly.

No. of Pages: 25 No. of Claims: 9
A method and system for automating decision making for instances recorded within an organization is disclosed. The method includes receiving a list of pre-defined categories and thresholds like span threshold, location threshold and size threshold. Further receiving the instances and analysing the instances to determine a span value, location value and size value for the instances received. Subsequently comparing the span value, location value and size value with span threshold, location threshold and size threshold. Subsequently, tagging the instances to the pre-defined categories and subsequently automating decision making for an organization.
A power supply glitch detector includes a sense node AC coupled to a power supply node on which voltage glitches having a magnitude of $V_{glitch}$ are to be detected. A sensing inverter has an input and an output, the input coupled to the sensing node, the sensing inverter having a trip voltage $V_{trip}$ below which the output of the sensing inverter is at a voltage representing a logic high state and above which the output of the sensing inverter is at a voltage representing a logic low state. An adjustable voltage biasing circuit is coupled to the sensing node to maintain the input of the sensing inverter at a bias voltage $V_{bias}$, wherein $V_{bias}$ is chosen such that either both conditions ($V_{bias} < V_{trip}$) and ($V_{bias} + V_{glitch} > V_{trip}$) or both conditions ($V_{bias} > V_{trip}$) and ($V_{bias} - V_{glitch} < V_{trip}$) are always true.
Techniques for activity detection from metadata features of e-mails are disclosed. In an embodiment, metadata features of e-mails associated with a user are extracted. Further, the features are represented as a rectangular matrix. Furthermore, the matrix is projected onto a right singular vector space. Moreover, a dimension of each vector is reduced using t-SNE. Also, density based clustering is performed on the vectors to obtain e-mail clusters. Similarity between pairs of e-mail clusters is then determined based on the features in corresponding pair of e-mail clusters. Further, the e-mail clusters are modelled as nodes on a graph and edges are created between pairs of the nodes based on similarity between corresponding pairs of e-mail clusters. Furthermore, one or more of the e-mail clusters of a community are determined using the modeled graph. Also, an activity of the user is detected based on the one or more of the e-mail clusters.
The Patent Office Journal No. 24/2018 Dated 15/06/2018

(12) PATENT APPLICATION PUBLICATION
(21) Application No. 201621042289 A
(19) INDIA
(22) Date of filing of Application: 12/12/2016
(43) Publication Date: 15/06/2018

(54) Title of the invention: AQUA SILENCER

(51) International classification: F01N3/00
(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:
Present invention provides specially design and construction of aqua silencer for automobiles. As the problems faced due to emission of the vehicle our main objective is to control the emission of the vehicle, to manage the proper exhaust of flue gases. This invention is all about Aqua silencer, its working and also the method to overcome the drawback of using charcoal in it. The Aqua Silencer is used in the exhaust to direct the gas from the engine after going through the process of reducing the toxic gases and also water is used to reduce the exhaust noise. In this silencer, the main drawback is using charcoal to reduce the exhaust toxins which should be replaced in the span of 3 years approximately. In this work, we have targeted to come up with a cheap, easy and reliable solution. Following invention is described in detail with the help of Figure 1 of sheet 1 showing diagram of aqua silencer, Figure 2 of sheet 2 showing the CAD model of aqua silencer and Figure 3 of sheet 2 showing effect of change in hole’s diameter of Perforated tube.

No. of Pages: 16 No. of Claims: 3
Now-a-days accidents of vehicles are a major problem, to overcome this advanced automatic or electronic control system is required. For this purpose we are introducing new concept known as ‘Automatic braking with pneumatic bumper using proximity sensor system’, will be assembled on four wheeler vehicle. In this system consists of two mechanisms and these are automatic braking system and pneumatic bumper system. Automatic braking system uses the proximity sensor which senses the vehicle or obstacle in the range of 2-3 feet which comes in front of our system and which may be cause for accident. Then sensor gives feedback to relay for applying brakes and also to stop the working of engine. During the working of Automatic braking system simultaneously he driver of vehicle also try to stop the vehicle by pressing brake pedal. Limit switch is provided below the brake pedal which used to activate the pneumatic bumper and disc brake simultaneously to reduce the damage our vehicle which occurs if both vehicles collapse on each other. This provides pre-crash safety for vehicle. As well as this system improve the response time of vehicle braking to keep safe distance between two vehicles. This system is activated when the vehicle speed is above 30-40 km/hr. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the block diagram of automatic braking system and Figure 2 of sheet 2 showing automatic braking system setup.
All of knows that Railway is the life line of our country. Daily millions of peoples as well as million tonnes of goods are travelled throughout the country. So in short Railway is the best example of transportation as well as logistics. In these railway bogies the toilets are provided. These toilets are open way for dumping the human waste. So when the train stops on stations the human waste may dump at station only. These create mess as well as a bad odour in atmosphere. It may invite or support the diseases. So it is not desirable for human health & environment too. So, present invention provides specially design and implementation of automatic rail waste dumb mechanism. The main motto behind this concept is to avoid the human waste to be dump on the station. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the schematic diagram of rail waste dumb mechanism.
Present invention provides specially design and develop a bank locker security system based on GSM technology which can be formed into a structured in bank, secured offices and homes. In this system only authentic person can be recovered money from bank locker. We have enforced a bank locker security system based on PIR sensor and GSM technology containing door locking system using and GSM which can activate, authenticate, and validate the user and unlock the door in real time for bank locker secure access.

The main advantage of exploitation passive PIR sensor and GSM is more secure than other systems. This system consists of microcontroller, PIR sensor, GSM modem, keyboard, and LCD. In this system the PIR sensor detects the motion of human and sends the SMS request to the authenticated person mobile number for the original password to open the bank locker if the password is sent to the microcontroller, which will verify the passwords enrolled by the key board and received from particular mobile phone. If these two passwords are matched the locker will be opened otherwise it will be stay in locked position. This system is more secure than other systems because two passwords required for verification. This system also generates a log containing check-in and check-out of each user along with basic information of user. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the system architecture of the proposed system.
Dumpers and trailers have lots of application in today’s world. That is for industrial and domestic purpose to pull variety of a product including gravel, grain, and sand, etc. In existing system, tripper can upload only in one side by using pneumatic jack or conveyor mechanism. Modern 3-way dumper has been designed by observing the difficulties in unloading the materials with existing system. The main focus of this work is to overcome the herculean task with conventional systems available hence a prototype of suitable arrangement has been designed. This unidirectional dumper can unload the material in any direction. Thus, it incorporates a direction control valve which activates the ram of the hydraulic cylinder which lifts the trailer cabin in required side. The dumper can unload material in any direction without application of any input force. It reduces time and fuel consumption, thus making it more economical and efficient. Following invention is described in detail with the help of Figure 1 of sheet 1 showing A-axis motion, Figure 2 of sheet 2 showing B-axis motion and Figure 3 of sheet 3 showing C-axis motion.
Title of the invention: LOAD CELL BASED DIGITAL FUEL METER

Abstract:
Automobile vehicles use fuel as a basic source of energy. In India about all two wheelers vehicles are consists of Analog Meters, which didn’t give exact idea of amount of fuel present in the tank. It is necessary to give the exact information to the driver about amount of remaining fuel in the fuel tank of vehicle. Today in this digitalized world, if the fuel indicator in the automobiles is also made digital, it will help to know the exact amount of fuel available in the fuel tank. Digital Fuel Indicator gives the exact quantity of fuel in the fuel tank. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the sequence diagram and Figure 2 of sheet 2 showing the block diagram of digital fuel meter.

