(19) INDIA

(22) Date of filing of Application :11/02/2021 (43) Publication Date : 12/08/2022

(54) Title of the invention : A DEVICE FOR SENSING HYDROGEN SULFIDE GAS AT LOW TEMPERATURE USING COBALT DOPED CADMIUM SULFIDE THIN FILM AS SENSING MATERIAL

| (51) International classification | :G01N0027120000, H01L0031180000, H01L0021020000, G01L0001180000, G01N0033000000 | (71)Name of Applicant: 1)DR.PARTHA MITRA Address of Applicant: DEPARTMENT OF PHYSICS, THE UNIVERSITY OF BURDWAN, GOLAPBAG, BURDWAN, PIN-713104,WEST BENGAL,INDIA West Bengal India |
|---|---|--|
| (31) Priority Document No | :NA | (72)Name of Inventor: |
| (32) Priority Date | :NA | 1)DR.PARTHA MITRA |
| (33) Name of priority country | :NA | 2)DR.AYAN MUKHERJEE |
| (86) International Application No | :NA | 3)DR.MAHIMA RANJAN DAS |
| Filing Date | :NA | |
| (87) International Publication No | : NA | |
| (61) Patent of Addition to Application Number Filing Date | :NA :NA | |
| (62) Divisional to Application Number | :NA | |
| Filing Date | :NA | |
| 7> · · | | + |

(57) Abstract:

A Device for sensing hydrogen sulfide gas at low temperature using cobalt doped Cadmium Sulfide thin film as sensing material The device (1) of the present patent application works mainly on the principle of change of resistance due to the adsorption of hydrogen sulfide gas on the surface of the sensor element (2). The sensing material comprises of cobalt doped Cadmium Sulfide thin film which senses hydrogen sulfide gas with good sensitivity at relatively low temperature. Doping with cobalt modifies the sensing ability by increasing the surface roughness and porosity. The thin film was deposited by low cost chemical bath deposition (CBD) method.

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

| | | | | | (FOR OFFICE USE ONLY) | | | | |
|---------------------------------------|------------|----------------------|----------|----------------|-----------------------|--------------|---|----------------------------|--------------------|
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| THE PATENTS ACT 1970 (39 of 1970) | | | Арр | olication No.: | | | | | |
| and THE PATENTS RULES, 2003 | | | Filir | ng date: | | | | | |
| ADDUCATION | N 500 | CDANT | ~ | | | nount of | | | |
| APPLICATIO | _ | _ | _ | | Гес | e paid: | | | |
| (See section 7, | | l 135 and s e 20) | ub-r | ule (1) of | СВЕ | R No: | | | |
| | | | | | Sign | nature: | | | |
| 1. APPLICANT'S IDENTIFICATION OFFICE) | N NO. (/ | AS ALLOTT | | | | | | | |
| 2. TYPE OF APP | PLICATION | ON [Please | | | | riate catego | | | |
| Ordinary (✓) | | | Cd | onvention | n () | | PCT-NP | () | |
| Divisional () | Patent | t of | Divi | sional () | Pater | nt of | Divisional | () | Patent of |
| | Additi | on () | | | Addit | ion () | | | Addition () |
| 3A. APPLICANT | (S) | | | | | | | | |
| Name in Full | N | ationality | | Count | ry of resi | dence | Address | of th | e Applicant |
| Dr. Partha Mitra | Inc | lian | | India | | | Department of Physics, The University of Burdwan, Golapbag, District: Burdwan, State: West Bengal, Country: India, PIN: 713104. | | of Burdwan, an, |
| 3B. CATEGORY | OF API | PLICANT [P | lease | tick (√) | at the ap | propriate ca | ategory] | | |
| Natural Person | (√) | | 0 | ther than | Natural | Person () | | | |
| | • | | Sr | mall Entit | y() | Startup (|) | | Others () |
| 4. INVENTOR (S | S) [Plea | se tick (√) | at th | e approp | riate cat | egory] | | | |
| Are all the invent | tor(s) sa | ame as | Yes | () | | | | No (| (✓) |
| the applicant(s) r | named a | above? | | | | | | | |
| If "No", furnish t | he deta | ils of the ir | nvent | or(s) | | | | | |
| Name in Full | | Nationalit | y | Cou | intry of r | esidence | Address of | f the | Inventor |
| Dr. Partha Mitra | | Indian | | Indi | a | | Golapbag, District: B State: West | rsity o Surdw t Beng | of Burdwan, an, |
| | | | | | | | Country: Ir PIN: 71310 | | |

