(19) INDIA

(22) Date of filing of Application :03/12/2017

(43) Publication Date : 07/06/2019

(54) Title of the invention : AUTOMATIC CONTROL SYSTEM FOR WATER SPRINKLING AND VENTILATION

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No 	:A01G 1/00 :NA :NA :NA :NA	 (71)Name of Applicant : 1)Centurion University of Technology and Management (CUTM) Address of Applicant :17, Forest Park, Bhubaneswar, Khurda District - 751009 Odisha, India (72)Name of Inventor :
Filing Date	:NA	1)Sangram Keshari Swain
(87) International Publication No	: NA	2)Subrat Kumar Pradhan
(61) Patent of Addition to Application Number	:NA	3)Swarna Prabha Jena
Filing Date	:NA	4)Saroj Behera
(62) Divisional to Application Number	:NA	5)T. Sunil Kumar
Filing Date	:NA	

(57) Abstract :

The present invention proposes an automatic control system for water sprinkling and ventilation. The system comprises a circuit board that mechanically supports and electrically connects the components using conductive tracks and thereof. The system uses an arduino based AT mega microcontroller that is specifically programmed to compute the input signals. The signals are received from the various sensors that sense moisture content of beds, humidity and ambient temperature and thereof. This is achieved by using a detecting unit with plurality of detectors arrangement for an effective system. Once the controller receives this signal, it begins the process of computation in order to carry out the necessary action for comparing the precise parameters that are pre fed and displayed in a visual means, which makes it very much informative. The system reduces human intervention and takes care of proper maintenance of growth parameters and minimizing wastage of resources in the mushroom cultivation chamber

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

(54) Title of the invention : SMART MONITORING SYSTEM OF SOIL MOISTURE

(19) INDIA

(22) Date of filing of Application :03/12/2017

(43) Publication Date : 07/06/2019

:G01N (71)Name of Applicant : (51) International classification 33/00 1)Centurion University of Technology and Management (31) Priority Document No :NA (CUTM) (32) Priority Date Address of Applicant :17, Forest park, Bhubaneswar, Khurda :NA (33) Name of priority country District - 751009, Odisha, India :NA (86) International Application No (72)Name of Inventor: :NA Filing Date :NA 1)Sangram Keshari Swain (87) International Publication No : NA 2)Subrat Kumar Pradhan (61) Patent of Addition to Application Number :NA 3)Swarna Prabha Jena Filing Date :NA 4)Saroj Behera (62) Divisional to Application Number :NA Filing Date :NA

(57) Abstract :

An integrated handheld soil moisture sensor device comprising a controller for controlling a soil moisture sensor and integrated to the microcontroller, an oscillator to generate an electrical signal of precise frequency and a sensing unit to determine the moisture content of the soil. The controller may be a microcontroller of 8051, AVR, PIC and the like controllers. The controller controls the sensor circuit in accordance to the program dumped in the controller. The soil moisture sensor may be a capacitance sensor, granular matrix sensor and the like sensors. The oscillator may be a crystal oscillator, Hartley oscillator and the like oscillators to provide clock signals based on type of said controller. The sensing unit may be a neutron probes, gravimetric probes and the like sensing units and material of the sensing unit may be a conducting material such as copper, aluminium, metal and thereof. The sensing unit is inserted into the soil to determine moisture content of the soil where in the moisture content is displayed with precise value. The invention consists of portable soil moisture sensor and a common display unit. This makes it possible for the user to observe the moisture level of the soil in multiple locations from a single conveniently positioned display unit.

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

(19) INDIA

(22) Date of filing of Application :03/12/2017

(43) Publication Date : 07/06/2019

(54) Title of the invention : LOW SMOKE PORTABLE COMBUSTION FURNACE

(51) International classification37/(31) Priority Document No:N/(32) Priority Date:N/(33) Name of priority country:N/(86) International Application No:N/Filing Date:N/(87) International Publication No: N	 (CUTM) Address of Applicant :# 17, Forest park, Bhubaneswar, Pin - 751009, Dist; Khurda, Odisha, India (72)Name of Inventor : 1)Nityananda Padhy A 2)Debashree debadatta Behera
Filing Date :NA	4)Shiv Sankar Das
(62) Divisional to Application Number :NA	<u>\</u>
Filing Date :NA	

(57) Abstract :

A low smoke portable combustion furnace comprises a combustion chamber, a shell, a plurality of air inlets, a plurality of orifices, a plurality of set of pores engraved on orifices and a support structure to place an item such as a vessel, a pot, a container and the like. The combustion chamber is to contain and combust solid biomass fuels. The term "biomass" can be taken broadly to include any fuel, coal, oil, waste products, etc., that will burn more cleanly and efficiently by getting injected of air during combustion. The inventive design of the combustion chamber can be of a variety of shapes such as cylindrical or pie shape, depending on the type of fuel used and the stove's intended purpose. The furnace design reduces the amount of carbon monoxide gas emitted from the burning of solid fuel energy source, especially biomass.

