# 3.3.1 Details of Patents filled by Faculty : 2022-23

| Sl. No. | Patent Application No. | Applicant/s Name | Title of the Patent | Patent Published Date / Granted Date (DD/MM/YYYY) | Assignee/s Name (Institute Affiliation/s at time of Appication) |
|---|---|---|---|---|---|
| 1 | 202341037449A | Dr. P.M.M.S. SARMA | ANN BASED BRIDGELESS LANDSMAN CONVERTER DESIGN FOR ELECTRIC VEHICLE POWER FACTOR CORRECTION | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| 2 | 202341037452A | Dr. P.M.M.S. SARMA | DEVELOPING AN RBFNN MAXIMUM POWER POINT TRACKING ALGORITHM FOR A THREE-PHASE LANDSMAN PV-GRID CONNECTION | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| 3 | 202341037453A | Dr. P.M.M.S. SARMA | ACTIVE AND REACTIVE POWER REGULATION UTILIZING AN ANN CONTROLLER FOR A PV FED TRANS QUASI-Z SOURCE NETWORK WITH A MULTILEVEL GRID-TIED SYSTEM | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| 4 | 202341037454A | Dr. P.M.M.S. SARMA | INTELLIGENT CONTROLLER FOR FLYBACK CONVERTER WITH 31-LEVEL INVERTER FOR GRID-CONNECTED HYBRID SYSTEM | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| 5 | 202341037458A | Dr. P.M.M.S. SARMA | IMPLEMENTATION OF ANFIS CONTROLLER TO IMPROVE HYBRID SYSTEM RELIABILITY | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |

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| **6** | 202341037477A | Dr. P.M.M.S. SARMA | A NOVEL ASYMMETRIC 21-LEVEL INVERTER WITH PV SYSTEM FED TO MOTOR LOAD | 23/06/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| **7** | 202331020812 | Dr.JMSV Ravi Kumar | IOT & CLOUD COMPUTING Based Hull Mounted Mercury Detector in Sea Water for Fishing Boats | 07/04/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **8** | 202341009621A | Dr. Dondapati Ravi Kishore | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **9** | 202341009621A | Dr. B. KAVYA SANTHOSHI | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **10** | 202341009621A | Dr. SURESH VENDOTI | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **11** | 202341009621A | Mr. S. BALARAJU | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **12** | 202341009621A | Mr. SIVA GANESH CHINTHAKULA | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **13** | 202341009621A | Mr. BOLLU PRABHAKAR | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **14** | 202341009621A | Mr. ADAPA SUDHEER KUMAR | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **15** | 202341009621A | Ms. PASUPULETI GANGA BHAVANI | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **16** | 202341009621A | Ms. VINA KUMARI | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **17** | 202341009621A | Mr. KONA VEERA VENKATA RAYA SATYAMURTHY | A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **18** | 202341009639 A | MR.DANDAMUDI VIJENDRA KUMAR | ALCOHOL SENSING ALERT WITH ENGINE LOCKING SYSTEM AND GPS TRACKING | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **19** | 202341009623A | Mr. T. Amar Kiran | ANN-based filters to improve the power quality of Grid Connected solar photovoltaic system | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **20** | 202341009621A | Dr. Dondapati Ravi Kishore | A Single-Stage Control Strategy with Energy Management for PV/Battery Hybrid Systems | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **21** | 202341009630A | Dr. B. Kavya Santhoshi | EV CHARGING STATION WITH PV AND BATTERY BASED ON A MULTIPORT CONVERTER | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **22** | 202341009626A | Dr. B. Kavya Santhoshi | Modernization of 31 Level Distribution Network with Lower DC Voltage Sources | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **23** | 202341009627A | Mrs.Kunche Gowtami | Power Quality Improvement In Distribution System With Dynamic Voltage Restorer With Energy Storage Integration | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **24** | 202341009633A | Mrs.Kosuri Sravani | Energy Management with PV Integrated Battery Energy Storage System using ANN Technique | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **25** | 202341009628A | Mr.Yalla Ananda Kumar | A Power Management Strategy for Photovoltaic-Based Microgrids Employing PSO | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **26** | 202341009636A | Mr. T. Amar Kiran | Active Power control of Photovoltaic Systems to Support Grid frequency | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **27** | 202341009631A | Mrs. K. Saritha | BRIDGELESS AND INDEPENDENT ZETA LUO CONVERTER BASED ELECTRIC VEHICLE CHARGER | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **28** | 202341009629A | Dr. Suresh Vendoti | High Step Up Transformerless DC-DC Converter Designed for Use in Applications Involving Renewable Energy | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **29** | 202341009625A | KANKELA ARUNASRI | IMPROVED POWER QUALITY USING D-Q THEORY-BASED THREE-PHASE UNIFIED POWER FLOW CONTROLLER | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **30** | 202341007827A | Dr. B. Kavya Santhoshi | SOLAR POWERED ROBOTIC VEHICLE FOR HEAVY METAL IONS DETECTION IN WATER EMPLOYING NACHINE ENGINE | 24/03/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **31** | 202341005717 | Ms.Aruna k<br>Mr.Manoj Kumar Roy<br>Mr.Thonangi Lalit<br>Vidyasagar<br>Mr.T V Dharmaraju<br>Mr M.V.Raghavendra Rao<br>Mr.Putta Venugopal | A MACHINE LEARNING BASED FORECASTING FOR ELECTRIC VEHICLE HAVING ARTIFICAL INTELLIGENCE INTERFACE | 17/02/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **32** | 202341006093 | Mr.Putta Venugopal | ELECTRIC VEHICLE JUNCTION DIAGNOSTIC BASED ON ARTIFICIAL INTELLIGENCE | 17/02/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **33** | 202341004175 A | MR.DANDAMUDI VIJENDRA KUMAR,G.V.Vinod | A SYSTEM FOR RECOGNIZING AND STORING A BUSINESS CARD BY USING A BUSINESS CARD MANAGEMENT SERVER AND METHOD THEREOF | 17/02/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **34** | 202341005844 | Dr.V.Subrahmanyam | AN ARTIFICIAL INTRLLIGENCE BASED SYSTEM FOR PARKING SPACE DETECION FOR ELECTRIC VEHICLES USING DEEP LEARNING INTERFACE | 10/02/2023 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **35** | 202241067810A | Mr. JOGARAO BIKKAVOLU | SOLAR AND WIND ENERGY BASED CHARGING STATION FOR ELECTRIC VEHICLES | 23/12/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| **36** | 202241062481A | T. AMAR KIRAN | IOT SYSTEM FOR MONITORING GATEWAYS USING LORA AND LORAWAN | 11/11/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **37** | 202241062480A | T. AMAR KIRAN | IMPACT OF LORAWAN ON PERFORMANCE OF CLOUD-BASED IOT PLATFORMS AND FOG COMPUTING | 11/11/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **38** | 202241061027 | Dr. Ashok Koujalagi | An Intelligent Management System For Reaching Mass Audiences Through YouTube Ads In Digital Marketing And Its Comparative Effectiveness | 4/11/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **39** | 202241058454A | Dr. G. RAMAKRISHNA<br>Dr. M. SREENIVASA RAO | A NATURAL FIBER CARRIER FOR MECROBIAL IMMOBILIZATION AND PREPARING METHOD OF NATURAL FIBER CARRIER | 21/10/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A) |
| **40** | 202141044814 | 1 . Dr. Ganganagunta Srinivas<br>2. Dr M Sreenivasa Rao<br>3. Dr. Kommana Siva Kumar<br>4. Dr.S. Srigowri<br>5. Mr. Md Ahammad Sharif<br>6. Dr M.P. Srinivas Rao<br>7. Dr K. Sunil<br>8. Mrs. Alpitha Suhasini Juttuka<br>9. Dr CAJyothirmayee<br>10. Dr.K. Sreelatha<br>11 . Mr. Adabala Kumar Sanjay<br>12 . Mr. Nellore Manoj Kumar | Nanoparticles for producing ceramic heat shield and seal. | 15/10/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **41** | 202211053749 | Dr. Ashok Koujalagi | AN INTELLIGENT SYSTEM AND METHOD FOR AUTOMATIC TARGET IDENTIFICATION, TRACKING AND SAFETY EVALUATION FOR RADIOTHERAPY | 23/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **42** | 202241045906A | Dr. Dondapati Ravi Kishore | A solar photovoltaic traffic light signal system and method thereof | 19/08/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **43** | 202241045904A | Dr. Dondapati Ravi Kishore | An ocean thermal energy conversion (OTEC) system and method thereof | 19/08/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **44** | 202241051570 | Dr. Ashok Koujalagi | A SMART HEALTH CARE SYSTEM TO RECOGNIZE FRUITS, VEGETABLES AND CALORIE ESTIMATION FOR HEALTHY LIFE USING DEEP LEARNING APPROACH | 16/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **45** | 202241050367 | Dr.V.Subrahmanyam | AN AI&ML BASED WIND TURBINE CONTROL SYSTEM AND METHOD THEREOF | 16/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **46** | 202241050438 | Dr.B.KAVYA SANTHOSHI | An embedded system for data acquisition provided with an unmanned aeriel vehicle | 09/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **47** | 202241050139 | Dr.B.KAVYA SANTHOSHI DR. V. SURESH K. SIVA PRASAD | Influence of the interconnection of wind turbines types I,ii,iii and iv on the parameters of the hosting ca[acity of distribution systems | 09/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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| **48** | 20221048349 | Dr.B.KAVYA SANTHOSHI | Human Resource Recommendation Algorithm Based on Machine Learning | 09/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **49** | 202241050436 | Dr.V.Subrahmanyam | A DEEP LEARNING AND IOT BASED WIND TURBINE CONDITION MONITORING & CLASSIFICATION | 09/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **50** | 202241049068 | Dr. Ashok Koujalagi | An Innovative Method For Improving Online Education System And Education Skill Teaching Evaluation System Through The Use Of Artificial Intelligence | 02/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| **51** | 202241048285 | Dr. Ashok Koujalagi | Smart Management System For Online Technical Learning And Advanced Training Based On Information Literacy | 02/09/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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# 3.3.1 Details of Patents filled by Faculty : 2021-22