No. of Pages: 13  No. of Claims: 1
Riveting Machine is a machine in Mahindra Sona Limited used in the manufacturing process of Clutch plates used in automobiles. The rivets are punched in the facing assembly with the help of this machine. The force of 40N is applied for the riveting process. The present invention provides design and implementation of a mechanism for the reduction of noise and energy conservation on riveting machine. Reduction of noise, maintenance and energy conservation of riveting machine is done by the present system. By introducing a servo motor and timing pulley mechanism we have reduced the sound level, the maintenance time and cost of maintenance. By introduction of the greasing and oiling assembly we have reduced the problem of continuous oiling by the can after certain period of time basic idea about your invention in one paragraph. Following invention is described in detail with the help of Figure 1 of sheet 1 showing limit switches and position sensor in new machine, Figure 2 of sheet 2 showing vertical mounting of motor, Figure 3 of sheet 3 showing base mounting of motor and Figure 4 of sheet 4 showing mounting for limit switch.
Title of the invention: INDUSTRIAL POULTRY FARMING

Abstract:
Present invention provides specially design and implementation of an automated system for Industrial Poultry Farming. Industrial livestock production is a modern form of intensive farming that refers to the industrialized production of livestock, including cattle, poultry and fish. As we seen, in poultry farm human being works there and gives his time to provide food, water, etc. to hens & also try to maintain the surrounding temperature for survival of hens by using fan and bulb like things. Our project is to automate this food providing and temperature control from which we can reduce human efforts and time which is most important now a days. Following invention is described in detail with the help of Figure 1 of sheet 1 showing the block diagram and Figure 2 of sheet 2 showing the circuit diagram of the present invention.
The Present invented Process constitutes of 4 different units conglomerated into a single processing unit for MSW inert waste. 1. Primary Segregation Process 2. Crushing and Sizing Unit 3. Washing and Wastewater Treatment Unit 4. Shredding and Bailing Unit. The innovation of the process lies in linking the wet and dry treatment of Inserts coming out from a MSW processing plant. Based on separation processes the unit has both 1. Mechanical Sorting Method by following processes: a) Dry mechanical Separation technique/ Mechanical Screens. b) Air Sorting Technique c) Wet Density Sorting Methods. 2. Manual Sorting Method So the process involves all types of segregation process put under one umbrella of Inert Valuation Process. Also the process is sustainable with respect to drying of wet RDF material prior to shredding and bailing which would be carried out through €SOLAR DRYING€• that would maintain its heating value.

No. of Pages : 12 No. of Claims : 5
Title of the invention: HIGH TRACTION MANUAL TILLER

Abstract:
The present invention provides an agricultural device that can be operated manually by a single person and is capable of performing tilling, weeding, seeding and fertilizing operations by use of the same device, with minimum manual effort. The device is suitable for use by the Indian farmer where land holdings are small. The device is economically affordable and results in increase in agricultural productivity.
A system and method for analyzing research literature for strategic decision making is disclosed. The method includes obtaining the patent literature and research publication documents from the database and indexing the data obtained. Further, obtaining a plurality of topics and obtaining a set of phrases that occur frequently within the research publication documents of each of the topics. Furthermore, a degree of topic overlap is computed between the plurality of research publication documents and the patent literature and the degree of topic overlap is quantified to obtain technological insights that include measuring commercialization and predicting patent trends. Further, a set of reports are generated based on the technological insights and the data obtained from indexing the patent literature and the research publication documents. The set of reports generated are provided to a user from an entity based on a role and designation of the user in the entity.
A pressing device comprising: a lower punch (10) provided with a pressing surface (10a) facing upwards; an upper punch (11) provided with a pressing surface (11a) facing downwards; at least one of the two punches is movable nearingly and distancingly relative to the other in order to perform pressing of a layer (L) of a ceramic material; a first movable belt (2) comprising an active portion (3) arranged at least partially between the upper punch (11) and the lower punch (10); a second movable belt (4) comprising an active portion (5) arranged at least partially between the first movable belt (2) and the upper punch (13); a shaped profile (6) which is so structured as to at least partially delimit a pressing chamber which is detachably associated to the lower punch (10) or to the upper punch (11) in a projecting manner.
The present invention relates to amorphous sacubitril valsartan complex and its solid dispersion. The invention also relates to process for the preparation of sacubitril valsartan complex and its solid dispersion.
**Title of the invention:** ACCOUNT LOGIN METHOD AND DEVICE

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**Abstract:**

The application discloses an account login method and device. The account login method comprises: when an application is initiated detecting using a JS SDK file called by the application an operating environment of the application wherein the JS SDK file packages a plurality of login paths used to log in to the application; detecting using the JS SDK file a login path supported by the operating environment; and transmitting using the JS SDK file and to the application a first login path wherein the first login path is a login path supported by the operating environment and comprises at least one of the plurality of login paths. The application resolves a technical problem occurred when providing an interface supporting multiple login methods in which an access process is complex and easy to produce errors.
Title of the invention : 3 AXIS ADJUSTABLE SMALL GIMBAL

International classification : B64D47/08, F16M13/02, F16M11/12

Priority Document No : 1020150153073
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Abstract :
A 3 axis camera gimbal is disclosed in the present invention. The disclosed gimbal may comprise: a first support; a lens barrel including a lens group and rotatably coupled about a first axis on the first support; a rolling drive unit mounted at a first position on the lens barrel and providing force for rotating the lens group about the first axis and a perpendicular second axis; a pitching drive unit mounted on the first support and providing force for rotating the lens barrel about the first axis; a second support rotatably coupled to the first support about a third axis that is perpendicular to both the first and second axes; and a yawing drive unit mounted on the second support and rotating the first support about the third axis. The present invention can have various embodiments.

No. of Pages : 23 No. of Claims : 15
PROCESS FOR MAKING A METAL CONTAINING LAYER

Process for preparing a metal containing layer the process comprising (i) at least one step of co vaporization at a pressure which is lower than $10^{-2}$ Pa of a) at least one first metal selected from Li Na K Rb and Cs and b) at least one second metal selected Mg Zn Hg Cd and Te from a metal alloy provided in a first vaporization source which is heated to a temperature between 100 C and 600 C and (ii) at least one subsequent step of deposition of the first metal on a surface having a temperature which is below the temperature of the first vaporization source wherein in step (i) the alloy is provided at least partly in form of a homogeneous phase comprising the first metal and the second metal electronic devices comprising such materials and process for preparing the same.

No. of Pages : 40 No. of Claims : 20
Title of the invention: COMBUSTION ENGINE INTAKE VALVE

Abstract:
An intake valve for a combustion engine is described. The intake valve has a head portion that is designed to improve the flow of air fuel mixture around the head portion and into the combustion chamber. The head portion has a beveled or rounded edge at the top surface. The angle changes from the underside surface to the top surface are rounded to prevent separation of the air fuel mixture from the surface of the intake valve. In addition the underside surface of the head portion has a plurality of helical grooves that induce a circular flow to improve mixing of the air fuel mixture in the chamber. The helical grooves also improve heat exchange between the air fuel mixture and the intake valve.
The present invention belongs to the field of organic synthesis and in particular relates to a method for preparing a pyridylpyrazolidone carboxylate compound. The reaction formula is as follows and the definition for each group in the formula can be found in the description. The present invention provides a method for preparing a pyridylpyrazolidone carboxylate compound that is a key intermediate of benzamide insecticides. By employing the method of the present invention the yield of products is increased and the energy consumption is reduced. The method of the present invention is more easily to be used in the industrial production.

No. of Pages : 12 No. of Claims : 10
Title of the invention: METHODS AND NODES IN A WIRELESS COMMUNICATION NETWORK

Abstract:
Transmit device (110) and method (400) therein for providing transmission burst information to a receive device (120) by downlink control signalling. The transmit device (110) is configured to: transmit a Downlink Control Information DCI (210 1) comprising the transmission burst information wherein the DCI (210 1) has the same number of bits as a DCI format used for PDSCH scheduling. Also a receive device (120) and method (600) therein is disclosed.

No. of Pages: 43 No. of Claims: 20
The present invention relates to a method for preparing a concentrated polysaccharide mass in particular a method for preparing concentrated glucan or schizophyllan in particular a method for redispersing glucan or schizophyllan for producing a ready to use mass.