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

(21) Application No.201931004151 A

(19) INDIA

(22) Date of filing of Application :01/02/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : ROBOTIC SERVICE SYSTEM FOR RAILWAY COACHES (SWAB RAILWAYS)

(51) International classification	:A61B0034300000, H04N0021218000, H04N0021218700, H04N0007180000, G09C0001000000	 (71)Name of Applicant : 1)Centurion University of Technology & Management (CUTM) Address of Applicant :Alluri Nagar Village, P.O- R Sitapur, Via- Uppalada, Paralakhemundi, Gajapati- 761211, Odisha, India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)Avinash Seekoli
(33) Name of priority country	:NA	2)Debasish Mohanty
(86) International Application No	:NA	3)S.Ranjit Rao
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	er:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Title: Robotic Service System for Railway Coaches The present disclosure discloses a robotic service system that automatically cleans the targeted railway coaches while sending live video feed and monitors different parameters of the railway coaches that include humidity, gas, temperature and thereof. The robotic service system has the ability to communicate bit to bit information wirelessly about the train at any moment with railway personnel. The information may include real-time image capturing which is then communicated with the railway personnel. Further, a controlling means is configured to receive and execute instructions sent from the railway personnel. Thus, the disclosure provides a safety servicing and data collecting robot thereby preventing many accidents and life threatening issues at a low cost.

No. of Pages : 16 No. of Claims : 9

(21) Application No.201931032613 A

(19) INDIA

(22) Date of filing of Application :12/08/2019

(43) Publication Date : 19/06/2020

(51) International classification	:A61K0036230000, A61K0031474500, A61K0048000000, A61K0041000000, A61K0009480000	 (71)Name of Applicant : 1)Centurion University of Technology & Management (CUTM) Address of Applicant :At-Alluri Nagar Village, PO-R. Sitapur Via-Uppalada, Paralakhemundi-761211, Gajapati District, Odisha
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application	:NA	
Number Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(54) Title of the invention : CORIANDER EXTRACT FOR BONE CANCER

(57) Abstract :

The proposed disclosure provides a therapeutically effective coriander (Coriandrum Sativum) composition for targeted gene therapy with proven pharmacological activities for the treatment of particular bone cancer. The formulation of coriander (Coriandrum Sativum) composition comprises of herbal extracts such as Decene (6DJC) and 2- Bornyl acetate (5ZF4) extracted from the root of coriander. The composition helps in inhibiting DNA damage, preventing cancer cell migration and promoting cancer cell death or boost the immune system. The composition has the capability of removing toxins from the body by relieving fluid retention. The composition is formulated as tablets, capsules and thereof which is a cost effective drug without having any harmful side effects for normal cells. The composition helps in providing better molecular docking scores when compared to conventional extracts.

No. of Pages : 19 No. of Claims : 7

(19) INDIA

(22) Date of filing of Application :12/08/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : SYZYGIUM AROMATICUM EXTRACTS FOR OVARIAN CANCER

(51) International classification	:A61K0036610000, A23L0033105000, A61K0031198000, A61K0048000000, A21D0002360000	 (71)Name of Applicant : 1)Centurion University of Technology & Management (CUTM) Address of Applicant :At-Alluri Nagar Village, PO-R. Sitapur, Via-Uppalada, Paralakhemundi-761211, Gajapati District, Odisha,
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The proposed disclosure provides a therapeutically effective Syzygium aromaticum (clove) composition for targeted gene therapy with proven pharmacological activities for the treatment of ovarian cancer. The formulation of Syzygium aromaticum (clove) composition comprises of herbal extracts such as kaempferol and protein. In specific, protein may include either 5AUX or 5AV2 or 5AV3 or 4DET. The composition has the capability of being used as anti-oxidant property that helps in removing free radicals. The composition can be formulated as tablets, capsules and thereof which is a cost effective drug without having any harmful side effects for normal cells. The composition helps in providing better molecular docking score when compared to conventional extracts in Syzygium aromaticum.

No. of Pages : 21 No. of Claims : 8

(19) INDIA

(22) Date of filing of Application :12/08/2019

(43) Publication Date : 19/06/2020

(51) International classification	:A61K0048000000, A61K0041000000, A61K0031708000, A61K0031417800, A61K0009480000	
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA :NA	
Filing Date (62) Divisional to Application Number	:NA	
Filing Date	:NA	

(54) Title of the invention : METHI EXTRACT FOR LIVER CANCER

(57) Abstract :

The proposed disclosure provides a therapeutically effective Fenurgreek (Methi) composition for targeted gene therapy with proven pharmacological activities for the treatment of liver cancer. The formulation of Fenurgreek (Methi) composition comprises of herbal extracts such as linalool, sotolon and coumarin. The composition has the capability of being used as anti-oxidant and anti microbes. The composition is formulated as tablets, capsules and thereof which is a cost effective drug without having any harmful side effects for normal cells. The formulated drug can also be used for preparing different skin and hair products. The composition helps in providing better molecular docking scores when compared to conventional extracts in Fenurgreek.