| Sl. No. | Patent Application No. | Applicant/s Name | Title of the Patent | Patent Published Date / Granted Date (DD/MM/YYYY) | Assignee/s Name (Institute Affiliation/s at time of Appication) |
|---|---|---|---|---|---|
| 52 | 202241031368 | P.Vyasa Omkar | STRESS PREDICTION USING INTERNET OF THINGS | 10/06/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 53 | 202241016808 | 1 . Dr.Ch.Asha Immanuel Raju<br>2. Dr.Ch.Asha Kiran Raju<br>3 . Dr.Ch.Asha Jyothi<br>4 . D.Vijaya Mitra<br>5 . Dr.M.Tukaram Bai<br>6. Dr.N.V.R. Nagalakshmi<br>7. Ms.L.Neelima Chandralekha<br>8. Dr.S.Chakri<br>9. Dr.Ch.V.R.L.Gayatri<br>10.Ch.V.Naga Sowjanya | A method of using hytropes in soap floatation for recovery from low grade ores. | 15/04/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 54 | 202241008765 | Dr.GUDIVADA VENKATA ARUNAMAYI | MACHINE LEARNING BASED BIG DATA ANALYTICS OF PATIENTS SUFFERING FROM CANCER | 11/03/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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|---|---|---|---|---|---|
| 55 | 202241005023 | Mr.M.V.Raghavendra Rao<br>Mrs.Aruna Kunda<br>Mr.Subrahmanyam Vasamsetti | DESIGN OF HYDRO-PNEUMATIC ISD SUSPENSION IN HEAVY MULTY-AXLE VEHICLES | 04/02/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 56 | 202241004390A | Dr. M. VIJAYA SEKHAR BABU | DESIGN AND DEVELOPMENT OF LOW COST MAGNETIC BEARING FOR ENERGY CONVERSION | 04/02/2022 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 57 | 202141060132A | Dr.VENNA KUSUMA KUMARI | Sensor assembly for evaluating fluid dynamiic for a mechanical system and method thereof | 31/12/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 58 | 202141059882 | Dr. Dondapati Ravi Kishore | IMPROVED BOOST CONVERTER FOR SOLAR PV APPLICATIONS | 22/12/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 59 | 2021141050172 | 1 , Dr. Kommana Siva Kumar<br>2. Dr. Killi Sunil<br>3. Dr NVR Nagalakshmi<br>4. Mr. K.V.V.N.R.Chandra Mouli<br>5. Dr. Kanaka Mahalakshmi Katta<br>6. Dr. Jagadeesh Potnuru<br>7. Mr. K. Uday Kumar<br>8. Mr. Dasari Kiran Kumar<br>9. Dr. Ratna Srinath Rao B<br>10. Dr. B. Sreenamma | Biofuel composition and methods for manufacturing using pyrolysis | 19/11/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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|---|---|---|---|---|---|
| 60 | 202141049308 A | Dr.R.Tamilkodi | A SYSTEM FOR ENCODING AND DECODING DATA USING CLOUD COMPUTING AND METHOD THEREOF | 05/11/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 61 | 202141042345A | Mrs. E. NIRMALA DEVI | A NOVEL METHOD FOR PRODUCING NANO BIOFUEL BY USING SEWAGE OIL | 01/10/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 62 | 202141036940 A | Dr.R.Tamilkodi | An Isotropic Antenna based on AI & ML Interface having Multifunctional guidewire assemblies | 20/08/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 63 | 202141033907 | 1 . Dr.Ch.Asha Immanuel Raju<br>2. Dr.CH.Asha Kiran Raju<br>3. Ms.Ch.Asha Jyothi<br>4. Dr.N. M.Yugandhar<br>5. Dr.KiIIi Sunil<br>6. Dr.N.V.R.Nagalakshmi<br>7. Mr.Gampala Prasad<br>8. Mr.D.Vijaya Mitra<br>9. Dr. Imandi Sarat Babu<br>10. Dr.SiIas Saka | A method for decolourization of dyes by using agricultural waste | 13/08/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |
| 64 | 202111028832A | Dr.VENNA KUSUMA KUMARI | Image contrast enhancement system with fuzzy based threshold histogram equalization | 2307/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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# 3.3.1 Details of Patents filled by Faculty : 2020-21

| Sl. No. | Patent Application No. | Applicant/s Name | Title of the Patent | Patent Published Date / Granted Date (DD/MM/YYYY) | Assignee/s Name (Institute Affiliation/s at time of Appication) |
|---|---|---|---|---|---|
| 65 | 202141049447A | Dr. B. Kavya Santhoshi | AGRI-TECH FARMING REVOLUTION FOR USING PLC SOLAR WATER, AND FERTILIZER'S PUMP WITH NEW ALTERED-NOZZLE | 11/05/2021 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

# 3.3.1 Details of Patents filled by Faculty : 2019-20

| Sl. No. | Patent Application No. | Applicant/s Name | Title of the Patent | Patent Published Date / Granted Date (DD/MM/YYYY) | Assignee/s Name (Institute Affiliation/s at time of Appication) |
|---|---|---|---|---|---|
| 66 | 201941023815 A | MR.DANDAMUDI VIJENDRA KUMAR | IDV-SCREEN: INTERACTING WITH DIGITAL SCREENS USING ALL TYPE OF VOICE SYSTEM | 28/06/2019 | GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A) |

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/05/2023

(21) Application No.202341037449 A
(43) Publication Date : 23/06/2023

(54) Title of the invention : ANN BASED BRIDGELESS LANDSMAN CONVERTER DESIGN FOR ELECTRIC VEHICLE POWER FACTOR CORRECTION

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| (51) International classification | :B60L 531200, B60L 532000, H02J 031800, H02M 010000, H02M 014200 |
| (86) International Application No<br>Filing Date | :NA<br>:NA |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
| (62) Divisional to Application Number<br>Filing Date | :NA<br>:NA |

(71)**Name of Applicant :**
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**Name of Applicant : NA**
**Address of Applicant : NA**
(72)**Name of Inventor :**
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**3)Dr. V. SURESH**
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**4)Dr. B. KAVYA SANTHOSHI**
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**6)Mr. T. AMAR KIRAN**
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**7)Dr. M. VIJAY KUMAR**
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**8)Dr. B. SUJATHA**
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**9)Dr. R. TAMILKODI**
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**10)Mr. AHAMMAD SHARIF MD**
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(57) Abstract :
Electric vehicles (EVs) are becoming more popular due to their many desirable characteristics, such as their ability to store energy in batteries and their small carbon impact. Electric vehicles represent a revolution in both the transportation and electrical sectors, and by uniting the two, they have the ability to improve both. This relationship needs the implementation of effective Power Factor Correction (PFC) systems for charging EV batteries, which minimises the supply front-inherent end's Power Quality (PQ) concerns. This study uses a Bridgeless Landsman converter for PFC, since it is efficient and can detect changes in the link voltage. The usage of an ANN-based PI controller facilitates prediction and classification with regards to reaction time. This is accomplished by connecting the hysteresis controller to a PWM generator, which then determines the correct switching frequency for the converter in steady state. The suggested strategy aids in effective minimising of harmonics with heightened efficiency.

No. of Pages : 6 No. of Claims : 5

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(2)

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/05/2023

(21) Application No.202341037452 A

(43) Publication Date : 23/06/2023

(54) Title of the invention : DEVELOPING AN RBFNN MAXIMUM POWER POINT TRACKING ALGORITHM FOR A THREE-PHASE LANDSMAN PV-GRID CONNECTION

(51) International classification :G05F 016700, G06T 072460, H02J 033800, H04N 053300, H04N 133100

(86) International Application No :NA
Filing Date :NA

(87) 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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(57) Abstract :
In this study, we use an MPPT algorithm based on a Radial Basis Function Neural Network (RBFNN) to a 3 grid-connected PV system. Because of its strong voltage gain at low duty cycle, the DC-DC Landsman converter is used to boost the PV system's output voltage. Greatest power point tracking (MPPT) using a recurrent neural network (RNN) is presented to mbnitor the MPP of the solar PV panel and extract the maximum amount of energy from the sun. Total Harmonic Distortion (THD) is decreased and grid voltage is synchronised effectively with the help of a PI controller. With the help of MATLAB simulation, we have a look at the 1 performance of the suggested model of a grid-connected PV system.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/05/2023

(21) Application No.202341037453 A

(43) Publication Date : 23/06/2023

(54) Title of the invention : ACTIVE AND REACTIVE POWER REGULATION UTILIZING AN ANN CONTROLLER FOR A PV FED TRANS QUASI-Z SOURCE NETWORK WITH A MULTILEVEL GRID-TIED SYSTEM

(51) International classification :A23G 032000, A23G 033400, F03D 092500, H02J 031800, H02J 035000

(86) International Application No :NA
Filing Date :NA

(87) 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 :
New Z-source inverter and quasi Z-source inverter topologies and their variations suitable for solar photovoltaic power systems are designed and developed in this study, with verification by simulation and experimental validation. In order to create topologies of Z-source inverters that are well-suited for a wide range of uses, researchers have analysed current Z-source inverter designs in depth. In order to get the performance characteristics of solar photovoltaic systems, which are used in the design of the impedance network of Z-source inverters, modelling, simulation, and experimental verification of solar photovoltaic systems-are performed. With the help of simulation and appropriate Matlab software, the optimal PV array configuration for use in the proposed Z-source inverter topologies is determined by analysing the performance of photovoltaic (PV) modules connected in a variety of array configurations under normal/partial shaded conditions.