No. of Pages : 26 No. of Claims : 12
The present invention relates to a process for the preparation of an amide from a carboxylic acid chloride and an organic molecule comprising both a primary amine group and a tertiary amine group wherein the nitrogen atom of the tertiary amine group is comprised in a non aromatic heterocycle and wherein the amide bond forms selectively with the primary amine group comprising the step of reacting the carboxylic acid chloride with an organic molecule comprising both the primary amine group and the tertiary amine group in the presence of imidazole. This is particularly useful in the preparation of amides from quinuclidin 3 amine such as for the preparation of encenicline ((R) 7 chloro N (quinuclidin 3 yl)benzo[b]thiophene 2 carboxamide) from 7 chloro benzo[b]thiophene 2 carboxylic acid chloride and (R) quinuclidin 3 amine in the presence of imidazole. Encenicline is a nicotinic acetylcholine receptor agonist useful as a neuromodulator for the treatment of e.g. cognitive impairment schizophrenia and Alzheimers disease.
The present invention relates to an electrochemical device separator and an electrode assembly comprising the same and more specifically to: a separator having improved interfacial adhesion to an electrode and an electrode assembly comprising the same. According to the present invention an adhesive layer comprises: a first layer coming into surface contact with the surface of the separator; and a second layer formed on the surface of the first layer and coming into surface contact with an electrode wherein the first layer comprises a polymer comprising a fluorine containing monomer and the second layer comprises a polymer having a dissolution rate in an electrolyte solution for an electrochemical device lower than that of the polymer contained in the first layer.
The present invention relates to agonistic antibodies specifically binding human CD40 polynucleotides encoding the antibodies or antigen binding fragments and methods of making and using the foregoing.

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No. of Pages: 128 No. of Claims: 65
The present invention relates to a method, a device, and a system for transmitting downlink signals. In particular, the present invention relates to a method and a device and system for the purpose of transmitting downlink signals, wherein if the detection of the first common control channel fails and if the DL interval of SFₙ is a part of SFₙ only the detection process of a first physical channel/signal is permitted in SFₙ and the first physical channel/signal includes a discovery reference signal (DRS).
(54) Title of the invention: METHOD FOR MANUFACTURING GRAIN ORIENTED ELECTROMAGNETIC STEEL SHEET

(57) Abstract:
In order to improve upon the electromagnetic properties of typical grain oriented electromagnetic steel sheets a method is provided for manufacturing a grain oriented electromagnetic steel sheet wherein a steel slab which has a chemical composition containing in mass% 0.002 0.080% of C 2.00 8.00% of Si 0.02 0.50% of Mn at least 0.003 and less than 0.010% of acid soluble Al 0.005 0.010% in total of S and/or Se 0.005 1.000% in total of Sn and/or Sb and less than 0.006% of N with the remainder comprising Fe and inevitable impurities is heated at 1300C or lower the steel slab is subjected to hot rolling to produce a hot rolled steel sheet the hot rolled steel sheet is subjected to one cycle of cold rolling or two or more cycles of cold rolling with intermediate annealing performed between cycles to produce a cold rolled steel sheet having a final thickness the cold rolled steel sheet is subjected to a first recrystallization annealing an annealing separating agent is applied to the surface of the cold rolled steel sheet after the first recrystallization annealing and the steel sheet is then subjected to a second recrystallization annealing.

No. of Pages: 24 No. of Claims: 8
(54) Title of the invention : AERIAL PHOTOGRAPHY CAMERA SYSTEM

(51) International classification : G03B19/00, G05B15/00
(31) Priority Document No : 242790
(32) Priority Date : 26/11/2015
(33) Name of priority country : Israel
(86) International Application No : PCT/IL2016/051176
  Filing Date : 01/11/2016
(87) International Publication No : WO 2017/090022
(61) Patent of Addition to Application Number : NA
  Filing Date : NA
(62) Divisional to Application Number : NA
  Filing Date : NA

(57) Abstract :
The presently disclosed subject matter includes a camera system for aerial photography applications which can be mounted on an aircraft and be operated for obtaining images of a surveyed area. The proposed camera system comprises a camera control unit operatively connected to a camera supported by a pivotal supporting device such as a gimbal assembly. The camera is continuously moved along a scanning line without stopping and is operated to capture images in a certain frame rate this is carried out by measuring as well as regulating the angular velocity of the camera to adapt the pictured and the non pictures zones over the scanning line.

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No. of Pages : 16 No. of Claims : 21
An apparatus and a method for generating a broadcasting signal frame that includes a preamble for signalling injection level information are disclosed. The broadcasting signal frame generating apparatus according to an embodiment of the present invention comprises: an injection level controller for reducing the power of an enhanced layer signal so as to generate a power reduced enhanced layer signal; a combiner for combining a core layer signal with the power reduced enhanced layer signal so as to generate a multiplexed signal; a power normaliser for reducing the power of the multiplexed signal to a power corresponding to the core layer signal; a time interleaver for performing interleaving that is applied to both the core layer signal and the enhanced layer signal so as to generate a time interleaved signal; and a frame builder for generating a broadcasting signal frame that includes a preamble for signalling injection level information corresponding to the injection level controller.
Title of the invention: METHOD FOR ASCERTAINING TEXTURE PARAMETERS OF A PAINT

The invention relates to a method for predicting visual texture parameters (9) of a paint with a known paint formulation (1). On the basis of a number of color components used in the paint formulation (1) visual texture parameters (9) of the paint are ascertained using an artificial neural network (7) and a value of at least one characteristic (5) which describes at least one optical property is ascertained for the known paint formulation (1) using a physical model (3) assigned to the known paint formulation (1) and transmitted to the artificial neural network (7) as an input signal in order to ascertain the visual texture parameters (9). The ascertained value assigned to the known paint formulation describes the at least one optical property for at least some of the number of color components of the paint formulation (1). In order to train the neural network (7) color samples with a respective known paint formulation are used and for each color sample the respective visual texture parameters are measured and assigned to a value which is determined for the corresponding respective paint formulation of the at least one characteristic that describes the at least one optical property for the respective paint formulation.

No. of Pages: 37 No. of Claims: 12
A support apparatus 100 is disclosed herein. In a described embodiment the support apparatus 100 comprises a connector plate 202 having a connector primary plate 204 for mounting to a support structure 104 and opposing side leg portions 210-212 integrally formed with the connector primary plate 204 and projecting from the connector primary plate 204. Each of the opposing side leg portions 210-212 includes engaging members 222 for attaching the side leg portions 210-212 to respective side walls of an elongate support member 300. A load bearing connector is also disclosed among other components.
The present invention relates to the use of coating compositions for coating fibre cement boards which contain at least one acrylate based aqueous polymer dispersions as a binder. The present invention further relates to specific acrylate based aqueous polymer dispersions and to a process for preparing these specific acrylate based aqueous polymer dispersions.
The present invention provides a washing machine control method a control system and a washing machine on the internet of things. The control method comprises: S1: when a power supply module of the washing machine detects a startup signal the washing machine starting and a communication module starting networking; S2: determining whether the networking of the communication module is successful; if yes activating a remote control function and going to the next step; if no going to the next step directly; S3: determining whether the washing machine receives an operation command of running a washing program; if yes executing the operation command and going to the next step; if no going to the next step directly; S4: determining whether to execute a shutdown; if yes going to the next step; if no returning to step S3; S5: sending a shutdown signal to the power supply module; the washing machine is off and the communication module is powered off. The present invention can save power energy improve the safety of the washing machine and enhance user experience.
ENCAPSULATED FILLINGS

The present invention relates to fillings for bakery and patisserie products in particular fillings for cakes and the methods for preparing the fillings as well as the bakery and patisserie products in particular cakes comprising the fillings.