No. of Pages : 21 No. of Claims : 7

(21) Application No.201931032616 A

(19) INDIA

(22) Date of filing of Application :12/08/2019

(43) Publication Date : 19/06/2020

(51) International classification	:A61K0036800000, A61K0041000000, A61K0009480000, A61K0036680000, A61K0031416400	 (71)Name of Applicant : 1)Centurion University of Technology & Management (CUTM) Address of Applicant :At-Alluri Nagar Village, PO-R. Sitapur, Via-Uppalada, Paralakhemundi-761211, Gajapati District, Odisha,
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(54) Title of the invention : BACOPA MONNIERI EXTRACTS FOR LUNG CANCER

(57) Abstract :

The proposed disclosure provides a therapeutically effective Bacopa monnieri (Bramhi) composition for targeted gene therapy with proven pharmacological activities for the treatment of lung cancer. The formulation of Bacopa monnieri (Bramhi) composition comprises of herbal extract such as Alpha alanine-6HUG. The composition has the capability of being used as anti-oxidant property that helps in removing free radicals. The composition can be formulated as tablets, capsules and thereof which is a cost effective drug without having any harmful side effects for normal cells. The composition helps in providing better molecular docking score when compared to conventional extracts in Bacopa monnieri.

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

(19) INDIA

(22) Date of filing of Application :11/10/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : SOLAR SUGARCANE JUICER WITH CUSTOMIZED COOLING AND ADDITIVE DOSAGE DESIGN

(51) International classification	A23N0001000000,	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT (CUTM) Address of Applicant :At-Alluri Nagar Village, PO-R Sitapur, Via-Uppalada, Paralakhemundi- 761211, Gajapati Dist. Odisha,
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Nimay Chandra Giri
(86) International Application No	:NA	2)Bishnu Prasad Mishra
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	er :NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Title: Solar Sugarcane Juicer with Customized Cooling and Additive Dosage Design The present disclosure discloses a sugarcane juicer machine with customized cooling and additive dosage design that offers a ready to serve sugarcane juice. The juicer machine is powered using solar energy which is used in any remote part of the world. The juicer machine comprises of a juice extractor, a clarifier, a cooling unit and an additive dosage selector. The cooling unit further comprises of a brine tank, plurality of Peltier cells and plurality of helical coils. The clarifier may include a centrifugal clarifier that aid in separating the solids from the extracted juice. The plurality of Peltier cells are powered by the solar power supply that aid in customized cooling the brine solution as per customer requirement. The juicer provide different levels of cooling and different flavors for taste enhancement. The additive dosage selector is incorporated to add different customized additives as per customer requirement to the cooled juice to make it tastier. The juice is blended with other taste improvers that provide health benefits to cure or prevent some diseases. The solar sugarcane juicer machine provides a hygiene sugarcane juice at an affordable price that can be assured to all rural, semi urban and urban population.

No. of Pages : 16 No. of Claims : 9

(19) INDIA

(22) Date of filing of Application :11/11/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : AUTOMATIC FAULT CONTROL SYSTEM INTEGRATED 3D PRINTER

(51) International classification	:G06F0011070000, H02M0001320000, B41J0003407000, G01R0031360000, A42B0003040000	 (71)Name of Applicant : 1)Centurion University of Technology & Management (CUTM) Address of Applicant :At-Alluri Nagar Village, PO-R. Sitapur, Via-Uppalada, Paralakhemundi- 761211, Gajapati District,
(31) Priority Document No	:NA	Odisha, India.
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Suman Kumar Sudhanshu
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numb	oer:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Title: Automatic Fault Control System Integrated 3D Printer The present disclosure discloses an automatic fault control system integrated 3D printer which automatically monitors different parameters, assesses and corrects faults within the printer during printing of an object. The control system comprises a parameter monitoring module, a remedy application module, a fault communication module, a controller and a power module. The parameter monitoring module is configured to assess faults during printing and the fault communication module is configured to communicate the assessed faults wirelessly to the remedy application module. The remedy application module can be linked either as a mobile application or a server application or the like which provides remedies to faults occurred during printing. Further, the controller is configured to process received remedies and to correct faults occurred during printing without discontinuing the process of printing.

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

(21) Application No.201931049814 A

(19) INDIA

(22) Date of filing of Application :03/12/2019

(43) Publication Date : 19/06/2020

(51) International classification	:A23L0005200000, A23P0030200000, G01N0033558000, A23K0050400000, B01J0020220000	 (71)Name of Applicant : 1)Centurion University of Technology and Management (CUTM) Address of Applicant :Alluri Nagar Village, PO-R Sitapur, Via-Uppalada, Paralakhemundi-761211, Gajapati Dist, Odisha,
(31) Priority Document No	:NA	India
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Num	iber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(54) Title of the invention : A DEVICE FOR DETECTION OF FOOD TOXINS

(57) Abstract :

The present disclosure discloses a cost-effective sensing device that detects food toxins i.e., Aflatoxin B1 in agricultural plants, food and feed products with ease and can be used by the farmers. The device comprises a body 101, a paper roll casing 102, a guiding and rolling means 103, a sample collecting means 104, an ejection means, a cutting means 105, and a paper outlet 106. The device is cost-effective and aids in detecting Aflatoxin in food and feed products based on capillary rise principle. The device is capable of detecting minor changes in the pH of solution to thereby enhance the detection procedure of the affected cell. The device helps in detecting biochemical changes in agricultural plants, food, and feed products with reduced time-consumption.