No. of Pages : 6 No. of Claims : 5

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/05/2023

(21) Application No.202341037454 A

(43) Publication Date : 23/06/2023

(54) Title of the invention : INTELLIGENT CONTROLLER FOR FLYBACK CONVERTER WITH 31-LEVEL INVERTER FOR GRID-CONNECTED HYBRID SYSTEM

(51) International classification :B60K 064850, H02J 033800, H02M 010000, H02M 033350, H02M 074870

(86) International Application No :NA
Filing Date :NA

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(57) Abstract :
Rapid exhaustion of fossil fuel energy systems, emission of carbon, and climate change issues has been paid more attention in the recent scenario. The development of power electronic devices, the growth of industries and population increases the need for green energy. The Hybrid renewable energy of wind and PV system are the better choice due to the benefits of the reliability of power based on the weather condition, an extension of the grid system, and remote electrification. In this research, the isolated grid integrated multilevel inverter for hybrid (Solar and wind) battery based fly back converter application is proposed with optimal controlling techniques. The primary objective of this research is to design and develop the fly back converter with an effective controller to obtain the higher power output during the operation of continuous and discontinuous conduction mode respectively. Even though, the researchers are mostly implemented with cascaded H-bridge (CHB) inverter based grid-tied system. CHB are increasing the harmonics, the requirement of the filter circuit and overall efficiency. To solve this issues thirty one inverter is proposed with intelligent techniques as a secondary objective. The modeling and controlling techniques of the discussing system are done by MATLAB tool. The prototype setup provides the experimental feasibility of the developed hybrid PV-wind connected fly back converter with a thirty one level inverter based grid-tied system with reliability of intelligent controller system.

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

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/05/2023

(21) Application No.202341037458 A
(43) Publication Date : 23/06/2023

(54) Title of the invention : IMPLEMENTATION OF ANFIS CONTROLLER TO IMPROVE HYBRID SYSTEM RELIABILITY

| | |
|---|---|
| (51) International classification | :B60K 061200, B60W 100600, B60W 204000, G06N 030400, H04W 880400 |
| (86) International Application No | :NA |
| Filing Date | :NA |
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| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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(57) Abstract :
The fundamental problem with the current electricity infrastructure is that it can't keep up with the ever-increasing demands of a rapidly expanding population. Since renewable technologies, which make up part of the Distributed Energy System, are both environmentally beneficial and abundant in the wild, they are increasingly being used as part of the conventional electricity generation infrastructure. In this work, we focus on hybrid systems powered by solar and wind energy. In order to get the most out of the PV and wind energy systems, an MPPT based DC-DC converter is used. The efficiency of several MPPT methods, such as the P&O method, applied for hybrid systems was compared. To boost power reliability, an ANFIS approach is used to the inverter controller's dc link voltage. Several MPPT techniques are tried out on this hybrid system in Matlab/Simulink, and the results are compared across a wide range of load circumstances and fault analyses.

No. of Pages : 6 No. of Claims : 5

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :31/05/2023

(21) Application No.202341037477 A

(43) Publication Date : 23/06/2023

(54) Title of the invention : A NOVEL ASYMMETRIC 21-LEVEL INVERTER WITH PV SYSTEM FED TO MOTOR LOAD

(51) International classification :A61B 051100, H02J 033800, H02M 010000, H02M 074870, H04L 691800

(86) International Application No :NA
Filing Date :NA

(87) 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 :
Due to their low cost, wide availability, and lack of maintenance requirements, renewable energy sources (RES) have been favoured in this work to effectively meet the load demand. This is because, in the present scenario, RES play a remarkably important role in the process of improving the function of motor load. When compared to now, the importance of RE Sources in enhancing motor load function was much lower in the past. This effort relies heavily on the Sepic converter, since its goal is to enhance the system's performance as a whole. However, the ANFIS method greatly facilitates the process of achieving the Maximum PowerPoint Tracking (MPPT). The purpose of this effort is to increase the voltage range across which PVs may operate at full efficiency. The Multi Level Inverter (MLI) is set up in the best possible way, which increases the system's dependability to its highest possible level with little effort. A 21 Level (31 L) inverter does an impressive job of balancing out fluctuations in load demand. The whole of the system is simulated by using MATLAB Simulink, and the results that were obtained demonstrated that the strategy that was presented provides ideal performance since it reduces the amount of Total Harmonic Distortions (THD) to a higher degree.

No. of Pages : 6 No. of Claims : 5

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(7)

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Department of Industrial Policy & Promotion,
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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202331020812 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 24/03/2023 |
| APPLICANT NAME | 1 . Dr.Velumani P.S<br>2 . Kattupalli Sudhakar<br>3 . Dr. Vartika Kulshrestha<br>4 . Mr. Karan Ranjit Jagdale<br>5 . Dr.JMSV Ravi Kumar<br>6 . Dr.B.Rasina Begum<br>7 . Dr. Pradeep Balkrishna Pathak<br>8 . Mr.Amandeep Singh K<br>9 . V.R.Niveditha |
| TITLE OF INVENTION | IoT & Cloud Computing based Hull mounted Mercury Detector in Sea Water for Fishing Boats |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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## Application Status

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(57) Abstract :

Proportional-integral (PI) energy strategy (EMS) and micro-grid operations are presented to function independently of the grid in this study report. the photovoltaic system It provides just what is required. To get the most out of the PV electricity, it employs power tracking in addition to DC/DC and DC/AC converters. Parameters like charge status are within the controller's purview in traditional proportional- integral (PI) control (SOC). The maximum power-point tracking (MPPT) advantage for power distribution and battery charging/discharging has to be considered in the three distinct situations. The suggested power generating system's performance under different operating circumstances and with the enabled control methods is simulated in Matlab/Simulink.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009639 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : ALCOHOL SENSING ALERT WITH ENGINE LOCKING SYSTEM AND GPS TRACKING

(51) International classification :A45C 131000, G01S 191600, G01S 193700, G07C 090000, G08B 212200

(86) International Application No :NA
Filing Date :NA

(87) 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 :
Typically, drunk drivers crash their cars while under the influence of alcohol, inflicting both property damage and human casualties. So, in this article, we provide a novel technique to stop such cases. The driver's breath would be continuously monitored by our suggested system. Thus, if a drunk driver tries to operate a vehicle, the system recognizes the alcohol in his or her breath and locks the engine. Therefore, if a motorist tries to operate a car while intoxicated, the system recognizes alcohol in his or her breath and locks the engine, preventing the vehicle from starting. Additionally, if the driver drinks while operating the vehicle even though they are not intoxicated when they start the engine, the sensor will still detect the alcohol in their breath and shut off the engine to prevent the car from rolling, not accelerate further, and the driver can direct it to the side of the road. The pre-registered contact in consideration will thereafter receive an SMS with the vehicle's precise position.

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

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(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009623 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : ANN-BASED FILTERS TO IMPROVE THE POWER QUALITY OF GRID CONNECTED SOLAR PHOTOVOLTAIC SYSTEM

(51) International classification :H02J 030100, H02J 033800, H02K 071800, H02S 403600. H02S 500000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
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(57) Abstract :
Grid-connected photovoltaic (PV) systems are gaining popularity in both the business and academic sectors as a clean energy alternative to fossil fuels. Using a shunt active power filter (APF) and an adaptive current management approach, this study intends to improve the power quality of a grid-connected PV distribution system. In this research, an artificial neural network-based controller is used to remove voltage and current harmonics from a photovoltaic (PV) system that is connected into the electrical grid. An strategy for producing a reference current is developed to lessen current harmonics by separating the fundamental components (FCs) of the nonlinear load currents. If the grid voltage is extremely distorted, MCCF may be utilised to protect the FC by isolating it from the distortion and eliminating the voltage harmonics. Power quality, dc offset rejection, FC and frequency extraction, and grid synchronisation are some of the metrics against which the proposed hybrid control technique is measured, as are comparisons to conventional and adaptive control methods.

No. of Pages : 8 No. of Claims : 5

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(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009621 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : A SINGLE-STAGE CONTROL STRATEGY WITH ENERGY MANAGEMENT FOR PV/BATTERY HYBRID SYSTEMS

(51) International classification :B60W 102600, B60W 200000, H02J 033200, H02J 033800, H02J 130000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
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(62) Divisional to Application Number :NA
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(57) Abstract :
Proportional-integral (PI) energy strategy (EMS) and micro-grid operations are presented to function independently of the grid in this study report. the photovoltaic system It provides just what is required. To get the most out of the PV electricity, it employs power tracking in addition to DC/DC and DC/AC converters. Parameters like charge status are within the controller's purview in traditional proportional- integral (PI) control (SOC). The maximum power-point tracking (MPPT) advantage for power distribution and battery charging/discharging has to be considered in the three distinct situations. The suggested power generating system's performance under different operating circumstances and with the enabled control methods is simulated in Matlab/Simulink.

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(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009630 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : EV CHARGING STATION WITH PV AND BATTERY BASED ON A MULTIPORT CONVERTER

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|---|---|
| (51) International classification | :B60L 533000, B60L 536500, H02J 070000, H04B 070413, H04W 680200 |
| (86) International Application No<br>Filing Date | :NA<br>:NA |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
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(57) Abstract :
The environmental effect of the transportation industry is growing, and electric vehicles (EVs) are seen as a possible solution due to their limited on-board battery capacity. As a consequence, there is a pressing need for charging stations to be situated in convenient locations. However, peak-time overload, unexpected power gaps. and voltage dips are all ways in which fast charging stations, and especially super-fast charging stations, may put a burden on the power grid. In this research, we investigate the viability of modeling a multiport converter-based EV charging station with PV power generation and a battery energy storage system in ANSYS Twin Builder. In this research, we demonstrate that the reliability of a power grid may be enhanced by integrating solar photovoltaic (PV) power generation with an EV charging station and a battery energy storage (BES) system. When daily charging demand is in sync with adequate daytime PV supply, the effect on the power system is reduced. Results from a simulation study verify the benefits of the proposed multiport EV charging circuits using the PV-BES architecture in a number of charging modes. The EV charging station also makes use of SIC devices to improve efficiency. In this simulation study, power losses and efficiency across several modes and functions are analyzed and compared to those of conventional charging circuits based on Si devices.