No. of Pages : 37 No. of Claims : 18
Title of the invention: COMPACT BURNER WITH BOTH FUEL AND COMBUSTIVE AIR REGENERATION

A compact burner with both fuel and combustive air regeneration (11) comprising: a refractory block (12) a metallic body (13) of the burner internally coated with an insulating refractory layer (14) and an ignition device (15) with flame detection wherein said refractory block (12) is positioned directly facing a combustion chamber of a furnace wherein said metallic body (13) of the burner comprises a pair of regeneration units (16 17) both coated by said insulating refractory layer (14) an intermediate refractory block (33) also being provided which separates said pair of regeneration units (16 17) and sealingly collaborates with said refractory block (12) said pair of regeneration units comprises an air regeneration unit (16) and a fuel regeneration unit (17) integrated with each other and supported in said metallic body (13) said air regeneration unit (16) and fuel regeneration unit (17) both being connected to a single combustion pre chamber of the burner (29) positioned in said refractory block (12) wherein said combustion pre chamber of the burner (29) is also connected to said ignition device (15) with flame detection interposed in said two units (16 17) wherein said air regeneration unit (16) and fuel regeneration unit (17) are connected to said combustion pre chamber of the burner (29) by means of at least one respective intermediate duct (30 31) positioned in said refractory block (12).
Plant and method for regenerative combustion which burns low calorific value fuels in a furnace or combustion chamber (11) for high temperature thermal processes at around 1200-1300°C comprising at least one air regeneration unit (12) and at least one regeneration unit of low calorific value fuel (13) for preheating air and low calorific value fuel before entering a control area of the furnace wherein each of said regeneration units is positioned on a respective exhaust fume duct (12e 13e) at the outlet of the furnace and on an air feeding duct (18a) and a feeding duct of low calorific value fuel (19a) at the inlet of the furnace wherein each regeneration unit is periodically and selectively run in two different consecutive regeneration and combustion states valves (12a 13a 12b 13b) being envisaged on said ducts downstream of said regeneration units in an open and/or closed arrangement depending on one of the two regeneration and combustion states selected and active a post combustion unit (14) is connected to a duct (13f) at the outlet of the fuel regeneration unit which is fed by at least a part of regenerated fumes coming from a fume regeneration valve (13a) at the outlet of said fuel regeneration unit said post combustion unit being further fed by a certain quantity of air coming from a valve (14c) positioned on the air feeding line (18) and by a certain quantity of fuel fed by a valve (13c) of the feeding line (19) of low calorific value fuel to complete the oxidation of the regenerated fumes coming from the fume regeneration valve inside the post combustion unit said post combustion unit being connected at the outlet to at least one heat exchanger (16a 16b 16c 16d) wherein said control area comprises consecutive control areas (11a 11b 11c 11d etc.) each of said control areas comprising at least one air regeneration unit and at least one regeneration unit of low calorific value fuel wherein each of said fuel regeneration units is connected to said post combustion unit.
### PATENT APPLICATION PUBLICATION

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**Name of priority country:** U.S.A.

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**Title of the invention:** SYSTEMS AND METHODS FOR SELF CONTAINED AIR INTERFACE PARTITIONS

**Abstract:**
Signal processing complexity in fifth generation (5G) networks can be reduced by communicating wireless signals over self contained partitions of a carrier such that the wireless transmission communicated over each self contained partition of the carrier includes all physical control channel signaling required to decode data carried in a physical data channel of the partition. The control signaling may include resource assignment within the partition modulation and coding scheme indication reference signal configuration and retransmission information. In some embodiments an anchor partition of a carrier is used to communicate initial access information for self contained partitions of the carrier. The initial access information may include center frequencies bandwidths and/or air interface configurations of the self contained partitions. The anchor partition may also carry load indications associated with the self contained partitions.

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**No. of Pages:** 22

**No. of Claims:** 43
The present invention relates to a process for producing an aqueous suspension of precipitated calcium carbonate an aqueous suspension of precipitated calcium carbonate and a precipitated calcium carbonate obtained by the process a product comprising the aqueous suspension of precipitated calcium carbonate or the precipitated calcium carbonate as well as its use.
**Title of the invention:** SYSTEM AND METHOD FOR COMMUNICATING A MESSAGE TO A VEHICLE

**Abstract:**

Various aspects of a system and method for communication of a message to a vehicle are disclosed herein. The system comprises one or more circuits in an electronic control unit (ECU) of a first vehicle that is communicatively coupled to a display device. The one or more circuits in the ECU are configured to receive a video stream and control display of a plurality of image frames in the video stream on the display device. Vehicle information of one or more vehicles included in an image frame of the plurality of image frames is received from the one or more vehicles via a wireless network. A first input corresponding to a selection of a vehicle from the one or more vehicles included in the image frame is received. Vehicle information associated with the selected vehicle is identified. A second input that corresponds to a selection of an information item to be communicated to the selected vehicle is received. The selected information item is communicated to the selected vehicle.
The present invention relates to a novel method for the purification of cyclohexadec 8 en 1 one to a method for the production of cyclohexadec 8 en 1 one and cyclopentadecenones to the substances and substance mixtures thereby produced and to the use thereof as a flavoring substance in particular as an odoriferous substance and to flavoring substance mixtures and products containing said mixtures.
A washing machine without water between barrels and a control method. The washing machine comprises an outer barrel (4) an inner barrel (1) an air chamber (7) and a pressure sensor (19) connected to the air chamber (7). A plurality of spin drainage holes (2) is provided on the upper part close to the edge of the inner barrel (1); at least one inner barrel water outlet (3) is provided on the bottom of the inner barrel (1); a telescopic drain valve (10) capable of plugging the inner barrel water outlet (3) is arranged at the bottom of the outer barrel (4); an outer barrel water outlet (5) is provided on the bottom of the outer barrel (4) and a washing machine drainage pipeline (6) is arranged on the outer barrel water outlet (5); the outer barrel (4) is provided with the air chamber (7) in communication with the inner barrel (1); and an air chamber water outlet (8) capable of discharging water in the air chamber (7) is provided on the air chamber (7). The washing machine is thorough in drainage free from residue and rapid in drainage speed avoids water flow staying between an inner barrel and an outer barrel and avoids an inner wall of the outer barrel (4) being stained by dirt. The washing machine is accurate in water level detection and simple in structure; furthermore there is no residual water in an air chamber (7) such that an error caused when water level detection is used again is avoided and bacteria produced by the residual water in the air chamber (7) is avoided; and a telescopic drain valve (10) is in communication with an inner barrel (1) such that blockage caused by thread scraps is avoided.
**Title of the invention:** DRAINING AND SPINNING CONTROL METHOD FOR SELF-CLEANING LAUNDRY MACHINE

| (51) International classification | :D06F33/02 |
| (31) Priority Document No | :201510766801.3 |
| (32) Priority Date | :11/11/2015 |
| (33) Name of priority country | :China |
| (86) International Application No | :PCT/CN2016/103557 |
| Filing Date | :27/10/2016 |
| (87) International Publication No | :WO 2017/080364 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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**Abstract:**
Provided is a draining and spinning control method for a self-cleaning laundry machine. The method comprises: arranging cleansing particles (4) in a space (3) between an inner drum (2) and an outer drum (1) of a laundry machine to cleanse an outer wall of the inner drum (2) and an inner wall of the outer drum (1) with the movement of a water flow and receiving a draining instruction to open a draining valve (5); determining a quantity of the cleansing particles (4) per unit water volume in the space (3); and controlling a rotation speed of the inner drum (2) to adjust a frequency of friction and collision between the cleansing particles (4) and the walls of the inner and outer drums. The laundry machine arranges at least two control phases for draining and spinning processes according to the quantity of the cleansing particles (4) per unit water volume in the space (3). Different rotation manners are set for the inner drum in the respective control phases. In a control phase where the quantity of the cleansing particles (4) per unit water volume is larger the rotation speed of the inner drum (2) is higher. During the draining and spinning processes the laundry machine selects a corresponding control phase by detecting the quantity of the cleansing particles (4) per unit water volume in the space (3). The control method of the invention is simple and can completely remove dirt from a drum wall of a laundry machine thereby keeping a washing environment clean preventing re-contamination and improving clothes cleaning performance.
A device includes a substrate with a curvilinear perimeter segment adjoined to a plurality of facets a display area a border area surrounding the display area and connection pads divided into groups corresponding to the facets in the border area. A flexible circuit board with arms coupled to the groups of connection pads is included. Another device includes a substrate having a display area first connection pads within a border area peripheral to the display area and a flexible circuit board having a first portion including second connection pads configured to be coupled to the first connection pads and a second portion configured to accommodate a plurality of transmission lines extending from the second connection pads. An arc length of the first portion can be greater than that of the second portion and a center-to-center pitch of the second connection pads can be greater than that of the transmission lines.
Computer implemented systems methods and articles for identifying errors in the computerized preparation of a payroll tax form to be submitted to a tax agency. The system includes a computing device a data store and a payroll tax form preparation software application executable by the computing device. The payroll tax form preparation software includes a payroll calculation engine an error check engine and one or more error graph(s). Each error graph includes a plurality of interconnected nodes configured to utilize tax data and calculated payroll data to identify errors. The calculation engine is configured to read tax data from the shared data store perform payroll calculation operations and write calculated payroll data to the shared data store. The error check engine is configured to read the tax data and payroll data and process the error graph(s) to identify errors. An explanation engine may generate narrative explanations of the errors.
A method is provided in one example embodiment and includes receiving at a network element a packet including a Network Services Header ("NSH") in which the NSH includes an Infrastructure ("I") flag and a service path header comprising a Service Index ("SI") and a Service Path ID ("SPI") and determining whether the I flag is set to a first value. The method further includes if the I flag is set to the first value setting the I flag to a second value and forwarding the packet to the service function that corresponds to the SI for processing. The method still further includes if the I flag is not set to the first value decrementing the SI and making a forwarding decision based on a new value of the SI and the SPI.
(57) Abstract:
Method and devices are disclosed for focusing on tilted image planes. For example one imaging device includes an objective lens configured to focus a scene at an image plane the scene having an object plane tilted relative to the objective lens plane and a sensor receive light from the objective lens the sensor having a plurality of light sensing elements configured to generate image data based on the light received at the sensor. The imaging device also includes a processor and memory component configured to receive the image data the image data indicative of a first image; receive a tilt parameter indicative of an orientation of a selected non parallel image plane and convert the image data to relative image data based on the tilt parameter the relative image data indicative of a second image focused along the non parallel image plane.