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

(19) INDIA

(22) Date of filing of Application :13/12/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : BIO-GAS CYLINDER MONITORING AND REPLACING SYSTEM IN MOBILE BIO-TOILETS

(51) International classification	:C12M0001107000, A47K0011030000, C02F0003280000, C12M0001000000, G06Q0010060000	 (71)Name of Applicant : 1)Centurion University of Technology and Management (CUTM) Address of Applicant :Alluri Nagar, PO-R.Sitapur, Via-Uppalada, Parlakhemundi-761211, Gajapathi Dist, Odisha, India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)Pritam Das
(33) Name of priority country	:NA	2)Jyoti Lal Lodhi
(86) International Application No	:NA	3)N.Laxmidhar Reddy
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Title: Bio-Gas Cylinder Monitoring and Replacing System in Mobile Bio-Toilets The present disclosure discloses an e-movable biotoilet incorporated with monitoring and replacing system that alerts the driver to replace the cylinder once it is filled and simultaneously transmits wirelessly the bio-gas availability information to the gas inventory in real-time. The system 100 comprises a vehicle body 101, a toilet cabinet 102, a replaceable bio-gas cylinder 103, and a weight detection means 104, a pair of visual indication means 105, a signal transmitting means 106, and a dashboard controlling means. The system transmits the signal to the driver or the inventory either in an audibly or visually manner with colour representation of filling level indication of methane gas in the cylinder. The bio-gas monitoring and replacing system minimizes pollution by using electrical energy and generates good revenue by selling the methane gas that is extracted from the waste material.

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

(19) INDIA

(22) Date of filing of Application :27/12/2019

(43) Publication Date : 19/06/2020

(54) Title of the invention : TERMINALIA CHEBULA EXTRACT COMPOSITION FOR JAUNDICE

(51) International classification	:A61K0036185000, A61K0008970000, A61K0048000000, A61K0008310000, A61K0008340000	 (71)Name of Applicant : 1)Preetha Bhadra Address of Applicant :D/o Tapash Bhadra Babupara, Sir Ashutosh Sarani PO, Dist-Alipurduar, West Bengal-736121 India 2)CENTURION UNIVERSITY OF TECHNOLOGY &
(31) Priority Document No	:NA	MANAGEMENT (CUTM)
(32) Priority Date	:NA	(72)Name of Inventor :
(33) Name of priority country	:NA	1)Preetha Bhadra
(86) International Application No	:NA	2)Atanu Deb
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number Filing Date	:NA :NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

Terminalia Chebula Extract Composition for Jaundice The proposed disclosure provides a therapeutically effective terminalia chebula (Haritaki) composition for targeted gene therapy with proven pharmacological activities for the treatment of jaundice. The terminalia chebula extract Composition comprises of herbal extracts such as chebulagic acid, punicalagin and chebulanin. The proposed terminalia chebula (Haritaki) composition enhances glucuronidation process to thereby decrease the levels of bilirubin. The proposed composition is a cost effective drug with less harmful side effects for normal cells. The terminalia chebula (Haritaki) composition reduces the use of synthetic drugs.

No. of Pages : 19 No. of Claims : 6

(21) Application No.448/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :24/04/2015

(43) Publication Date : 05/06/2015

(54) Title of the invention : ENHANCEMENT OF THERMAL CONDUCTIVITY THROUGH BEST NANOPARTICLE AND LIQUID PAIRING

(51) International classification	:C09K5/00	(71)Name of Applicant :
(31) Priority Document No	:NA	1)Centurian University of Technology & Management
(32) Priority Date	:NA	(CUTM)
(33) Name of priority country	:NA	Address of Applicant :HIG-5, Phase - 1, BDA Duplex
(86) International Application No	:NA	Pokhariput, Khurda District Bhubaneswar, ODISHA - 751020
Filing Date	:NA	(72)Name of Inventor :
(87) International Publication No	: NA	1)Dr. Ashok Misra
(61) Patent of Addition to Application Number	:NA	2)Dr. Saroj Kumar Mishra
Filing Date	:NA	3)Dr. Pradeep Kumar Tripathy
(62) Divisional to Application Number	:NA	4)Dr. Damera Nageswara Rao
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method of calculating thermal conductivity of the nano-fluids. More specifically, the method relates to measurement of the increased thermal conductivity of nano-fluids considering the thermal conductivities affected by appropriate parameters like radius, surface area, concentration, and the temperature of medium due to applied electric charge to the thermal conducting nano-fluid.