No. of Pages : 9 No. of Claims : 5

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(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009626 A

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(54) Title of the invention : MODERNIZATION OF 31 LEVEL DISTRIBUTION NETWORK WITH LOWER DC VOLTAGE SOURCES

| | |
|---|---|
| (51) International classification | :B66B 190000, C23C 164550, G06Q 500600, H01L 515000, H02J 030000 |
| (86) International Application No<br>Filing Date | :NA<br>:NA |
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(57) Abstract :
In this invention, we provide a new topology for a 31 - level asymmetrical multilevel inverter that operates on a single phase and requires fewer parts than previous designs. Based on an H-bridge and a pair of asymmetric DC sources, the suggested topology may provide an output voltage with up to 31 discrete steps. Realization of the basic 13-level multilevel inverter (MLI) architecture; further development of the topology for 31-level; potential usage in renewable-energy applications. As a result, the system's size, cost, and number of individual components are all reduced. Despite MLIs' numerous benefits, dependability is a major issue because of the extra parts needed to cut down on THD. Researchers have a significant difficulty in attempting to improve dependability while reducing total harmonic distortion (THD). Total standing voltage (TSV), cost function (CF), and power loss are among the many metrics studied for both primitive 13-level and advanced 31-level MLIs. The inverter is put through its paces in the lab with a wide range of dynamic load conditions, including combinational loads and unexpected load disturbances. The suggested MLI's cost function is compared to other previously published topologies in terms of total standing voltage, and it is shown to be cost-effective. Numerous characteristics are compared in depth and graphically. For the suggested MLI, it is shown that less TSV and components are needed. Total harmonic distortion (THD) levels achieved are well below IEEE limits. The architecture is tested theoretically in MATLAB/Simulink and then empirically using a hardware prototype in a range of environments.

No. of Pages : 8 No. of Claims : 5

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(19) INDIA
(22) Date of filing of Application :14/02/2023

(21) Application No.202341009627 A
(43) Publication Date : 24/03/2023

(54) Title of the invention : POWER QUALITY IMPROVEMENT IN DISTRIBUTION SYSTEM WITH DYNAMIC VOLTAGE RESTORER WITH ENERGY STORAGE INTEGRATION

(51) International classification :G06T 034000, H01J 295000, H02J 030100, H02J 031200, H02J 031800
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**8)Mr. BODAPATI SUDHEER**
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(57) Abstract :
Incorporating PEVs into a voltage-dependent control power grid is proposed in this study. As a result of the fuel gate scandal, a growing number of individuals, particularly in advanced technological communities, are opting for electric cars. PEVs have the benefit of being cutting-edge automobiles that can run on a variety of fuel cells and batteries. The suggested PEVs model was built for use as a static load model in balanced load power distribution systems. Enhanced voltage sag and swell correction may be achieved with the incorporation of energy storage, and one device that can do this is the dynamic voltage restorer (DVR). Ultracapacitors (UCAP) are well-suited for compensating voltage sags and swells, which demand high power for brief periods of time, due to their low-energy density and high-power density. This study makes a significant contribution by introducing DVR topology with rechargeable UCAPrbased energy storage. The UCAP-DVR system will be able to autonomously adjust transient voltage sags and swells with active power capabilities after this integration, rather of having to rely on the grid to do so. The findings demonstrate the viability of the suggested concept and are the product of a MATLAB SIMULINK model of the complete system and Raspberry pi development board real-time controllers.

No. of Pages : 9 No. of Claims : 5

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(22) Date of filing of Application :14/02/2023

(21) Application No.202341009633 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : ENERGY MANAGEMENT WITH PV INTEGRATED BATTERY ENERGY STORAGE SYSTEM USING ANN TECHNIQUE

(51) International classification :B64C 390200, H01L 250650, H01M 104800, H02J 033200, H02J 070000

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(57) Abstract :
In order to mitigate the power fluctuations caused by PV panel characteristics and solar radiation, it is usual practice to include battery storage into PV systems. The bus voltages in photovoltaic battery systems must be stabilized while allowing for a high degree of discretion in the management of power flows. This paper's goal is to propose a comprehensive control and power management system (CAPMS) for AC and DC bus-based PV-battery hybrid micro grids operating in both grid-connected and islanded modes. The proposed investigation contrasts PI controllers with artificial neural networks (ANN). Regulators keep an eye on both the power supply and the waves. The task was completed using the Matlab simulink application.

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(54) Title of the invention : A POWER MANAGEMENT STRATEGY FOR PHOTOVOLTAIC-BASED MICROGRIDS EMPLOYING PSO

(51) International classification :B29L 310000, G06N 030000, H02J 033800, H02J 073500, H02S 104000

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(57) Abstract :
Research into Microgrids and Distributed Generation (DG) is gaining traction as a consequence of the advantages that might accrue from using renewable energy sources. Renewable microsources located near to the load centre form the basis of a typical microgrid. The actual and reactive power of each DG must be managed in a microgrid, and this can only be done with a combination of Voltage-Frequency control and a Power management technique. This project includes research on the effect of adding renewable energy based generating sources to the current distribution network on load sharing. This study introduces maximum power point tracking (MPPT) using a genetic algorithm (GA) for a photovoltaic (PV) array that incorporates a battery storage unit (BSU) as an independent power producing unit. PV production is affected by solar irradiation, site location, and ambient conditions including temperature. For this reason, PV production is inherently erratic, and the addition of nonlinear load just exacerbates the problem. In summary, PSO-based MPPT for PV generating is effective for local optimum solution. To get the required rated voltage, a DC/DC and boost converter were employed. As a result, the DC-link voltage is kept relatively stable and near to the setpoint using a PI controller. The outcomes of simulations conducted under various operational and environmental parameters are shown/

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(54) Title of the invention : ACTIVE POWER CONTROL OF PHOTOVOLTAIC SYSTEMS TO SUPPORT GRID FREQUENCY

(51) International classification :G06Q 300200, H02J 032400, H02J 033800, H02J 034600, H02J 034800
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(57) Abstract :
Grid operators are increasingly interested in inverter-coupled production to assist minimize frequency contingencies by immediately surging active power into the grid. Active power in an emergency enhances the chance of stopping it. We give a predictive technique of operating PV inverters for rapid and precise active power regulation. Rapid active power management might support higher-level controls like quick power-frequency droop, inertia modeling, and fast frequency response to reduce grid frequency contingencies. A prototype PV inverter uses maximum power point prediction and quick active power control. The prototype inverter responds rapidly (2 line cycles for a moderate test event, 4.5 line cycles for a severe test event) and accurately (2% steady-state error) to a broad variety of frequency events.

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(54) Title of the invention : BRIDGELESS AND INDEPENDENT ZETA LUO CONVERTER BASED ELECTRIC VEHICLE CHARGER

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|---|---|
| (51) International classification | :B60L 531200, B60L 531400, G02B 064400, H02M 010000, H02M 014200 |
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(57) Abstract :
In this fast-warming world there is an urgent of eco- friendly products to stop the pollution and global warming. To stop global warming, we have to immediately cease the release of carbon dioxide in to our atmosphere for that we have to modify or replace the biggest carbon releasing factors form our atmosphere one of those factors are transportation. In past century the adaptation of internal combustion engines were drastic but they have contributed to our economies hugely but it's time to replace them with more sustainable electric vehicles. Development of electric vehicles have started way back along with the development of internal combustion engines but the technologies couldn't able to catch up with that along with the need but now in the 21st century tame has arrived to switch to EV and technology has developed significantly. When we talk about technology the main infrastructure we need is charging facility. To coup up with the growing demand of EV we urgently need to update our charging facility. One of those improved chargers is BRIDGELESS ZETA LUO CONVERTER EV CHRGER.

No. of Pages : 8 No. of Claims : 5

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009629 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : HIGH STEP UP TRANSFORMERLESS DC-DC CONVERTER DESIGNED FOR USE IN APPLICATIONS INVOLVING RENEWABLE ENERGY

| | |
|---|---|
| (51) International classification | :C09K 031400, H02J 033800, H02M 031580, H04L 090800, H05K 072000 |
| (86) International Application No<br>Filing Date | :NA<br>:NA |
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| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
| (62) Divisional to Application Number<br>Filing Date | :NA<br>:NA |

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**7)Mr. S. BALARAJU**
**8)Mr. CHANDU CHALLA**
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(57) Abstract :
Switch-mode power supply, fuel cells, and solar photovoltaic systems are just some of the many places you'll find a high gain dc-dc converter in use. We present a dc-dc boost converter with a record-breaking gain and do considerable research on it. The proposed setup may achieve significant voltage gain compared to previous transformer less designs. As long as the output voltage doesn't go beyond 50%, the active MOSFETs are safe. We settle for the lowest-rated components because of this. The underlying operational logic of both systems is dissected to establish their respective benefits. The converter's performance is deemed satisfactory both in open and closed loop configurations, and high gain is attained at low duty ratios.

No. of Pages : 8 No. of Claims : 5

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :14/02/2023

(21) Application No.202341009625 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : IMPROVED POWER QUALITY USING D-Q THEORY-BASED THREE-PHASE UNIFIED POWER FLOW CONTROLLER

(51) International classification :G01R 192500, G05D 070600, H02J 030600, H02J 031800, H04W 048000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :
In this invention, a unique approach is presented to be used for a unified power flow controller (UPFC) that operates in voltage control mode. In order to produce the reference stator current, D-Q theory is used. This, in turn, results in a reduction in the total harmonic distortion (THD) of the source current. The technique that has been presented offers a number of advantages over the voltage-controlled UPFC that is the industry standard. Under typical circumstances of operation, the achievement of unity power factor (UPF) by the load terminal is ensured by the method that has been described. The UPFC controller not only prevents problems with voltage sag in the distribution system, but it also adjusts for reactive power. According to the data, the approach that was presented is an excellent strategy for maintaining a healthy ecology. When evaluating the performance of the whole system, a MATLAB model is put through its paces.