| Dr. Ayan Mukherjee | Indian | India | 107A, Mithapukur West Rajbati, District: Burdwan, State: West Bengal, Country: India, | | | |
|--|--------|-------|---|--|--|--|
| | | | PIN: 713104. | | | |
| Dr. Mahima Ranjan Das | Indian | India | Vill: Parulia, P.O.: Debi Parulia, District: Murshidabad, State: West Bengal, Country: India, PIN: 731 244. | | | |
| 5. TITLE OF THE INVEN | TION | | | | | |
| "A Device for sensing hydrogen sulfide gas at low temperature using cobalt doped Cadmium Sulfide thin film as sensing material". | | | | | | |

| 6. AUTHORISED REGISTERED PATENT AGENT(S) | IN/PA No. | |
|--|----------------|--------------------------|
| | Name | |
| | Mobile No. | |
| 7. ADDRESS FOR SERVICE OF APPLICANT IN | Name | Dr. Partha Mitra |
| INDIA | | |
| | Postal Address | Department of Physics, |
| | | The University of |
| | | Burdwan, Golapbag, |
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| | Telephone No. | |
| | Mobile No. | +91 9434387201 |
| | Fax No. | |
| | E-mail ID | mitrapartha1@rediffmail. |
| | | com |

8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION

| Country | Application | Filing | Name of the | Title of the | IPC (as classified in the |
|---------|-------------|--------|-------------|--------------|---------------------------|
| | Number | date | applicant | invention | convention country) |
| - | - | - | - | - | - |

9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)

| | <u> </u> | | | | | |
|--|---------------------------|--|--|--|--|--|
| International application number | International filing date | | | | | |
| - | - | | | | | |
| 10. IN CASE OF DIVISIONAL APPLICATION FILED LINDER SECTION 16. PARTICULARS OF ORIGINAL | | | | | | |

| (FIRST) APPLICATION | |
|----------------------------------|--|
| Original (first) application No. | Date of filing of original (first) application |
| - | - |

11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT

| Main application/patent No. | Date of filing of main application | | |
|-----------------------------|------------------------------------|--|--|
| - | - | | |

12. DECLARATIONS

(i) Declaration by the inventor(s)

(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period). I/We, the above named inventor(s) is/are the true & first inventor(s) for this Invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

- 1. (a) Date:
- (b) Signature:
- (c) Name: Dr. Partha Mitra
- 2. (a) Date:
- (b) Signature:
- (c) Name: Dr. Ayan Mukherjee
- 3. (a) Date:
- (b) Signature:
- (c) Name: Dr. Mahima Ranjan Das

(ii) Declaration by the applicant(s) in the convention country

(In case the applicant in India is different than the applicant in the convention country): the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

- (a) Date
- (b) Signature(s)
- (c) Name(s) of the signatory

(iii) Declaration by the applicant(s)

I/We the applicant(s) hereby declare(s) that: -

- (✓) I am/ We are in possession of the above-mentioned invention.
- (✓) The complete specification relating to the invention is filed with this application.
- (\checkmark) The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.
- (✓) There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- (✓) I am/we are the true & first inventor(s).
- (✓) I am/we are the assignee or legal representative of true & first inventor(s).
- (✓) The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s).
- (区) I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.
- (区)My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.
- (区) The application is divided out of my /our application particulars of which is given in Paragraph-10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.
- (☑) The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

√ (a) Form 2

| Item | Details | Fee | Remarks |
|------------------------|---------------------|--------|---------|
| Complete specification | No. of pages: 13 | 1750/- | |
| # | | | |
| No. of Claim(s) | No. of claims: 10 | | |
| | No. of pages: 02 | | |
| Abstract | No. of pages: 01 | | |
| No. of Drawing(s) | No. of drawings: 02 | | |
| | No. of pages: 01 | | |