No. of Pages : 39 No. of Claims : 28
Title of the invention: MULTIVALENT Fv ANTIBODIES

Abstract:
Described is a trispecific antibody molecule comprising a diabody unit integrated into a polypeptide chain having at least six variable domains linked one after another. In certain instances two single chain Fv (scFv) fragments are distally connected to the diabody unit providing two further antigen binding sites.
The invention discloses a method of monitoring chromatic dispersion in an optical communication network and a device utilizing the same. The method comprises: performing coherent mixing on a signal to be measured and a first optical signal to obtain a first simulation electrical signal; performing coherent mixing on the signal to be measured and a second optical signal to obtain a second simulation electrical signal wherein center frequencies of the first optical signal and the second optical signal are located at two sides of a center frequency of the signal to be measured and a difference between the center frequencies of the first optical signal and the second optical signal equals a baud rate; converting the first simulation electrical signal into a corresponding first time domain power signal and converting the second simulation electrical signal into a corresponding second time domain power signal; determining a delay value between the first time domain power signal and the second time domain power signal; and obtaining according to a corresponding relationship between the delay value and chromatic dispersion optical fiber chromatic dispersion in a process of transmitting the signal to be measured. The method and device disclosed in the invention resolve a problem of being difficult to implementing a pulse delay method in a long distance transmission application.
The invention relates to a method for producing iron doped ruthenium/carbon carrier catalysts and to the use of same for selective liquid phase hydration of carbonyl compounds to obtain the corresponding alcohols particularly for the hydration of citral to geraniol or nerol or of citronellal to citronellol.

No. of Pages : 17 No. of Claims : 15
The invention relates to a system for dispensing liquid foam in particular a direct foam cleaning product comprising a container for the liquid and a dispensing apparatus connected to the container. Here the dispensing apparatus comprises a pump comprising a pump chamber in fluid communication with the container and a piston arranged in the pump chamber the piston and pump chamber being moveable with respect to one another; an outlet channel connecting the pump chamber to a nozzle; a pre compression valve arranged between the outlet channel and the nozzle; and a buffer comprising a buffer chamber connected to the outlet channel the buffer chamber including a compressible variator arranged therein for varying the usable volume of the buffer chamber; wherein the nozzle the buffer and the pump are configured and dimensioned such that the foam is dispensed in a predetermined spray pattern.
**Title of the invention:** USE OF NOVEL MIXTURES OF (E/Z) CYCLOPENTADECENONE ISOMERS THE PRODUCTION AND USE THEREOF AS FLAVORING SUBSTANCE

| (51) International classification | :C07C45/32,C07C49/587 |
| (31) Priority Document No | :15188870.8 |
| (32) Priority Date | :08/10/2015 |
| (33) Name of priority country | :EPO |
| (86) International Application No | :PCT/EP2016/074021 |
| Filing Date | :07/10/2016 |
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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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**Abstract:**
The present invention relates to a novel mixtures of cyclopentadecenone isomers to the production and use thereof as a flavoring substance in particular as an odoriferous substance and to flavoring substance mixtures and products containing said mixtures.

No. of Pages : 43 No. of Claims : 20
Coating compositions including a binder agent are disclosed. The binder agent is formed of a fluorocopolymer and a non fluorinated film forming polymer. Methods of coating cables with the coating compositions are also described herein.

No. of Pages : 32 No. of Claims : 20
(54) Title of the invention : INTERNALLY MESHED TRANSMISSION MECHANISM

(51) International classification : F16H1/32, F16H55/10, F16H55/17
(31) Priority Document No : 201510655588.9
(32) Priority Date : 13/10/2015
(33) Name of priority country : China
(86) International Application No : PCT/IB2016/001459
    Filing Date : 11/10/2016
(87) International Publication No : WO 2017/064549

(57) Abstract :
Provided is an internally meshed transmission mechanism comprising: an outer wheel the inner circumference of the outer wheel being provided with a first number m of arc shaped teeth said first number of arc shaped teeth being arranged around the inner circumference of the outer wheel; an inner wheel the outer circumference of the inner wheel being provided with a second number n of teeth the second number of teeth being arranged around the outer circumference of the inner wheel m > n; an eccentric rotation apparatus the eccentric rotation apparatus enabling the eccentric arrangement for the inner wheel; any one of the outer wheel the inner wheel and the eccentric rotation apparatus is connected to a power input end and any one of the outer wheel the inner wheel and the eccentric rotation apparatus is connected to a power output end such that power is transmitted by means of the meshed transmission between the outer wheel and the inner wheel; the design of the teeth shape on the inner wheel is such that at any time during the meshed transmission between the inner wheel and the outer wheel a part of the second number of teeth mesh with or are in contact with a part of the first number of arc shaped teeth and the remaining part of the second number of teeth are disengaged from the first number of arc shaped teeth.
**Title of the invention:** WHEEL WEIGHT PRESSURE POWER PROJECT

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**Abstract:**

Wheel weight pressure power project is in the field of electricity generation. It comprises a plurality of wheel weights connected to each other on an iron track and plurality of wheel weight engines connected at specific places to the wheel weights where the engine is controlled by an automatic computer. On the iron track pressure rods having an inclined rod and upright rod are placed at certain intervals and are connected to a spring and gearwheel. The gearwheel is attached to the shaft of the turbine for generating electricity. Such arrangement having multiple pressure rods connected to multiple turbines produces huge amount of electricity.
A process for the deinking of a coated paper or paperboard is disclosed. The process comprises a step of providing a coating layer comprising a calcium or magnesium exchanged clay which is deposited on the paper or paperboard before the ink layer. In a further step, said calcium or magnesium exchanged clay is activated and the paper is subsequently treated with water.