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

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(30)

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :07/02/2023

(21) Application No.202341007827 A

(43) Publication Date : 24/03/2023

(54) Title of the invention : SOLAR POWERED ROBOTIC VEHICLE FOR HEAVY METAL IONS DETECTION IN WATER EMPLOYING MACHINE VISION

| | |
|---|---|
| (51) International classification | :C02F 012000, C02F 012800, C02F 014200, G05D 010200, H01L 230000 |
| (86) International Application No | :NA |
| Filing Date | :NA |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number | :NA |
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| Filing Date | :NA |

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(57) Abstract :

This invention is a solar powered robotic vehicle that identifies and maps heavy metal ions in agricultural soil employing a camera. The soil is first collected from the agricultural land using a cup and stirred periodically using a stirrer. The data from the stirred sample is collected employing camera along with a time stamp and sent to the server dedicated for this product via the Internet employing an IoT Module. The camera sensor first detects the type of the soil with the colour as primary parameter. The soil can be red soil, black soil or other such types. This soil type will be detected with the image data collected from the camera. Next the camera sensor identifies whether the soil has heavy metal ion content or not. If heavy metal ion content is found in the soil collected it maps the corresponding location along with the ion concentration data to a cloud server. The machine learning model is trained by providing various images of soil with heavy metal ion concentration. The entire robot can be made to traverse in any programmed route in a field to collect data from throughout. A trained Ensemble Machine Learning model for soil information inference from the data collected from sensor mentioned above is loaded at the centralized server. The data collected from different soils is first categorized and employed to train the ensemble machine learning model. Once the model is trained, it can operate as a reliable predictive model. A combination of Convolutional Neural Network, Support Vector Machine, Linear Regression and K Means is employed for the above said ensemble machine learning model.

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

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Ministry of Commerce & Industry,
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INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

## Application Details

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|---|---|
| APPLICATION NUMBER | 202341005717 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 28/01/2023 |
| APPLICANT NAME | 1 . Ms. Aruna K<br>2 . Mr. Manoj Kumar Roy<br>3 . Mr. Thonangi Lalit Vidyasagar<br>4 . Mr. T V Dharmaraju<br>5 . Mr. M.V. Raghavendra Rao<br>6 . Mr. Putta Venugopal |
| TITLE OF INVENTION | A MACHINE LEARNING BASED FORECASTING SYSTEM FOR ELECTRIC VEHICLE HAVING ARTIFICIAL INTELLIGENCE INTERFACE |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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| E-MAIL (UPDATED Online) | |
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## Application Status

APPLICATION STATUS: **Awaiting Request for Examination**

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INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

## Application Details

| | |
|---|---|
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| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 31/01/2023 |
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| TITLE OF INVENTION | Electric vehicle junction diagnostic based on artificial intelligence |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :20/01/2023

(21) Application No.202341004175 A

(43) Publication Date : 17/02/2023

(54) Title of the invention : A SYSTEM FOR RECOGNIZING AND STORING A BUSINESS CARD BY USING A BUSINESS CARD MANAGEMENT SERVER AND METHOD THEREOF

(51) International classification :G06Q0010100000, H04W0008180000, H04L0067109500, G06F0003048800, H04L0067550000

(86) International Application No :PCT// Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA Filing Date :NA

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(57) Abstract :
This breakthrough facilitates the management and distribution of electronic business cards. The system and approaches employ a centralized database to maintain contact information and make it available as an electronic business card online for others to see and subscribe to using a QR-Code or Bar-Code. This may be done with the help of the system. It is the responsibility of the owner of the business card to ensure that the contact information is accurate and that subscribers have access to it. The recipient may subscribe to an electronic business card by connecting to it in their address book. This causes their address book to get contact information that has been updated from a centralized database. This relieves subscribers or business card recipients of the responsibility of updating the information about the card owner locally. Because the receiver is connected to the network, they will never view data that has become obsolete. Card owners have the ability to add their own custom fields, which may store contact information that is either unusual or regional. Cardholders have the ability to establish subscription groups and choose whose contact information is made public. Push notifications are sent out to subscribers whenever a card owner makes a change to their contact information.

No. of Pages : 18 No. of Claims : 7

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Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

सत्यमेव जयते

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS | GEOGRAPHICAL INDICATIONS

## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202341005844 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 30/01/2023 |
| APPLICANT NAME | 1 . Dr. V. Subrahmanyam<br>2 . Ms. Karri Santhi Supriya<br>3 . Mr. Dwarabandala Vamsi<br>4 . Mr. Madhura Abhishek Paul<br>5 . Mr. Arise Chandresh Kumar<br>6 . Dr. R. Tamilkodi |
| TITLE OF INVENTION | AN ARTIFICIAL INTELLIGENCE-BASED SYSTEM FOR PARKING SPACE DETECTION FOR ELECTRIC VEHICLES USING DEEP LEARNING INTERFACES |
| FIELD OF INVENTION | ELECTRONICS |
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| E-MAIL (UPDATED Online) | |
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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :25/11/2022

(21) Application No.202241067810 A
(43) Publication Date : 23/12/2022

(54) Title of the invention : SOLAR AND WIND ENERGY BASED CHARGING STATION FOR ELECTRIC VEHICLES

(51) International classification :H02J0007000000, H02J0003380000, F03D0009250000, H02S0010120000, H02J0003460000
(86) International Application No :PCT// /
Filing Date :01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :
This paper describes SWCM to generate the power for charging the battery packs of electric vehicles. The renewable charging station consists of both the solar photovoltaic modules and a wind generator. The SWCM immensely reduce the requirement of fossil fuels to generate electricity which results in greatly reduced CO2 and CO related emissions. The renewable sources such as wind and solar has been modelled using single diode model and an analytical modelling has been done for wind energy generation. The I-V and PV characteristics of the solar panel and different parameters of wind turbine has been studied under two different loading conditions. There are two unidirectional direct current to DC converters are connected to the PV modules and the wind turbine and six bidirectional DC-DC converters are connected to ten charging points which provides charging to the electric vehicle.

No. of Pages : 20 No. of Claims : 6

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/11/2022

(21) Application No.202241062481 A

(43) Publication Date : 11/11/2022

(54) Title of the invention : IOT SYSTEM FOR MONITORING GATEWAYS USING LORA AND LORAWAN

(51) International classification :G06N0020000000, H04W0088160000, G06N0020200000, H04L0043080000, G06N0005000000

(86) International Application No :NA
Filing Date :NA

(87) 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 :
IoT is becoming a universal technology findings its application in almost every area. In this invention a novel architecture for monitoring LoRa and LoRaWAN gateways employing another module of IoT transmitter is presented. The novelty present in this invention is the employment of IoT modules as a monitoring mechanism for gateway performance. In this system, established metrics of performance for gateways like throughput and others are monitored by an IoT embedded model. The information from the gateway passes through the IoT module and the information about the performance in terms of throughput and other metrics are transmitted to a specified server. The software is installed in that server is an ensemble machine learning trained one for identifying the discrepancies in the performance of gateways. An expert system integrated with an ensemble machine learning trained approach will enable effective identification of deviations in the performance of gateways.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/11/2022

(21) Application No.202241062480 A

(43) Publication Date : 11/11/2022

(54) Title of the invention : IMPACT OF LORAWAN ON PERFORMANCE OF CLOUD-BASED IOT PLATFORMS AND FOG COMPUTING

(51) International classification :H04L0067100000, H04L0067120000, H04W0004700000, G06F0009500000, H04W0004380000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA
Filing Date :NA

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-

(57) Abstract :
In this invention, a novel method of integrating fog computing with LoRaWAN based Cloud IoT - platforms is presented. Fog computing by definition is distributed cloud computing where the computing happens closer to where the data is generated. The purpose of fog computing is to exploit the advantage of cloud computing with the benefits of computing the data close to where it is generated. In the proposed LoRaWAN model, the LPWAN sensors collect data from the environment and send them to LoRa gateways. The LoRa gateways are intern connected to the fog computing unit. In the conventional system, the LoRa gateways are directly connected to the network server. In the novel system presented here the fog computing unit is connected to the network server. The network server is connected to the application server. As in conventional system, the cloud IoT services are executed in these group of application servers.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/10/2022

(21) Application No.202241061027 A

(43) Publication Date : 04/11/2022

(54) Title of the invention : AN INTELLIGENT MANAGEMENT SYSTEM FOR REACHING MASS AUDIENCES THROUGH YOUTUBE ADS IN DIGITAL MARKETING AND ITS COMPARATIVE EFFECTIVENESS

| | |
|---|---|
| (51) International classification | :G06Q0030020000, H04N0021450000, H04N0021810000, G06Q0050000000, H04N0021442000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
| (62) Divisional to Application Number<br>Filing Date | :NA<br>:NA |

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**8)Mr. Dhwaniket Kamble**

**9)Mrs. Supriya Sanjay Ajagekar**

**10)Mr. Vinod Motiram Rathod**

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**12)Mrs. Reshma R Kanse**

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(57) Abstract :

Disclosed herein is a system and method for reaching mass audience through social network or digital marketing platform. The system comprises an audience/viewer profile accumulating module (102) embedded in user devices (100); a marketer monitoring device (200); and a broadcasting device (300). The audience/viewer profile accumulating module (102) embedded in user devices (100) is adapted to procure the identity/contact information of the audiences/viewers who are active in one or more social network or digital marketing platforms. The marketer monitoring device (200) is adapted to monitor qualitative/quantitative characteristics of the audiences/viewers traffic flow into the social network/digital marketing platforms. The broadcasting device (300) is wirelessly synchronised over an internet protocol set up between the user devices and the marketer monitoring device (200). The broadcasting device (300) comprises a neural network trained intelligent tool configured for: analysing time spent in consuming digital content by the audiences'/viewers' and type/nature/pattern of such digital content over various Internet Protocol (IP) addresses; segregating the audience/viewer profiles into different target groups based on the analysis results of time spent and type/nature/pattern of the consumed digital content; scheduling an advertisement delivery timing to the target groups while more than 90% audience/viewer of the target groups are active the social network or digital marketing platform; and delivering the advertisement content/post to the user devices of the audience/viewer of the target groups. . Fig. 1

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

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PUBLICATION OF THE PATENT OFFICE

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :12/10/2022
(21) Application No.202241058454 A
(43) Publication Date : 21/10/2022

(54) Title of the invention : A NATURAL FIBER CARRIER FOR MICROBIAL IMMOBILIZATION AND PREPARING METHOD OF NATURAL FIBER CARRIER

(51) International classification :C08J0005040000, C08L0097020000, A23K0010300000, B27N0003000000, C08H0008000000
(86) International Application No :PCT// Filing Date :01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA Filing Date :NA
(62) Divisional to Application Number :NA Filing Date :NA

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :03/10/2021

(21) Application No.202141044814 A

(43) Publication Date : 15/10/2021

(54) Title of the invention : NANOPARTICLES FOR PRODUCING CERAMIC HEAT SHIELD AND SEAL

(51) International classification :B82Y 30/00
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA


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(57) Abstract :

The methods used to create multilayer ceramic coatings with porosity in some of the layers are discussed, and the finished coatings. Different layers may be applied at various temperatures by placing a heat-blocking shield regularly between the heat source and either the evaporated or an external heater. Layers that are applied have a Zone I structure, whereas layers that are not are structured in a Zone I or II manner. Zone I structural layers may have their porosity increased with heat treatment.