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

The Patent Office Journal 05/06/2015

(19) INDIA

(22) Date of filing of Application :25/04/2015

(21) Application No.455/KOL/2015 A

(43) Publication Date : 05/06/2015

(54) Title of the invention : AUTOMATED MANUFACTURING OF AGRICULTURAL IMPLEMENTS

(57) Abstract :

The present invention relates to a method of manufacturing agricultural implements on large scale. More specifically, the said method comprises of a computer aided process that collects and analyzes the required information and is also capable in designing appropriate model sketches. Further the process utilizes verification and scheduling device for verifying and scheduling the process for manufacturing of agricultural implement.

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

The Patent Office Journal 05/06/2015

(19) INDIA

(22) Date of filing of Application :22/05/2015

(21) Application No.561/KOL/2015 A

(43) Publication Date : 05/06/2015

(54) Title of the invention : COMPACT SOLAR POWERED WATER PUMPING SYSTEM

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number 	:NA :NA :NA :NA : NA :NA	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa (72)Name of Inventor : 1)Shiv Sankar Das 2)Udaya Kumar Sahoo
(61) Patent of Addition to Application Number Filing Date	:NA :NA	2)Udaya Kumar Sahoo
(62) Divisional to Application Number Filing Date	:NA :NA	

(57) Abstract :

The present invention relates to a compact solar powered water pumping system that comprises of, a moving means used for transportation from one location to another; plurality of solar panels mounted on the moving means; a foldable means provided in between the plurality of solar panels; and a pump used for pumping water, mounted on the moving means. Present invention relates to compact solar powered water pumping system which is mounted on the movable means. More specifically the direction of the solar panels can be adjusted to sunlight angle for optimum power generation of electric power that can be utilized for powering water pump. Further, the present invention offers an economic, easy to carry, portable mobile powering unit that can be carried form one place to other for powering water pumps.

No. of Pages : 17 No. of Claims : 10

The Patent Office Journal 05/06/2015

(21) Application No.574/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :25/05/2015

(43) Publication Date : 05/06/2015

(54) Title of the invention : PROCESS FOR SUPERCRITICAL AND SUBCRITICAL FLUID CO2 EXTRACTION OF FRAGRANCES FROM CHAMPA FLOWERS

 (51) International classification :A61 (31) Priority Document No :NA (32) Priority Date :NA (33) Name of priority country :NA (33) Name of priority country :NA (86) International Application No Filing Date :NA (87) International Publication No :NA (87) International Publication No :NA (87) International Publication No :NA (61) Patent of Addition to Application Number Filing Date :NA (62) Divisional to Application Number :NA Filing Date :NA 	 K8/41 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa (72)Name of Inventor : 1)Shashikant Tewary
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(57) Abstract :

The present invention relates to a method of extracting useful compounds from selected species of plants. More specifically, the said method comprises delivering an extraction fluid from a delivery system to a heating means. Further, the method involves treating the plant species and the residual plant species with the extraction fluid in an extractor at the supercritical and sub-critical conditions respectively; separating and collecting the useful compounds in a first and second collecting means respectively thereby increasing the extraction rate of the useful compound.

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

The Patent Office Journal 05/06/2015

(21) Application No.612/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :31/05/2015

(43) Publication Date : 05/06/2015

(54) Title of the invention : IDENTIFICATION OF HYDROCARBON LOCALES OF AN UNEXPLORED BASIN USING SPACE INPUTS AND GIS

(51) International classification	:G01V9/00	(71)Name of Applicant :
(31) Priority Document No	:NA	1)CENTURION UNIVERSITY OF TECHNOLOGY &
(32) Priority Date	:NA	MANAGEMENT (CUTM)
(33) Name of priority country	:NA	Address of Applicant :HIG-5, Phase -1, BDA Duplex
(86) International Application No	:PCT//	Pokhariput, Khurda Dt., Bhubaneswar
Filing Date	:01/01/1900	(72)Name of Inventor :
(87) International Publication No	:NA	1)Prafulla Kumar Panda
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method of identification of natural resources or hydrocarbon locales from an unexplored basin. More specifically the present invention identifies geographic anomalies based on the state of generated thematic layers using geological information. Further, architectural information of the subsurface is also collected which generates a layout that can be used to identify the natural resources or hydrocarbon locales.

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

The Patent Office Journal 05/06/2015

(21) Application No.698/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :23/06/2015

(43) Publication Date : 07/08/2015

(54) Title of the invention : CONTROLLER DESIGN OF SEPIC CONVERTER USING MODEL REDUCTION

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date 	:NA :NA :NA :PCT//	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar, Orissa (72)Name of Inventor :
 (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number 	: NA :NA :NA :NA	1)Binod Kumar Padhi
Filing Date	:NA :NA	

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(57) Abstract :

The present invention relates to a method of designing a feedback controller for higher order converter using model reduction technique. More specifically, the said method comprises of deriving the system functions in mathematical model of a physical high order converter, followed by reducing the system function of higher order into a lower order. Further, a compensator is designed for the reduced model for improved steady state and transient response.