No. of Pages : 53 No. of Claims : 17
The present invention provides a cold plasma ozone generator comprising: an inlet gas port; at least one in electrode having a plurality of holes substantially at a perimeter of the same; said plurality of perimeter holes configured to allow said dry gas to pass therethrough; at least one out electrode having at least one hole at the center of the same; said at least one hole configured to allow gas to pass therethrough; said in electrode and said out electrode configured to maintain said high voltage AC therebetween; at least one spacer between said in electrode and said out electrode; an outlet port.
A bottle conveyor for a filling machine comprises multiple pairs of bottle gripping members (1) and a circulating chain conveyor mechanism and a pair of bottle gripping members (1) is mounted via an open close modular mechanism to a conveyor chain (100) of the circulating chain conveyor mechanism. The open close modular mechanism is provided with a rotary support capable of being opened as a V shape a synchronization mechanism configured to define the opened V shape an elastic mechanism configured to provide a bottle gripping force to the bottle gripping member (1) and a self restoring force for the opened V shape and an external force import mechanism. A mechanism configured to open the bottle gripping members (1) is provided respectively at a bottle entrance location and a bottle exit location of the bottle conveyor and the mechanism configured to open the bottle gripping members (1) cooperates with the external force import mechanism to provide an external force. The bottle conveyor can rapidly open or close the bottle gripping members on the circulating chain conveyor mechanism directly thus improving the conveyance efficiency and speed alleviating loading of a motor and simplifying the structure of a robotic arm and the structure for opening or closing the bottle gripping members in the filling machine.
A pocket filter adapted for filtering grease and other liquid aerosols has first and second depth loading media with a separator that prevents wicking thereby to extend filter life and capacity. The first layer is also of lower efficiency than the second to distribute loading and further extend life. The spacer may be of unwoven fiber mesh. Various features of the pocket filter ensure free flow of effluent streams.
The present invention relates to a method a device and a system for transmitting downlink signals. In particular the present invention relates to a method and a device and system for same the method comprising the steps of: selecting CSI RS configuration information for a downlink cell from a CSI RS configuration information set; transmitting the selected CSI RS configuration information to a terminal; and transmitting a CSI RS in the downlink cell to the terminal according to the selected CSI RS configuration information wherein the CSI RS configuration information set varies depending on the characteristics of a band in which the downlink cell operates.

No. of Pages : 63 No. of Claims : 20

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3) SON Juhyung
The invention relates to a public transport electric land vehicle (100) including at least one electric motor for moving said vehicle and at least one rechargeable electricity storage module (114 116) for powering said at least one electric motor characterised in that said vehicle (100) includes: a so called rear recess (202) provided at the rear of said vehicle (100) for holding at least one rechargeable electricity storage module (114 1144); and at least one compartment (204 210) provided at the periphery of said rear housing for holding at least one functional member.
Disclosed are methods, systems, and devices for addressing a jammer signal transmitted by a device that effects a signal received at a receiver. In a particular embodiment, an application content signal is encoded for transmission in a wireless transmission medium to provide symbol content where the symbol content comprises at least some symbols representing the application content signal. A receiver may be selectively blanked synchronized with at least a portion of the symbol content.
The invention relates to a computerised method for creating and editing surfaces used to represent garments on the body of a mannequin (22) in a virtual three dimensional environment. The method consists in using digital sculpting techniques and tools in conjunction with physical cloth simulation in order to modify freely and quickly the shape of a garment on the body of a mannequin (22).
Title of the invention: A METHOD OF INDUCING CARDIOMYOCYTES PROLIFERATION AND TREATING HEART DISEASES

Abstract:
An Agrin peptide which induces proliferation of cardiomyocytes for treating a heart disease is provided.

No. of Pages: 48 No. of Claims: 26
Method and device (10) to manage a coiler apparatus (11) associated with a distributor (15) in which there is at least an exit of the feeder (21) of hot or cold semi worked metal products and with a reel (16) both being respectively moved with suitable controlled movement and rotation means able to manage the coiling obtaining coils with desired characteristics. The management device comprises a video recording system (12) configured to acquire images of said semi worked metal product a processing and calculating unit (13) configured to process said images and calculate continuously the equivalent diameter of said semi worked metal product and the angle of inclination defined between the axis of said exit of the feeder (21) and the instantaneous coiling point of said semi worked metal product on said reel (16); and a control and command unit (14) configured to control said operating parameters obtained with reference operating parameters previously supplied and to command in a coordinated manner said movement and rotation means of said distributor (15) and said reel (16).
### Patent Application Publication

**Title of the invention:** DEVICE FOR SEPARATING ULTRA FINE PARTICLES (UFP) FROM AN AIR FLOW WHICH FLOWS IN MOTOR VEHICLE VENTILATION AND CLIMATE CONTROL SYSTEMS

**Abstract:**

In order in the case of a device for separating ultra fine particles (UFP) from an air flow (3) which flows in motor vehicle ventilation and climate control systems (1) to ensure a higher degree of separation for said ultra fine particles (UFP) it is proposed that the device for separation is configured as an electrostatic separation device (8) having a collecting electrode (11) on which ultra fine particles can be accumulated which are charged in the electrostatic separation device (8) upstream in the flow direction of the air flow (3) and that the collecting electrode (11) of the electrostatic separation device (8) is arranged in relation to an evaporator (5) of the motor vehicle ventilation and climate control system (1) in such a way that the collecting electrode (11) can be cleaned automatically by means of condensation water which is produced on the evaporator (5).

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**Name of Inventor:**
1) MOENKEMOLLER Ralf

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**No. of Pages:** 12  **No. of Claims:** 10
The present invention relates to a non water based cosmetic composition including water soluble scrub particles containing polypeptide or cell culture components. More particularly the present invention relates to a non water based cosmetic composition including 0.01% to 15% by weight of hard angular and water soluble scrub particles containing a peptide various polypeptides including oligopeptide or cell culture components. In addition the cosmetic composition of the present invention provides a non water based cosmetic composition that while not including effective ingredients includes water soluble excipient scrub particles for maintaining or improving scrub effects and for controlling viscosity or volume.
The present invention relates to a crosslinked polyacrylate salt which has been neutralized by two types of amines: (1) amine groups attached to the polymer backbone of an aminosilicone and (2) water soluble organic amines. The compositions of the present invention can readily swell in water displaying enhanced thickening emulsifying dispersing and producing film with water resistance compared to acrylate based thickener alone. The compositions can be used to formulate a wide variety of ingredients such as for example fatty substances humectants solid particles silicones organic or inorganic sunscreens without the need of further neutralizing agents dispersants or emulsifiers.

No. of Pages : 70 No. of Claims : 20
Title of the invention: METHOD FOR COATING THE SURFACE OF A SUBSTRATE

Abstract:
The invention relates to a method for coating the surface of a substrate such as inorganic particles with a metal oxide wherein a reduced mass related specific surface area of the metal oxide coating is achieved. In particular the invention relates to the surface coating of titanium dioxide pigment particles with aluminum oxide.

No. of Pages: 9 No. of Claims: 7
Methods and systems for removing polar compounds from a metal-containing solution. According to various example aspects, methods and systems for removing hydrolysis byproducts and other polar compounds from a metal-loaded organic solution of a solvent extraction process.

No. of Pages: 43 No. of Claims: 20
**Title of the invention:** PRODUCTION OF TITANIUM DIOXIDE PIGMENT OBTAINED BY THE SULFATE PROCESS WITH A NARROW PARTICLE SIZE DISTRIBUTION

**Abstract:**
The invention relates to a process for producing a titanium dioxide pigment obtainable by the sulfate process with a narrow particle size distribution the pigment itself and the use of said pigments in coatings and printing inks.

No. of Pages : 7  No. of Claims : 15
Processes for the separation of water from a mixture of water with other components comprising the following steps: A) providing feed material FM comprising water and at least one nonionic surfactant S in an amount of 0.1 to 1000 ppm by weight based on the feed material FM B) subjecting said feed material FM to a distillation step using a falling film evaporator.
The invention relates to a cosmetic mask particularly to a cosmetic mask that is a water insoluble substrate with a composition impregnated therein which can be applied to the face or any other topical surface of the body. The cosmetic mask provides both the benefits of a skin care active that delivers long-term benefits as well as instant lightening benefits without the disadvantages of unnatural whiteness that is often associated with such instant lightening products.