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

- ✓ (b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
 (c) Sequence listing in electronic form
- \checkmark (d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- (e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority

| document(s) available to DAS. |
|--|
| (f) Translation of priority document/Specification/International Search Report/International |
| Preliminary Report on Patentability. |
| ✓ (g) Statement and Undertaking on Form 3 |
| (h) Declaration of Inventorship on Form 5 |
| (i) Power of Authority |
| (j) |
| Total fee 1750/ in Cash/ Banker's Cheque /Bank Draft bearing No Dateon |
| Bank. |
| I/We hereby declare that to the best of my/our knowledge, information and belief the fact and |
| matters slated herein are correct and I/We request that a patent may be granted to me/us for the |
| said invention. |
| |
| Dated thisday of20 |
| |
| Signature: |
| |
| Name: Dr. Partha Mitra |
| |
| |
| To. |
| The Controller of Patents |
| The Patent Office, at KOLKATA. |
| THE FALCHI OTHER, AL NOLNATA. |
| |

(12) PATENT APPLICATION PUBLICATION

(12) PATENT APPLICATION FUBLICATIO

(19) INDIA

(51) International

(86) International

(87) International

Publication No

Filing Date

Filing Date

Application Number

Filing Date

(62) Divisional to

(61) Patent of Addition :NA

to Application Number :NA

Application No

classification

(22) Date of filing of Application: 11/03/2022 (43) Publication Date: 08/04/2022

(54) Title of the invention: STRATEGY FOR SELF-CLEANING SOLAR PANELS

:H01L0031048000, H02S0040100000,

B08B0006000000, B64G0001440000,

F24S0040200000

·NA

:NA

: NA

:NA

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(21) Application No.202241013241 A

2)Dr. Jamal Alsadi 3)Mr. Rudresha S Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor :

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Address of Applicant: Department of Chemistry, R.B. Narayanrao Borawake College, Shrirampur 413709, Maharashtra, India. -----

.........

8)Dr. Ayan Mukherjee

Address of Applicant :Department of Physics, College of Commerce, Arts & Science, Patliputra University, Patna 800020, India. ------

(57) Abstract:

The pfesent invention discloses a strategy for self-cleaning solar panels, that comprises ZnO induced PDMS films that incorporate the same, are provided. The self-cleaning solar panel consists of: ultra-hydrophobic layer made of highly physically and chemically stable PDMS layer; which consists of the transparent conducting films embedded with nanoparticles; and a pair of electrodes attached to the two ends of the solar panel which are capable of generating a traveling electrostatic waves, that eliminates the dust via a combination of polyrqeric as well as electrostatic action by imposing the electrostatic force, particles pass through the openings of the upper screen electrode and fall along off the inclined panel.

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

| | Filing date Amount of paid: CBR No: Signature: | | | Application Filing date: Amount of paid: CBR No: | 11/03/2022 f Fee 1750/- | | |
|------------------------------|---|--|--------------|--|---|---|--|
| | IDENTIFICA OFFICE) | NT'S REFERENCI TION NO. (AS A APPLICATION [P | LLOTTED BY |) at the approp | riate catego | ry] | |
| | Ordinary (🗸 |) | Convention | () | PCT-NP() | | |
| v. | Divisional | Patent of Addition () | Divisional (| Patent of Addition () | Divisional | Patent of Addition () | |
| ! | 3A. APPLIC | <u> </u> | 177 | 1_ | 1 | 5.1 | |
| | Name in | Full | Nationality | Country of Residence | Address of | f the Applicant | |
| 1/Form 1 | Dr. Ramji Kalidoss | | Indian | ., - | House No. Street City State Country Pin code Phone No. Email ID | Department of Biomedical Engineering, Bharath Institute of Higher Education and Research, Chennai, Tamil Nadu, India, 600 073. +91 —9840959832 —ramji.sat@gmail.com | |
| 88/20224101324 | Dr. Ramji Kalidoss Dr. Jamal Alsadi | | Jordon | Jordon | House No. Street City State Country Pin code Phone No. Email ID | Renewable Energy Engineering College, Jadara University, Irbid, Jordan. +962789958153 i.alsadi@jadara.edu.jo | |
| 11-Mar-2022/2208 ∀ | NT ∙0-F-F | ICE CH | E-N-N-A-I | 1 1-4-2-0-3-7-2 | 2.022 4 | . 6-4 1 2 | |