No. of Pages : 26 No. of Claims : 5

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GEOGRAPHICAL INDICATIONS

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202141044814 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 03/10/2021 |
| APPLICANT NAME | 1 . Dr. Ganganagunta Srinivas<br>2 . Dr M Sreenivasa Rao<br>3 . Dr. Kommana Siva Kumar<br>4 . Dr.S. Srigowri<br>5 . Mr. Md Ahammad Sharif<br>6 . Dr M.P. Srinivas Rao<br>7 . Dr K. Sunil<br>8 . Mrs. Alpitha Suhasini Juttuka<br>9 . Dr CA Jyothirmayee<br>10 . Dr.K. Sreelatha<br>11 . Mr. Adabala Kumar Sanjay<br>12 . Mr. Nellore Manoj Kumar |
| TITLE OF INVENTION | NANOPARTICLES FOR PRODUCING CERAMIC HEAT SHIELD AND SEAL |
| FIELD OF INVENTION | ELECTRONICS |
| E-MAIL (As Per Record) | mail2patentipr@gmail.com |
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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/09/2022

(21) Application No.202211053749 A
(43) Publication Date : 23/09/2022

(54) Title of the invention : AN INTELLIGENT SYSTEM AND METHOD FOR AUTOMATIC TARGET IDENTIFICATION, TRACKING AND SAFETY EVALUATION FOR RADIOTHERAPY

(51) International classification :G06T0007000000, A61B0005000000, A61B0006000000, G06T0019000000, A61N0005060000
(86) International Application No :NA
Filing Date :NA
(87) 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 :
Disclosed herein is a system and method for performing safety evaluation during radiotherapy delivery on a patient body. The system comprises a radiation source (100); an image sensor (300); an image analysing control unit (400); and a cloud server (500). The radiation source (100) is arranged around a patient bed (200) to deliver one or more type of rays on a target tissue region of the patient laying on the patient bed (200). The image sensor (300) is adapted to acquire anatomical images of the target tissue region of the patient laying on the patient bed (200). The image analysing control unit (400) is in wireless communication with the image sensor (300). The cloud server (500) comprises a neural network trained module being in wireless communication with image analysing control unit (400). The neural network trained module embedded in the cloud server (500) is configured to: defining coordinates of the target tissue regions based on various health characteristics of the patient; acquiring the anatomical images of the target tissue regions in one or more directions/orientations; deploying a deep neural trained model onto the anatomical images to find all possibilities of positioning of the target tissue regions; and comparing the possible positioning of the target tissue regions with the defined coordinates of similar target tissue regions; computing a safety score associated with identified/traced positioning of the target tissue.

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(19) INDIA
(22) Date of filing of Application :11/08/2022

(21) Application No.202241045906 A
(43) Publication Date : 19/08/2022

(54) Title of the invention : A SOLAR PHOTOVOLTAIC TRAFFIC LIGHT SIGNAL SYSTEM AND METHOD THEREOF

| | |
|---|---|
| (51) International classification | :H02J0007000000, H02J0007350000, H02J0003380000, H02M0001000000, G08G0001095000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
| (62) Divisional to Application Number<br>Filing Date | :NA<br>:NA |

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(57) Abstract :
Exemplary embodiments of the present disclosure are directed to a Solar Photovoltaic Traffic Light Signal System and method thereof. The system comprising: a solar panel comprising an array of solar cells connected in parallel or series to produce dc electricity; a luminescence unit and a charge controller/ dc-dc converter device, which is a two in one component and is configured to protect the battery from overcharging and deep discharging, and wherein the charge controller is configured to obtain a voltage supplied by the solar panel at 25 V and drops it down to 12 volts so that it supplies both the battery and the stop light; and a load component of the circuit which is a traffic light signal and wherein the circuit is configured to build a standalone photovoltaic traffic light signal that is able to function for long periods of time with no grid connection. FIG.6B

No. of Pages : 20 No. of Claims : 9

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :11/08/2022

(21) Application No.202241045904 A
(43) Publication Date : 19/08/2022

(54) Title of the invention : AN OCEAN THERMAL ENERGY CONVERSION (OTEC) SYSTEM AND METHOD THEREOF

| | |
|---|---|
| (51) International classification | :F03G0007050000, F24S0010130000, F24S0010100000, H02S0010100000, F24S0010170000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
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(57) Abstract :
Exemplary embodiments of the present disclosure are directed to an ocean thermal energy conversion (OTEC) system and method thereof. The ocean thermal energy conversion (OTEC) system comprising: an OTEC-solar pond hybrid, wherein the solar pond (SP) is located offshore and is a flexible floating structure of synthetic materials; a power block configured to facilitate thermal conversion; a floating salt gradient solar collector configured to increase temperature difference as per requirement; an artificial protective embankment of shore for the floating salt gradient solar collector; a cold water pipe present at about 1000m below sea-surface, to increase temperature; and a sand filter configured to maintain the offshore solar pond. FIG.1

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :09/09/2022

(21) Application No.202241051570 A

(43) Publication Date : 16/09/2022

(54) Title of the invention : A SMART HEALTH CARE SYSTEM TO RECOGNIZE FRUITS, VEGETABLES AND CALORIE ESTIMATION FOR HEALTHY LIFE USING DEEP LEARNING APPROACH

| | |
|---|---|
| (51) International classification | :A61B0005000000, G06T0007000000, G16H0040630000, A61B0005024000, G06F0001160000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
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(57) Abstract :
Disclosed herein is a system and method for evaluating food calorie of intake diet using deep learning tool. The system comprises a wrist wearable device (100); a food image analyser server (200); and a food calorie monitoring device (300). The wrist wearable device (100) is adapted to be worn around wrist of a user while taking the diet, wherein the wrist wearable device (100) comprises at least one image acquisition sensor (102) to acquire optical/thermal image of the diet. The food image analyser server (200) is adapted to receive, record and process the optical/thermal image data using a deep learning based diagnostic tool (202). The food calorie monitoring device (300) is wirelessly communicated between the wrist wearable device (100) and food image analyser server (200) to keep a track of different stages of food calorie evaluation operation. The deep learning based diagnostic tool (202) installed in the food image analyser server (200) is configured to carry out operation of: activating the image acquisition sensor (102) of the wrist wearable device (100) as soon as the food is taken towards mouth of the user; computing quantity of the food from the optical/thermal image data as acquired by the wrist wearable device (100); estimating various dietary composition present in the food by deploying a neural trained dataset as stored in the deep learning based diagnostic tool (202); predicting possible risk factors affecting the user health based on a predefined set of health parameters; and triggering warning message to the food calorie monitoring device (300) if the calorie intake goes above/below a threshold range. Fig. 1

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

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241050367 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 02/09/2022 |
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| TITLE OF INVENTION | AN AI & ML BASED WIND TURBINE CONTROL SYSTEM AND METHOD THEREOF |
| FIELD OF INVENTION | ELECTRICAL |
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Application Status

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241050438 |
| APPLICATION TYPE | ORDINARY APPLICATION |
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| TITLE OF INVENTION | AN EMBEDDED SYSTEM FOR DATA ACQUISITION PROVIDED WITH AN UNMANNED AERIAL VEHICLE |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241050139 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 02/09/2022 |
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| TITLE OF INVENTION | Influence of the Interconnection of wind turbines types I, ii, iii and iv on the parameters of the hosting capacity of distribution systems |
| FIELD OF INVENTION | CHEMICAL |
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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202221048349 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 24/08/2022 |
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| TITLE OF INVENTION | HUMAN RESOURCE RECOMMENDATION ALGORITHM BASED ON MACHINE LEARNING |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241050436 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 03/09/2022 |
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| TITLE OF INVENTION | A DEEP LEARNING AND IOT BASED WIND TURBINE CONDITION MONITORING & CLASSIFICATION |
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## Application Status

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| APPLICATION STATUS | Awaiting Request for Examination |

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(19) INDIA

(22) Date of filing of Application :28/08/2022

(21) Application No.202241049068 A

(43) Publication Date : 02/09/2022

(54) Title of the invention : AN INNOVATIVE METHOD FOR IMPROVING ONLINE EDUCATION SYSTEM AND EDUCATION SKILL TEACHING EVALUATION SYSTEM THROUGH THE USE OF ARTIFICIAL INTELLIGENCE

| | |
|---|---|
| (51) International classification | :G06Q0050200000, G06Q0010060000, G09B0005060000, G09B0007020000, G09B0005140000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
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(57) Abstract :
Disclosed herein is a method and system for evaluating online education or skill training network by using an artificial intelligence based predictive tool. The proposed system comprises a first interaction tool (102); a second interaction tool (202); and a supervisor cloud server (300) integrated in the online education scheme or skill training network (1000). The first interaction tool (102) is installed in a first user device (100) to be accessed by teacher engaged in the online education scheme or skill training network (1000). The second interaction tool (202) is installed in a second user device (200) to be accessed by students engaged in the online education scheme or skill training network (1000). The supervisor cloud server (300) coupled in wirelessly communication mode between the first user device (100) and second user device (200). An artificial intelligence based predictive module (302) is embedded in the supervisor cloud server (300) configured to: check status of one or more syllabus code associated to each course as taught during one session in the online education scheme or skill training network (1000); compare the checked status with a predefined set of educational/training parameters; assess various performance levels/scores of the students/teachers after competition of each course; output result sheets based on the evaluated performance levels/scores; and display one or more recommendations for the improvement of the online education or skill training network. Fig. 1