No. of Pages : 29 No. of Claims : 10

(12) PATENT	APPLICATION	PUBLICATION
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(21) Application No.707/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :29/06/2015

(43) Publication Date : 07/08/2015

(54) Title of the invention : A HIGH PERFORMANCE BRIDGELESS AC-DC-DC POWER FACTOR CORRECTOR FOR LED DRIVER APPLICATION

(31) Priority Document No:NA(32) Priority Date:NA(33) Name of priority country:NA(86) International Application No:PCT	M7/217 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa (72)Name of Inventor : 1)Satya Narayan Padhy 2)Sarika Kalra
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(57) Abstract :

The present invention relates to a high performance bridgeless DC-DC power-factor correcting circuit. More specifically, the bridgeless DC-DC power factor converter comprises of plurality of passive elements like capacitors, inductors and thereof. Further, the said plurality of active elements like diodes, an electromechanical device like switching means and atleast two additional diodes are utilized for improving the power factor of the circuit for load driving.

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

(12) PATENT	APPLICATIO	N PUBLICATION
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(21) Application No.742/KOL/2015 A

(19) INDIA

(22) Date of filing of Application :08/07/2015

(43) Publication Date : 07/08/2015

(54) Title of the invention : COMPOSITE MATERIALS FROM LAYERED SILICATE CLAY AND METHOD OF MAKING GRINDING WHEELS USING THE SAME

(51) International classification	:C09D7/12	(71)Name of Applicant :
(31) Priority Document No	:NA	1)CENTURION UNIVERSITY OF TECHNOLOGY &
(32) Priority Date	:NA	MANAGEMENT (CUTM)
(33) Name of priority country	:NA	Address of Applicant : CENTURION UNIVERSITY OF
(86) International Application No	:PCT//	TECHNOLOGY & MANAGEMENT (CUTM) HIG-5, Phase -1,
Filing Date	:01/01/1900	BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa
(87) International Publication No	: NA	(72)Name of Inventor :
(61) Patent of Addition to Application	on Number :NA	1)Annepu Lakshumu Naidu
Filing Date	:NA	2)Damera Nageswara Rao
(62) Divisional to Application Num	ber :NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a method of preparing nanocomposite grinding wheel using layered silicate-epoxy nanocomposite material. More specifically the montmorillonite-type-clay is modified into organo clay which is cured in presence of the epoxy resin facilitating for a crosslinking reaction between the organo clay and the epoxy resin at lower temperatures resulting in a nanocomposite with strong adhesion which is dispersed in a polymer tube comprising of styrene monomer. Further benzoyl peroxide is added to the mixture and is heated followed by crushing. The crushed polymerized material is heated in an vacuum oven for a certain period of time.

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

(19) INDIA

(22) Date of filing of Application :10/07/2015

(21) Application No.749/KOL/2015 A

(43) Publication Date : 07/08/2015

(54) Title of the invention : SMART CUSTOMIZED TEACHING DEVICE

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No 	:NA :NA :NA	(71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa
Filing Date	:01/01/1900	(72)Name of Inventor :
(87) International Publication No	: NA	1)Dr. Prajna Pani
(61) Patent of Addition to Application Number	:NA	2)Sashi Bhushan Maharana
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention relates to a smart interactive teaching aid having customized teaching information useful for improved learning capability. More specifically, the device helps the student in real-time scenarios by review, practice exams, educational games and other related activities that will automatically be recorded in the device for further preview. Further, the invention provides more interactive learning rather than routine knowledge dissemination using a smart & advanced interactive learning device.

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

(19) INDIA

(22) Date of filing of Application :14/07/2015

(21) Application No.756/KOL/2015 A

(43) Publication Date : 11/09/2015 ~

(54) Title of the invention : MIMO SYSTEM MODEL ADAPTABLE FOR DIFFERENT CHANNEL CONFIGURATIONS

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:NA :NA :NA :PCT//	(71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar Orissa India (72)Name of Inventor : 1)Abinash Gaya
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(57) Abstract :

The present invention relates to a wireless communication system that comprises of Multi input Multi output (MIMO) means. More specifically, the Multi input multi output (MIMO) means includes plurality of transmitting and receiving means and a channel utilized for the multi input and multi output means. Further, the MIMO is adaptable for different channel configurations as a common platform.