| | | | | House No. | Department of Mechanica |
|--|---|----------------|------------------|--------------|---|
| | | | | Street | Engineering, JSS |
| | | | | City | Academy of Technica |
| | N. B. I. I. G. | | 1 11 | State | Education, Noida 201301 |
| | Mr. Rudresha S | Indian | India | Country | Uttar Pradesh, India. +91 |
| | | | l | Pin code | 9632151048. |
| | | | i | Phone No. | rudreshs.thermal@gmail.c |
| | | | | Email ID | om |
| | 3B. CATEGORY OF APPLICA | NT [Please tic | :k (✓) at the ap | propriate ca | ategory] |
| 1 *** | Natural Person (✔) | Other th | an Natural Pers | on | |
| | | Small Ent | tity () | Startup () | Others () |
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| | 4. INVENTOR(S) [Please tid | k (✓) at the a | appropriate cat | egory] | |
| | Are all the inventor(s) | Yes () | | No (| · · · · · · · · · · · · · · · · · · · |
| | same as the applicant(s) | | | | , |
| | named above? | | | | |
| | If "No", furnish the details | of the invento | r(s) | , | |
| | Name in Full | Nationality | Country of | Addres | s of the Inventor |
| | | | Residence | | |
| | | | | | of Biomedical Engineering stitute of Higher Education |
| | Dr. Ramji Kalidoss | Indian | India | and Resea | rch, Chennai, Tamil Nadu |
| • | | | | India, 600 0 | 173. +91 9840959832 |
| | | | 1 | Renewable | Energy Engineering College |
| ├ - ▼ | Dr. Jamal Alsadi Mr. Rudresha S Dr. Santosh S Chobe | landan | loudon | Jadara U | niversity, Irbid, Jordan |
| Ε | Dr. Jamai Aisadi | Jordon | Jordon | +96278995 | 8153 |
| o | | | | j.alsadi@ja | <u>lara.edu.jo</u> |
| <u> </u> | | | | Department | of Mechanical Engineering |
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| 32 | Mr. Rudresha S | Indian | India | Noida 2013 | 01, Uttar Pradesh, India. +91 |
| \(\(\) | | | | 703213104 | o. ermal@gmail.com |
| | - | | + | Research | Centre and Department of |
| 24 | | | | Chemistry | M.G.V's L.V.H Arts, Science |
| 05 | Dr. Santosh S Chobe | Indian | India | and Comr | nerce College, Panchavati |
| 72(| 8 | | | Nashik 422 | 003. Maharashtra |
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|---|-----------------------|------------|----------|------------------------|---|--|--|---|
| Dr. Gavhane Vrushali Somanath | | India | ľ | Arts, Scien | t of Chemistry, R B Attal ce and Commerce College, 127, Maharashtra, India. | | | |
| Dr. Chandra Kumar Dixit Indian | | | India | | Department of Physics, Dr. Shakuntala Misra National Rehabilitation University, Lucknow 226017. U.P, indi | | | |
| Ms. Kirti Kamalakar Amolik Indian | | | India | | Department of Chemistry, R.E Narayanrao Borawake Colleg Shrirampur 413709, Maharashtra, India | | | |
| Dr. Ayan Mukherjee Indian | | | India | | Commerce | rtment of Physics, College of merce, Arts & Science, Patliputra ersity, Patna 800020, India. | | |
| 5. TITLE | OF THE INVE | NTION | | | | | L | |
| Strategy | y for self-Clear | ning Sola | r Panel: | S | | | | v· |
| 6. AUTHORISED REGISTERED PATENT | | | l IV | IN/PA No. | | | | |
| AGENT | (S) | | | | | Name | | - |
| | | | | | 8.40 | Mobile No. | | |
| 7 ADD | | | | | | Dr. Ramji Kalidoss | | |
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| | | | • | | Telephone No. | | hone No. | |
| | • | 700 | | ٠٠ | IV | Mobile No. | | +91 9840959832 |
| | | | | | Fa | Fax No. | | |
| | _ | | | | | E-mail ID | | ramji.sat@gmail.com |
| | • | | | | | | | ON FILED IN CONVENTION |
| F 10 1 10 10 10 10 10 10 10 10 10 10 10 1 | RY, PARTICUL | | | | | | | |
| Country | Application Number | Filing da | 60 to 00 | lame of th pplicant | ne | 20 | e of the ention | IPC (as classified in the convention country) |
| | raginibei | | - 01 | phileaut | | 1110 | | convention country |
| 9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT) | | | | | | | | |