No. of Pages : 16 No. of Claims : 14
This invention relates to a hair care composition which provides the desired anti-dandruff efficacy with uniform deposition of the active materials on hair/scalp. This is achieved through a judicious combination of a specific cationic deposition polymer and selective anti-dandruff agent of the right particle size.
Title of the invention: LIQUID PESTICIDAL COMPOSITION

A liquid pesticidal composition includes an emulsifier component present in an amount from 3 to 35 parts by weight per 100 parts by weight of the liquid pesticidal composition a pesticide present in an amount from 1 to 90 parts by weight per 100 parts by weight of the composition and an optional solvent present in an amount from 0 to 90 parts by weight per 100 parts by weight of the composition. The emulsifier component includes an alkaline earth salt or amine salt of a C6-C22 fatty acid along with an alkyl polyglycoside present in an amount from 1 to 20 parts by weight per 100 parts by weight of the composition. The emulsifier component may also include an optional co-emulsifier present in an amount from 0 to 20 parts by weight per 100 parts by weight of the composition.

No. of Pages : 23 No. of Claims : 20
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<th>(54) Title of the invention : PA/PET SEPARATION PROCESS</th>
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<td>IONIQIA TECHNOLOGIES B.V.</td>
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<tr>
<td>Address of Applicant :De Lismortel 31 5612 AR Eindhoven Netherlands</td>
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<tr>
<td>1) VAN BERKUM Susanne</td>
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<td>2) CASTILLO Sonja Irene Marie Reginalde</td>
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<th>(57) Abstract :</th>
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<td>The present invention is in the field of an improved separation process for mixed polymers typically provided in a waste stream comprising a polyamide (PA) and a polyethylene terephthalate (PET). The process is a relatively simple process wherein PA and PET are heated to a temperature above 150°C in an alcohol water is added and the PA and PET are separated thereafter by filtering.</td>
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No. of Pages : 14 No. of Claims : 16
The disclosure relates in some aspects to resource requirement signaling and rate setting for communication on an unlicensed band. The disclosure also relates in some aspects to determining a token arrival rate as a function of traffic arrival information. In some aspects the disclosed schemes may avoid traffic collisions on a resource and promote access fairness on the resource.
Provided in various examples are a device and a method the device comprising: a first pixel group and a second pixel group for converting an electrical signal into an optical signal; a first emission line for transmitting to the first pixel group power supplied from the outside; and a second emission line for transmitting the power to the second pixel group wherein the first emission line and the second emission line are electrically separated from each other. In addition other examples are also possible.
**Title of the invention :** A METHOD FOR PRE-TREATING A SURFACE FOR COATING

| (51) International classification | :C23C14/02 |
| (31) Priority Document No | :EP15193876.8 |
| (32) Priority Date | :10/11/2015 |
| (33) Name of priority country | :EPO |
| (86) International Application No | :PCT/EP2016/075171 |
| Filing Date | :20/10/2016 |
| (87) International Publication No | :WO 2017/080774 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

**Abstract :**
A method for pre-treating a substrate (200) for surface coating by subjecting the substrate to metal ions and noble gas ions selected from the group of argon-ions krypton-ions neon-ions xenon-ions and helium-ions in a vacuum chamber (10) and applying a negative electrical potential (P1 P2) on the substrate (1) wherein the substrate (200) is pre-treated in at least two steps (1000 2000) wherein the steps are performed subsequently in the vacuum chamber (10) wherein the first step (1000) comprises providing a plasma comprising predominantly noble gas ions selected from the group of argon-ions krypton-ions neon-ions xenon-ions and helium-ions in the vacuum chamber (10) and applying a first negative electrical potential (P1) on the substrate (200) and wherein the second step (2000) comprises providing a plasma comprising predominantly metal ions in the vacuum chamber (10) and applying a second negative electrical potential (P2) on the substrate (200) wherein the first electrical potential (P1) is lower than the second electrical potential (P2) and wherein the magnitude of the first negative potential (P1) is 100 - 1500 V.

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**No. of Pages :** 22  **No. of Claims :** 15
**Title of the invention:** SOLID SOLUTIONS OF ODORIFEROUS SUBSTANCES AND FLAVORING AGENTS WITH VINYL LACTAM POLYMERS

**Abstract:**
Optically transparent solid water-soluble formulations of odoriferous substances and flavoring agents containing at least one synthetic odoriferous substance and flavoring agent; in said formulations the odoriferous substances and flavoring agents are homogeneously embedded in a polyvinyl lactam-based polymer matrix.
Provided herein are oral care compositions comprising antifreeze proteins (AFPs) useful in methods of repairing or inhibiting dental erosion promoting dental remineralization and/or enhancing the anti-cavity effects of fluoride.
Title of the invention : HAEMORRHAGE AVOIDING MICROELECTRODE

A microelectrode comprises an oblong electrically conducting electrode body covered by distal and proximal sections of a layer of insulating material except for an annular contact section disposed between them a blunt distal bulge at the distal end of a radial extension substantially greater than that of the proximal section of non-conducting material. For implantation into soft tissue the microelectrode is provided with a support of a material dissolvable in body fluid. Also disclosed is a set of microelectrodes sharing such support a method of manufacture of the microelectrode and the set and uses of the microelectrode and the set.

No. of Pages : 26 No. of Claims : 33
There is provided a capacitive fingerprint sensing device comprising a plurality of sensing elements sensing circuitry for providing an analog sensing signal drive signal circuitry providing a drive signal comprising a drive pulse having a maximum level and a minimum level providing a change in potential difference between the finger and the sensing structure analog sampling circuitry comprising at least three analog sample and hold circuits arranged to sample the sensing signal and a sampling control unit for individually controlling the sample and hold circuits to capture a sample at a specified time wherein the samples comprises one sample captured when the drive signal is at a first voltage level $V_1$ and one sample captured when the drive signal is at a second voltage level $V_2$ different from $V_1$; and an analog-to-digital converter ADC configured to convert a combination of the samples into a digital signal wherein the three samples are captured times such that a noise component is suppressed from the sensing signal when the combination is formed.
The present invention generally relates to a method forming a fingerprint image using a fingerprint sensing system and specifically the formation of an improved fingerprint image by combining fingerprint image data from a plurality of subsequently acquired images of a finger. The invention also relates to a corresponding fingerprint sensing system and to a computer program product.
## Title of the invention
ORAL CARE PRODUCTS AND METHODS COMPRISING HYDROXYAPATITE BINDING PROTEINS

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<th>(51) International classification</th>
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<tr>
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<tr>
<td>(36) Name of Inventor</td>
<td>SCHNEIDER, Nina</td>
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<tr>
<td>(37) Name of Inventor</td>
<td>SUBKOWSKI, Thomas</td>
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<td>(38) Name of Inventor</td>
<td>JENEWEIN, Stefan</td>
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<tr>
<td>(39) Name of Inventor</td>
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<td>BOLLSCHWEILER, Claus</td>
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<td>FACEY, Sandra</td>
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<tr>
<td>(44) Name of Inventor</td>
<td>HAUER, Bernhard</td>
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### Abstract
Provided herein are oral care compositions comprising HABP which are useful in methods of repairing or inhibiting dental erosion promoting dental remineralization and/or enhancing the anti-cavity effects of fluoride.

No. of Pages : 38 No. of Claims : 19
(54) Title of the invention: METHOD FOR PRODUCTION OF A COMPOSITE MATERIAL USING EXCESS OXIDANT

(51) International classification: C22B5/04, C22B5/14, C22B34/12
(31) Priority Document No.: 2015903277
(32) Priority Date: 14/08/2015
(33) Name of priority country: Australia
(86) International Application No.: PCT/AU2016/050746
Filing Date: 12/08/2016
(87) International Publication No.: WO 2017/027915

(61) Patent of Addition to Application Number: NA
Filing Date: NA
(62) Divisional to Application Number: NA
Filing Date: NA

(57) Abstract:
There is provided a method of producing a composite material comprising: supplying a metal compound (MPC) of a product metal (MP) and a reductant (R) capable of reducing the metal compound (MPC) of the product metal (MP) to a reactor; forming a composite material comprising a matrix of oxidised reductant (Ro) of the reductant (R) the product metal (MP) dispersed in the matrix of oxidised reductant (Ro) and at least one of (i) one or more metal compounds (MPCR) of the metal compound (MPC) in one or more oxidation states and (ii) the reductant (R); and recovering the composite material from the reactor wherein the metal compound (MPC) of the product metal (MP) is fed to the reactor such that it is in excess relative to the reductant (R).
(21) Application No.201623042127 A
(19) INDIA
(43) Publication Date : 15/06/2018
(22) Date of filing of Application :09/12/2016
(12) PATENT APPLICATION PUBLICATION

(54) Title of the invention : AN OPTIMIZED SINGLE CYLINDER CONCRETE PUMP

(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
(87) International Publication No :NA
(61) Patent of Addition to Application Number :NA
(62) Divisional to Application Number :NA
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
(87) International Publication No :NA
(61) Patent of Addition to Application Number :NA
(62) Divisional to Application Number :NA
(57) Abstract :
"An Optimized single cylinder concrete pump" as described by the present patent of addition application is an improvement in our earlier invention disclosed by Indian Patent Application No. 3871/MUM/2013 & its corresponding International application no. PCT/IN2014/000088 which has been examined by the ISA & the IPEA and the reports have been established & are in public domain. The said invention is further optimized by way of this patent of addition application which makes the invention highly effective, lightweight & compact.