No. of Pages : 16 No. of Claims : 6

(19) INDIA

(22) Date of filing of Application :20/11/2015

(21) Application No.1181/KOL/2015 A

(43) Publication Date : 04/12/2015

(54) Title of the invention : SOLAR DRYER		
(51) International classification	:F24J2/00	(71)Name of Applicant :
(31) Priority Document No	:NA	1)CENTURION UNIVERSITY OF TECHNOLOGY &
(32) Priority Date	:NA	MANAGEMENT (CUTM)
(33) Name of priority country	:NA	Address of Applicant :HIG-5, Phase -1, BDA Duplex
(86) International Application No	:PCT// /	Pokhariput, Khurda Dt., Bhubaneswar-751020 Orissa India
Filing Date	:01/01/1900	(72)Name of Inventor :
(87) International Publication No	:NA	1)Shiv Sankar Das
(61) Patent of Addition to Application Number	:NA	2)Biswajit Nayak
Filing Date	:NA	3)Udaya Kumar Sahoo
(62) Divisional to Application Number	:NA	4)Debashree Behera
Filing Date	:NA	

(57) Abstract :

The present invention relates to an energy efficient solar dryer for drying foods, vegetables, seafood, edibles or organic foods and thereof. More specifically, the present invention eliminates moisture and provides sufficient drying in a reliable, hygienic and economic way with all three modes of heat transfer viz., conduction, convection and radiation. Further, the present invention eliminates the use of auxiliary heaters by taking advantage of direct sunlight falling over the dryer that is made of a good heat conducting material to heat air within the drying room.

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

The Patent Office Journal 04/12/2015

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(19) INDIA

(22) Date of filing of Application :20/11/2015

(21) Application No.1182/KOL/2015 A

(43) Publication Date : 04/12/2015

(54) Title of the invention : RAPID CURING AGENT

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:NA :NA :NA :PCT// /	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG-5, Phase -1, BDA Duplex Pokhariput, Khurda Dt., Bhubaneswar-751020 Orissa India (72)Name of Inventor : 1)SASANK SEKHAR HOTA
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(57) Abstract :

The present invention relates to rapid curing of concrete in a very less amount of time. More specifically, the present invention improves the bond strength between reinforcing bars and concrete at a very early age utilizing reduced energy consumption and cement. Further, the present invention is very economical compared to the existing curing processes and utilizes the same equipment used for steam curing with slight modifications.

No. of Pages : 12 No. of Claims : 9

The Patent Office Journal 04/12/2015

(19) INDIA

(22) Date of filing of Application :30/08/2016

(21) Application No.201631029622 A

(43) Publication Date : 07/10/2016

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:H02J17/00 :NA :NA :NA :PCT// :01/01/1900 : NA :NA :NA :NA :NA	 (71)Name of Applicant : 1)Centurion University of Technology and Management Address of Applicant :17, Forest park, Bhubaneswar, Khurd: District - 751009, Odisha, India (72)Name of Inventor : 1)Udaya Kumar Sahoo
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(57) Abstract :

An improved auxiliary powered household appliance comprises of BLDC motors, main source AC grid electric supply, an auxiliary solar DC electric power, where the household appliance can switch between the two power sources either automatically or upon manual selection of type of power supply (grid electric power or solar power) by the user. The solar energy is captured by a solar panel and controlled to provide a constant rate of 12V DC power output for the operation of household appliance. Also the solar energy may be stored in a battery. The grid electric AC power is converted to DC power output and supplied to the appliance. The auxiliary powered household appliance is economical and practical and is advantageous in saving the grid electricity and also beneficial in areas of power interruption.

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

The Patent Office Journal 07/10/2016

(19) INDIA

(22) Date of filing of Application :30/08/2016

(21) Application No.201631029623 A

(43) Publication Date : 07/10/2016

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No 	:NA :NA :NA :PCT//	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :17, Forest park, Bhubaneswar, Khurd District - 751009, Odisha, India (72)Name of Inventor : 1)Udaya Kumar Sahoo
61) Patent of Addition to Application Number Filing Date	:NA :NA	2)Debashree Debadatta Behara 3)Biswajit Nayak
62) Divisional to Application Number Filing Date	:NA :NA	4)Shiva Sankar Das

(57) Abstract :

A fluid heating solar dehydration assembly for drying of wet matter comprises of a heat chest for holding the material to be dried with an inlet for introducing flow of hot air and a solar hat capturing unit for elevating the temperature of air entering the unit. The heat chest is connected to and is in thermal communication with the solar heat capturing unit with air inlets lined with moisture limiting materials. A driving arrangement can be disposed in the solar heat capturing unit for directing heated air through the heat capturing unit and into drying relationship with the material to be dried in the heat chest. An exhaust arrangement is provided in the drying compartment for venting of spent air. The small scale fluid heating solar dehydration assembly is economic and beneficial in rural areas.