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

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/08/2022

(21) Application No.202241048285 A
(43) Publication Date : 02/09/2022

(54) Title of the invention : SMART MANAGEMENT SYSTEM FOR ONLINE TECHNICAL LEARNING AND ADVANCED TRAINING BASED ON INFORMATION LITERACY

| | |
|---|---|
| (51) International classification | :H04L0029060000, H04L0029080000, G06Q0050200000, G09B0005120000, H04W0012060000 |
| (86) International Application No<br>Filing Date | :PCT//<br>:01/01/1900 |
| (87) International Publication No | : NA |
| (61) Patent of Addition to Application Number<br>Filing Date | :NA<br>:NA |
| (62) Divisional to Application Number<br>Filing Date | :NA<br>:NA |

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**4)Shikha Gupta**
**5)Prof. Manju Rajput**
**6)Dr S.Nanthakumar**
**7)Dr. Shibe Rimo**
**8)Prof. Dr. Venice Mairya David**
**9)Dr. G. Gnanasekaran**
**10)Dr. Ashok Koujalagi**
**11)Dr. B. Chandirasekar**
**12)Ankur Gupta**
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**12)Ankur Gupta**
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(57) Abstract :
Disclosed herein is a system and method for managing online technical and advanced learning/training platform based on information literacy, which employs smart devices implemented with web-based or mobile-based user application modules to bring a healthy student-teacher interactive educational revolution in this virtual world. The system comprises a first user device (100), a second user device (200), and a cloud computing device (300) wirelessly communicated between the first user device (100) and the second user device (200). A trainee interface module (102) is embedded in the first user device (100) to be accessed by trainees (400) post registration therein. A trainer interface module (202) is embedded in the second user device (200) to be accessed by trainers (500) post registration therein. A data management tool (302) embedded in the cloud computing device (300) configured to: register the trainees (400) and the trainers (500) after verifying their one or more identity credentials as inputted through the first user device (100) and the second user device (200) respectively; keep records of digital contents as broadcasted during the learning /training period for future use; trigger alert notification to the trainees (400) and the trainers (500) under one or more predefined conditions; generate interaction scores for both the trainees (400) and the trainers (500) based on their communication behaviour observed during the learning /training period; and recommend one or more options for improving the learning/training platform based on the interaction scores. Fig. 1

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

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Ministry of Commerce & Industry,
Government of India

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GEOGRAPHICAL INDICATIONS

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241031368 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 01/06/2022 |
| APPLICANT NAME | 1 . MAHESH KUMAR JALAGAM<br>2 . THAMMANAPUDI RAVINDRA<br>3 . VELAMALA APPALA NAIDU<br>4 . PONNAPALLI VYASA OMKAR<br>5 . DR. K. ANUSUYA DEVI<br>6 . DR HARISHCHANDER ANANDARAM<br>7 . DR.R.THIAGARAJAN<br>8 . DR.R.RAMKUMAR |
| TITLE OF INVENTION | STRESS PREDICTION USING AN INTERNET OF STRESS PREDICTION USING AN INTERNET OF THINGS-BASED NOVEL WEARABLE SMART ELECTRONIC DEVICE USING MACHINE LEARNING SUPERVISED TECHNIQUE |
| FIELD OF INVENTION | COMPUTER SCIENCE |
| E-MAIL (As Per Record) | |
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| E-MAIL (UPDATED Online) | |
| PRIORITY DATE | |
| REQUEST FOR EXAMINATION DATE | -- |
| PUBLICATION DATE (U/S 11A) | 10/06/2022 |

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## Application Status

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Ministry of Commerce & Industry,
Government of India

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241016808 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 24/03/2022 |
| APPLICANT NAME | 1 . Dr.Ch.Asha Immanuel Raju<br>2 . Dr.Ch.Asha Kiran Raju<br>3 . Dr.Ch.Asha Jyothi<br>4 . D.Vijaya Mitra<br>5 . Dr.M.Tukaram Bai<br>6 . Dr.N.V.R. Nagalakshmi<br>7 . Ms.L.Neelima Chandralekha<br>8 . Dr.S.Chakri<br>9 . Dr.Ch.V.R.L.Gayatri<br>10 . Ch.V.Naga Sowjanya |
| TITLE OF INVENTION | A METHOD OF USING HYDROTROPES IN SOAP FLOTATION FOR HIGH RECOVERY FROM LOW GRADE ORES |
| FIELD OF INVENTION | CHEMICAL |
| E-MAIL (As Per Record) | tumula.githam@gmail.com |
| ADDITIONAL-EMAIL (As Per Record) | |
| E-MAIL (UPDATED Online) | |
| PRIORITY DATE | |
| REQUEST FOR EXAMINATION DATE | -- |
| PUBLICATION DATE (U/S 11A) | 15/04/2022 |

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Government of India

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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202241008765 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 19/02/2022 |
| APPLICANT NAME | 1 . MS.M. ANITHA<br>2 . DR.I. KANITHA CHRISTY<br>3 . MS.G. THAMARAISELVI<br>4 . DR.A. KARTHICK KUMAR<br>5 . DR.A.SASI KUMAR<br>6 . THANGAGIRI BASKARAN<br>7 . NIDHI NAGAR<br>8 . JHAKESHWAR PRASAD<br>9 . GUDIVADA VENKATA ARUNAMAYI<br>10 . DR. S. SARAVANAN<br>11 . SATYABRATA JENA<br>12 . YAGNAMBHATLA RAJENDRA |
| TITLE OF INVENTION | MACHINE LEARNING BASED BIG DATA ANALYTICS OF PATIENTS SUFFERING FROM CANCER |
| FIELD OF INVENTION | COMPUTER SCIENCE |
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| REQUEST FOR EXAMINATION DATE | -- |
| PUBLICATION DATE (U/S 11A) | 11/03/2022 |

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :30/01/2022

(21) Application No.202241005023 A

(43) Publication Date : 04/02/2022

(54) Title of the invention : Design of Hydro-Pneumatic ISD Suspension In Heavy Multi-Axle Vehicles

(51) International classification :G06Q0050200000, G09B0005000000, C12Q0001684400, G06F0011340000, G09B0019060000

(86) International Application No :PCT// Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA Filing Date :NA

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**6)Mr. G.VenkatRamana**

**7)Mrs. Aruna Kunda**

**8)Mr. Subrahmanyam Vasamsetti**

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(57) Abstract :

Students may benefit from a system that predicts and dynamically modifies content and teaching methods. Using a cognitive paradigm, it is possible to incorporate new information into a student's previous knowledge. Students' future academic paths are predicted by an AI engine using their individual cognitive needs and a pool of student data (AI Engine). Customized software agents are used to dynamically alter the learner's original cognitive model as the learner advances. An AI Engine on the server and a group of animated software Agents on the client are part of this system and approach. By creating connections between new information and prior knowledge, the programme ensures that students learn more effectively. These connections are then further deepened via exercises unique to each student.

No. of Pages : 20 No. of Claims : 6

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/01/2022

(21) Application No.202241004390 A
(43) Publication Date : 04/02/2022

56

(54) Title of the invention : DESIGN AND DEVELOPMENT OF LOW COST MAGNETIC BEARING FOR ENERGY CONVERSION

(51) International classification :G06F0030230000, H02K0007020000, F16C0032040000, G06T0030200000, G03F0007200000
(86) International Application No Filing Date :PCT :01 01 1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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4)Dr. M. Vijaya Sekhar Babu
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(57) Abstract :
The present focus of Flywheel Energy Storage System (FESS) sustaining as well as communications network development should be on low-consumption designs. In the great velocity yet lightweight FESS mass and momentum retention of mechanical kind structural systems, therefore, friction coefficient would be a non-negligible issue. Permanent Magnetic Bearings (PMB) could be used in the FESS to achieve mechanical loss-free assistance as well as improve the effectiveness of the flywheel charge. Humans have the benefit of low loss, high penetration velocity, variable adaptability, but also compact design. In this context, significant three-Degrees-Of-Freedom (DOF) PMB development to a special type of FESS has been conducted, with a focus on the operating principle, material properties, coupling attributes study, computational model, and structural elements. The radial impulse mathematical theorem to the matching calculation formulas of radius two DOF was established using a similar magnetic connection to assess the effectiveness of the 3-DOF PMB, but also radius-axial coupling was investigated using a finite element model. Furthermore, a control scheme was offered to address management issues in real-world scenarios. In 0.05 seconds, the rotor returns to its balanced state and maintains stable equilibrium. In the y-direction, the movement oscillation should be around 40μm, but in the x-direction, it should be about 30 μm. The dynamic rotor of the suggested PMB flywheel power storage system to outstanding properties, as great start-of-suspension effectiveness but also steady suspension features, according to test results. The research project would teach to develop, but also operate a low-loss FESS support network.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :23/12/2021

(21) Application No.202141060132 A

(43) Publication Date : 31/12/2021

(54) Title of the invention : Sensor assembly for evaluating fluid dynamic for a mechanical system and method thereof

(51) International classification :H04L0029060000, G05B0023020000, G01S0013860000, F01M0011100000, B01D0029110000

(86) International Application No :PCT//
Filing Date :01/01/1900

(87) International Publication No : NA

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

(62) Divisional to Application Number :NA
Filing Date :NA

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**3)Dr. Vishal Mehta**

**4)Dr. Narsu Sivakumar**

**5)Mrs. Mulupuri Nagapavani**

**6)Dr. Venna Kusuma Kumari**

**7)Dr. G. Vijaya Lakshmi**

**8)Mrs. Rosemary Varghese**

**9)Dr. Chanda Thapliyal Nautiyal**

**10)Dr. N. Tarakaramu**

**11)Dr. K. Bhagya Lakshmi**

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(57) Abstract :
Device and/or machinery diagnostics, prognostics, and control are made easier with the help of condition sensing, which may include detecting the condition of the device and/or the state of fluid inside the device (e.g., fluid health indicators). The system may make use of several sensors to identify the present state and estimate the future state of the fluid and/or device, as well as to manage the device, for example, to extend the remaining usable life of the fluid and/or to improve the functioning of the device. They may connect wirelessly with one another, with the device, and/or with a central control system that offers functions like sensor fusion, prognostics, and control integration, amongst other things. Additionally, depending on the physical or chemical features of the surroundings, the sensors may be powered locally.