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2)ANAND ARUN GOKHALE

(72)Name of Inventor :
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2)ANAND ARUN GOKHALE

No. of Pages : 32 No. of Claims : 23
An air-cooling heat dissipation device includes a base, a swirling-airflow heatsink, an air pump and a passage connector. The base is located beside an electronic component while the air pump is fixed on the base. The swirling-airflow heatsink is attached on the electronic component and includes a swirling passage defined by a conductive line and a thermal conduction plate collaboratively. An airflow-guiding chamber is defined by the air pump and the base collaboratively, and the airflow-guiding chamber is in communication with the swirling passage by the passage connector. When the air pump is enabled, an ambient air is introduced into the airflow-guiding chamber of the base and transferred to the swirling passage of the swirling-airflow heatsink through a discharge opening of the base and the passage connector. Consequently, a fast swirling air flow is produced to cool the electronic component.
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<td>(54) Title of the invention : POLYESTER BLEND HAVING A HALOGEN FREE FLAME PROTECTION</td>
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<td>Address of Applicant :Carl Bosch Strasse 38 67056 Ludwigshafen am Rhein Germany</td>
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<td>(86) International Application No :PCT/EP2016/072569</td>
<td>(72) Name of Inventor :</td>
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<td>(87) International Publication No :WO 2017/063841</td>
<td>1) WAGNER Sebastian</td>
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<td>2) KRAEMER Roland Helmut</td>
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(57) Abstract:
The invention relates to thermoplastic molding compounds containing A) 10 to 99 wt% of a thermoplastic polyester different from B) 0.1 to 30 wt% of a poly(caprolactone) C) 0.1 to 30 wt% of a biodegradable polyester different from B) D) 0.1 to 30 wt% of a phosphinic acid salt E) 0 to 20 wt% of a nitrogen containing flame retardant F) 0 to 15 wt% of an aromatic phosphate ester having at least one alkyl substituted phenyl ring G) 0 to 50 wt% of further additives wherein the sum of the percentages by weight of the components A) to G) adds up to 100%.

No. of Pages : 42 No. of Claims : 10
An ink or coating formulation including an energy curable high reactivity heteroatom containing polycarbonate polyfunctional vinyl ether molecule of formula (I) or an energy curable high reactivity heteroatom containing acrylate molecule of formula (II) is provided.
A tobacco barn monitoring and control system for monitoring and controlling of process parameters of a tobacco flue curing process in a barn is disclosed. System disclosed sets stages of a curing cycle based upon curing regime selected and thereafter monitors and controls the process parameters of the curing cycle to keep them within their threshold values, either automatically or upon receipt of instructions from a barn driver or remote supervisor. Alarm signals generated by system disclosed can trigger local alarms for local action by barn driver and, if no local action is taken by the barn driver within a pre-defined time, can trigger notifications for both barn driver and remote supervisor of barn on their Internet enabled devices/mobile devices for their actions. System disclosed can be configured as a website to monitor a plurality of barns simultaneously and can enable data visualization and analysis.
Title of the invention : DATA TRANSMISSION METHOD AND DEVICE

Abstract :
Embodiments of the present invention provide a data transmission method and device. The method comprises: modulating according to a lower-order constellation information bits to be sent to generate 4m lower-order modulation symbols; multiplying a precoding matrix Q with column vectors formed by the 4m lower-order modulation symbols to obtain 4m higher-order modulation symbols to be sent corresponding to a higher-order constellation; and respectively sending on different corresponding carriers of two antennas the 4m higher-order modulation symbols to be sent. The higher-order modulation symbols to be sent contain a part of or all of the information bits to be sent and therefore the same signal can be simultaneously sent on different carriers of multiple antennas thus achieving frequency diversity and space diversity and accordingly improving the transmission and receiving performance of data transmission.
No. of Pages : 10 No. of Claims : 6
(51) International classification : G01N 21/00 G01N 33/00
(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(86) International Application No Filing Date : PCT// 01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number Filing Date : NA
(62) Divisional to Application Number Filing Date : NA
(57) Abstract :
The present invention provides a facile method for the synthesis of metal nanoparticle aggregates (Soret colloids) as Surface Enhanced Raman Spectroscopy (SERS) substrate and their use in detection of analytes such as organic compounds using SERS. The nanoparticle aggregates are synthesized using a thermal gradient and thereafter said metal nanoparticles aggregates are used as SERS substrates for reliable, quantitative detection of organic analytes in both liquid phase and gas phase.

No. of Pages: 22 No. of Claims: 16
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<td>(22) Date of filing of Application :13/12/2016</td>
<td>(43) Publication Date : 15/06/2018</td>
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<td>(71) Name of Applicant : 1) DIGVIJAY SOLANKI</td>
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<td>THE SYSTEM WILL CONSISTS OF DEVICES THAT ARE ATTACHED TO EVERY TRAIN CART THAT DETECT DERAILING AND ALSO A CONSOLE IN THE DRIVERS CABIN. WHEN THE TRAIN IS DERAILING THE SYSTEM WILL APPLY AUTOMATIC BREAKING AND SEND EMERGENCY MESSAGES TO THE RESPONSIBLE PERSONAL.</td>
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No. of Pages : 6 No. of Claims : 9
(54) Title of the invention : NETWORK ANALYZER TO MEASURE S-PARAMETER MAGNITUDES OF VARIOUS DEVICES AT UHF, L AND S BAND

(51) International classification : G01R 31/00
G01R 27/00
G01R 35/00

(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 :
ABSTRACT Embodiments herein provide a network analyzer to measure S-parameter magnitudes of a DUT at UHF, L, and S band respectively. The proposed network analyzer includes a signal generator for generating a microwave signal. The proposed network analyzer includes a harmonic suppressor for suppressing harmonics of the generated microwave signal to obtain a filtered microwave signal. The proposed network analyzer includes a signal separator for isolating the filtered microwave signal incident on the DUT from a reflected signal, reflected by the DUT, for obtaining transmission coefficient and reflection coefficient of the DUT. The proposed network analyzer includes a computing unit for measuring the S-parameters of the DUT based on the determined transmission coefficient and reflection coefficient. FIG. 1

No. of Pages : 35 No. of Claims : 14
Title of the invention: SYSTEMS AND METHODS FOR HIGH ACCURACY VARIANT CALLING

Systems and methods for in silico prediction of HLA type of a patient are presented in which patient sequence reads and a reference sequence with known and distinct HLA alleles are used in a de Bruijn graph. A composite match score is then used to rank HLA alleles thus providing a first HLA type. A second HLA type is identified by re-ranking using an adjusted composite match score.
A metered dose inhaler canister combination comprises a canister configured for containing a pharmaceutical composition the canister having a canister base a side wall extending from the canister base an open end distal from the base and a first cooperating formation arranged at said open end and extending generally distally from said canister base; a shroud having a shroud base and a side wall extending from the shroud base to a waist the base and side wall defining a vessel configured to receive the canister therein the waist defining an aperture of constricted width configured to receive the canister therethrough and a second cooperating formation extending generally distally from said waist wherein the respective first and second cooperating formations adopt an engaged condition in which the canister is retained within the shroud.

CONTINUED TO PART- 2