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

The Patent Office Journal 07/10/2016

(19) INDIA

(22) Date of filing of Application :30/08/2016

(21) Application No.201631029624 A

(43) Publication Date : 07/10/2016

(54) Title of the invention : Solar Drip Irrigation System

(34) The of the invention : Solar Drip Irrigation S	ystem	
 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country 	:A01G9/24 :NA :NA :NA	 (71)Name of Applicant : 1)CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :17, Forest park, Bhubaneswar, Khurda
(86) International Application No Filing Date	:PCT//	District - 751009, Odisha, India (72)Name of Inventor :
(87) International Publication No(61) Patent of Addition to Application Number	: NA :NA	1)Debashree Debadatta Behara 2)Nimay Chandra Giri
Filing Date	:NA	3)Monalisa Mohanty
(62) Divisional to Application Number Filing Date	:NA :NA	4)Shiva Sankar Das

(57) Abstract :

An auxiliary powered irrigation system comprises of an auxiliary power source mounted onto a structural arrangement with a solar tracking device for converting solar energy into electric energy, wherein the auxiliary power source is electrically connected through a miniature circuit breaker (MCB) combo box for powering the water pumping device to pump water and irrigate farm lands. The water pumping device such as a submersible pump is connected with a water source such as a water well and a water reservoir. The water reservoir is connected to drip irrigation carrying supply line with plurality of distribution lines to irrigate the farm lands by means of water pumped by auxiliary powered water pumping device. The auxiliary powered irrigation system has the advantages that power can also be supplied for irrigation under the conditions of power interruption from connected grid so that the normal running of irrigation equipment is ensured and the drip-irrigation efficiency & efficiency of submersible pump powered through solar electricity is improved.

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

The Patent Office Journal 07/10/2016

(19) INDIA

(22) Date of filing of Application :30/08/2016

(21) Application No.201641029625 A

30/08/2016 (43) Publication Date : 04/11/2016

(51) International classification	:A61H	(71)Name of Applicant :
(51) International classification	1/00	1)P.Govinda Rao
(31) Priority Document No	:NA	Address of Applicant :S/o Vykunta Rao Belamara Village &
(32) Priority Date	:NA	Post, Polaki Mandal, Srikakulam-532 430, Andhra Pradesh, India
(33) Name of priority country	:NA	Andhra Pradesh India
(86) International Application No	:NA	2)Dr.P.SRINIVASA RAO
Filing Date	:NA	3)A.Gopala Krishna
(87) International Publication No	:NA	(72)Name of Inventor :
(61) Patent of Addition to Application Number	:NA	1)P.Govinda Rao
Filing Date	:NA	2)Dr.P.SRINIVASA RAO
(62) Divisional to Application Number	:NA	3)A.Gopala Krishna
Filing Date	:NA	

(57) Abstract :

The present invention proposes a vibratory assisted welding system to aid in improvement of welding properties of the specimens. The vibrations induced during the welding operation can be controlled through various disclosed methods, primarily through voltage adjustment of the vibration inducing assembly. Another method would be to induce vibrations through a structural means mounted over the vibrating platform. The invention is advantageous in providing an economic vibration system with a control over production of vibrations and transfer over vibrations to the specimen plates to the welded thereby improving the weld joint efficiency.

No. of Pages : 18 No. of Claims : 10

The Patent Office Journal 04/11/2016

(19) INDIA

(22) Date of filing of Application :23/09/2016

(21) Application No.201641032469 A

(43) Publication Date : 07/10/2016

(54) Title of the invention : COLLAPSIBLE VEHICLE

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	 :B62K (71)Name of Applicant : 1)Centurion University of Technology and Management Address of Applicant :17, Forest park, Bhubaneswar, Khurd District - 751009, Odisha, India Andhra Pradesh India :NA (72)Name of Inventor : :NA :NA :NA :NA :NA :NA :NA :NA :NA
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(57) Abstract :

The invention details a collapsible vehicle, which can be easily folded in simple steps. The bike is provided with a sliding lock, dead lock configuration and position-lock mechanism for mounting of movable parts, which can be movably folded and/ or disengaged to collapse the bike. The collapsible vehicle is portable and is light weight which is advantageous for carrying it in the collapsible position.

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

The Patent Office Journal 07/10/2016

(19) INDIA

(22) Date of filing of Application :03/08/2017

(21) Application No.201731027568 A

(43) Publication Date : 08/09/2017

(54) Title of the invention : A SYSTEM FOR PRECISE FARM MONITORING AND MICROCLIMATE CONTROL

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number 	:NA :NA :NA :NA :NA :NA	 (71)Name of Applicant : CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT (CUTM) Address of Applicant :HIG – 5, Phase -1, BDA Duplex Pokhariput, Khurda District, Bhubaneswar – 751020 Odisha, India (72)Name of Inventor : Aamlan Saswat Mishra
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The present invention proposes a system for precise farm monitoring and microclimate control. The system compises plurality of sensors in communication with a processor to detect farm parameters and transmit sensed values such as temperature, humidity, pH, methane and thereof to the processor. The processor is configured to compare the values with predetermined limits stored in the professor and thereby control the connected devices such as foggers to spray watervapor into the enviroement for maintaining the temreoature between of the farm of a place between wet bulb and dry bulb temperature, fertilizer valve to supply nutients, irrigation pump to supply water and thereof. The farmers, sharecroppers and the like can trade and display yeild on a gloabal market throught the application mdouel ofmthe sytem which also facilitates precise farm monitoring. The invention is advantageous in providing farmers, sharecroppers and the like to global market.

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

The Patent Office Journal No. 36/2017 Dated 08/09/2017