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

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# FORM - 2

THE PATENTS ACT, 1970

(39 OF 1970)

THE PATENTS RULES, 2003

# COMPLETE SPECIFICATION

(Section 10; rule 13)

1. **Title of the invention: Improved boost converter for Solar PV applications**
2. **Applicant (s) (Name, Nationality, Address)**

| Sr. No. | Name | Nationality | Address | Country | State |
|---|---|---|---|---|---|
| 1 | Jyothi Kesa | India | Department of EEE, Koneru Lakshmaiah Education Foundation, Guntur | India | Andhra Pradesh |
| 2 | D. Ravi Kishore | India | Department of EEE, Godavari Institute of Engineering & Technology(A), Rajahmundry | India | Andhra Pradesh |

3. **Permeable to the Description**

The following specification particularly describes the invention and the way it is to be performed

**Field and background of the invention**

With the general public creating, the energy request was expanding genuinely and the petroleum derivative was reducing rapidly, the sustainable power source, including photovoltaic (PV), power module and by, breeze-energy in increasingly more force ventures and scientists' thoughtfulness regarding concentrate for alleviating this condition. For the power device

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## Application Details

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|---|---|
| APPLICATION NUMBER | 202141050172 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 01/11/2021 |
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| TITLE OF INVENTION | BIO-FUEL COMPOSITION AND METHOD FOR MANUFACTURE USING PYROLYSIS |
| FIELD OF INVENTION | CHEMICAL |
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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/10/2021

(21) Application No.202141049308 A

(43) Publication Date : 05/11/2021

(54) Title of the invention : A SYSTEM FOR ENCODING AND DECODING DATA USING CLOUD COMPUTING AND METHOD THEREOF

(51) International classification :H04N0019176000, H04N0019440000, G06T0017200000, H04N0019700000, H04N0019170000

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

(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :
[034] The present invention discloses a system for Encoding and Decoding Data Using Cloud Computing and method thereof. The system includes, but not limited to, an encoding syntax data information provided on a cloud computing in a quantized space from a coded bitstream, wherein the syntax data information comprising dividing information and adaptive geometry quantization information for a bounding box of the point cloud; a decoder provided on a cloud computing in a quantized space from a coded bitstream, and dividing a bounding coded unit of the point cloud into a plurality of parts based on the dividing the data information; a processing unit configured to determine quantization parameters for the parts in a bounding coded unit based on the adaptive geometry quantization information; and reconstructing a plurality of points in each of the parts in the bounding coded unit of the point cloud based on the quantization parameter for the respective part in the bounding coded unit. Accompanied Drawing [FIG. 1]

No. of Pages : 23 No. of Claims : 10

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :18/09/2021

(21) Application No.202141042345 A

(43) Publication Date : 01/10/2021

(54) Title of the invention : A novel method for producing nano biofuel by using sewage oil


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(51) International classification :C10L 5/46
(86) International Application No :PCT//
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(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA



(57) Abstract :
The present invention discloses a nano method for producing nano biofuel by using sewage oil as a raw material. The nano biofuel is prepared from the following raw materials in percentage by weight: 75-85% of the sewage oil , 5-10% of water, 1.5-3.5% of hydrophilic agent, 5-10% of oleophylic agent, 5-10% of oil adjusting agent and 0.05-0.3% of quality improving agent; and the said nano biofuel is prepared through subjecting the raw materials to the processing steps like pre treatment, pre-esterification reaction, transesterification reaction, rectification, oil adjusting, standing, curing and the like. The nano biofuel disclosed by the invention has the advantages of high heat value, difficulty in delamination and deterioration and low production cost. According to the invention, the sewage oil is turned into a beneficial industrial resource; serving as an energy-saving and environmentally-friendly fuel oil product, the nano biofuel can be used as an alternative diesel fuel or used for diesel motors; and the nano biofuel also has extremely high economic value and popularization value.


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

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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/08/2021

(21) Application No.202141036940 A
(43) Publication Date : 20/08/2021

(54) Title of the invention : Isotropic Antenna based on AI & ML Interface having Multifunctional guide-wire assemblies

| | |
|---|---|
| (51) International classification | :G06N0020000000, G06K0009620000, A61M0025000000, A61N0005060000, A61B0005000000 |
| (31) Priority Document No | :NA |
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(57) Abstract :
[034] The present invention discloses an isotropic antenna based on an artificial intelligence (AI) & Machine Learning (ML) Interface having Multifunctional guide-wire assemblies. The isotropic antenna includes, but not limited to, a plurality of independent RF signals from a corresponding RF generator module for sampling each independent signal at a selected time period per signal and having a combined, time-multiplexed RF output therefrom, and analyzing the RF output signal as an unseparated sequence of multiplexed independent RF signals with a spectrum processing unit for assessing one or more vascular bodily lumens, which is further implemented with Multifunctional guide-wire assemblies. Accompanied Drawing [FIG. 1]

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

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Department of Industrial Policy & Promotion,
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INTELLECTUAL PROPERTY INDIA
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## Application Details

| | |
|---|---|
| APPLICATION NUMBER | 202141033907 |
| APPLICATION TYPE | ORDINARY APPLICATION |
| DATE OF FILING | 28/07/2021 |
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| TITLE OF INVENTION | "A METHOD FOR DECOLOURIZATION OF DYES BY USING AGRICULTURAL WASTE" |
| FIELD OF INVENTION | PHYSICS |
| E-MAIL (As Per Record) | iprsince2014@hotmail.com |
| ADDITIONAL-EMAIL (As Per Record) | |
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(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/06/2021

(21) Application No.202111028832 A
(43) Publication Date : 23/07/2021

(54) Title of the invention : IMAGE CONTRAST ENHANCEMENT SYSTEM WITH FUZZY BASED THRESHOLD HISTOGRAM EQUALIZATION

| | |
|---|---|
| (51) International classification | :G06T0005000000, G06T0005400000, G06T0005200000, H04N0005200000, G01S0007520000 |
| (31) Priority Document No | :NA |
| (32) Priority Date | :NA |
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| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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(57) Abstract :
Due to varying light source distributions and positions, the problem of overexposure or underexposure might arise during the imaging process. The goal of image enhancement technology is to overcome problems with an image's detailed information that are relatively poor. The fundamental purpose of improving the image is to reveal the hidden details or increase the contrast among images and a new dynamic range. The equalization of histograms is one of the most widely utilized methods for the improvement of image contrast as it is quick and simple to implement. The Fuzzy based Threshold Histogram Equalization approach is a strong tool for enhancing image contrast. The present invention disclosed herein is Image Contrast Enhancement System with Fuzzy based Threshold Histogram Equalization comprising of: Input Image (201); Fuzzification (202); PDF Estimation (203); Histogram Equalization (204); Mapping (205); and High Contrast Image (206); used as a scalable method for enhancing the contrast of an image with the help of Fuzzy Logic and Threshold based Histogram Equalization. The present invention discloses the method and the apparatus used, the type of the input image, the use of fuzzy logic. The image enhancement method is estimated numerically with Features Similarity index (FSII), Contrast Improvement Index (CII), and Entropy (H) in present invention, as set out in the present invention. With the present invention, implemented in the Mat Lab R2019 (a) environment, the Feature Similarity Index (FSIM) of 0.992, a Contrast Improvement Index (CII) of 8.32 and 0.682 bits/symbols entropy are obtained.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :28/10/2021

(21) Application No.202141049447 A

(43) Publication Date : 05/11/2021

(54) Title of the invention : AGRI-TECH FARMING REVOLUTION FOR USING PLC SOLAR WATER, AND FERTILIZER'S PUMP WITH NEW ALTERED-NOZZLE

(51) International classification :G06Q0010060000, G06Q0010100000, G06Q0050020000, G05B0019050000, A01C0007000000

(86) International Application No :PCT//
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(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
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(62) Divisional to Application Number :NA
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(57) Abstract :

Abstract Overall India has a shrinking agricultural sector, demonstrated by government data showing the number of full-time farmers at 1.7 million in 2014, declining from 2.2 million a decade earlier. Workforce and skills shortages are compounded by the lack of young people becoming farmers. Also, due to the increasing rate of farmers retiring, the overall amount of uncultivated farmland within India has doubled over the past two decades, increasing to 420,000 hectares in 2015. As physical activities bring more difficulties for a greater number of aging farmers, technological innovations to assist with and replace workers performing agricultural tasks is an urgent priority. As well as automating work, high-tech farming technologies provide accurate information which farmers can use to make decisions managing crops. The special features of the new technology are: 1. Sensors are used to sensing the humid level in soil for the particular agriculture land. The sensed output given to the PLC. 2. Programmable Logic Controllers (PLC), are used to automatically ON and OFF motor. And also it Automatically controls the open and closing the nozzle used in water as well as fertilizer pumps. 3. Specially designed sprinkler nozzle named altered –nozzle. Uniqueness of this nozzle is used in two different modes of operation depends on the moisture content present in the soil. Mode1:Mist mode of operation. Under this operation we can save 98% of Water usage. Mode2: Spray mode of operation. Under this mode of operation we can save 85% of water.

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

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :15/06/2019

(21) Application No.201941023815 A

(43) Publication Date : 28/06/2019

(54) Title of the invention : IDV-SCREEN: INTERACTING WITH DIGITAL SCREENS USING ALL TYPE OF VOICE SYSTEM

(51) International classification :G07F19/00
(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
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(62) Divisional to Application Number :NA
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(57) Abstract :
ABSTRACT [340] My invention IDV-Screen is a purely technology oriented for interacting with digital screen any size using voice input , Key Input, mobile aaps input is provided. The IDV-Screen• interaction device (104) identifies a type of program that runs on its IDV-Screen and parses the IDV-Screen as an image in real-time. The IDV-Screen interaction device (104) identifies a layout of the IDV-Screen to determine attributes and to associate labels with corresponding input fields. The IDV-Screen interaction device (104) receives voice input from the user (102) in a human spoken language and communicates the attributes and the voice input , Key Input, mobile aaps input to a any type of input interaction enabling server (108). The voice , other interaction enabling server (108) translates the attributes and the voice input, other input and verifies the voice input , other input to generate commands based on the voice input, other input. The IDV-Screen interaction device (104) receives and executes the commands to perform functions as defined in the commands.

No. of Pages : 31 No. of Claims : 7

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