| | International filing date | | |
|--|---|--|--|
| 10. IN CASE OF DIVISIONAL APPLICA ORIGINAL (FIRST) APPLICATION | ATION FILED UNDER SECTION 16, PARTICULARS | | |
| Original (first) application No. | Date of filing of original (first) application | | |
| 11. IN CASE OF PATENT OF ADDITION APPLICATION OR PATENT | N FILED UNDER SECTION 54, PARTICULARS OF MA | | |
| Main application/patent No. | Date of filing of main application | | |
| 12. DECLARATIONS | | | |
| i/we, the above named inventor(s) is | s/are the true & first inventor(s) for this Invention a | | |
| declare that the applicant(s) herein | s/are the true & first inventor(s) for this Invention and is/are my/our assignee or legal representative. | | |
| declare that the applicant(s) hereir | | | |
| (a) Date 09/03/2022 (b) Signature(s) | | | |
| (a) Date 09/03/2022 (b) Signature(s) (c) Name(s) Dr. Ramji Kalidoss (a) Date 09/03/2022 (b) Signature(s) | | | |

(c) Name(s) Dr. Gavhane Vrushali Somanath

(a) Date 09/03/2022

(b) Signature(s)

| (a) Date 09/03/2022 (b) Signature(s) (c) Name(s) Dr. Chandra Kumar Dixit | lista | |
|---|-----------------|--|
| (a) Date 09/03/2022 (b) Signature(s) (c) Name(s) Ms. Kirti Kamalakar Amolik | dun | |
| (a) Date 09/03/2022 (b) Signature(s) (c) Name(s) Dr. Ayan Mukherjee | Ayan Morkheyer. | |

- (ii) Declaration by the applicant(s) in the convention country
- (In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)
- I/We, Dr. Ramji Kalidoss, Dr. Jamal Alsadi, Mr. Rudresha S, Dr. Santosh S Chobe, Dr. Gavhane Vrushali Somanath, Dr. Chandra Kumar Dixit, Ms. Kirti Kamalakar Amolik, Dr. Ayan Mukherjee the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.
- (a) Date 09/03/2022
- (b) Signature(s)
- (c) Name(s) of the signatory Dr. Ramji Kalidoss, Dr. Jamal Alsadi, Mr. Rudresha S, Dr. Santosh S Chobe, Dr. Gavhane Vrushali Somanath, Dr. Chandra Kumar Dixit, Ms. Kirti Kamalakar Amolik, Dr. Ayan Mukherjee

(iii) Declaration by the applicant(s)

I/We the applicant(s) hereby declare(s) that: -

- I am/ We are in possession of the above-mentioned invention.
- I The provisional/complete specification relating to the invention is filed with this application.
- The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- Y I am/we are the true & first inventor(s).
- I am/we are the assignee or legal representative of true & first inventor(s).
- The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s).
- Y I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.
- Y My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.
- The application is divided out of my /our application particulars of which is given in Paragraph-10 and pray that this application may be treated as deemed to have been filed on 09/03/2022 under section 16 of the Act.
- The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11.

| Complete/ provisional specification)# | Details No. of pages No. of drawings and No. of pages CHEMATI 14 | ree | Remarks |
|---------------------------------------|--|-----|---------|
| No. of Claim(s) | No. of claims and No. of pages | | |
| Abstract | No. of pages | | |
| No. of Drawing(s) | No. of drawings and No. of pages | | |
| - | | 6 | |
| | | | |

- # In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.
- (b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- (c) Sequence listing in electronic form
- (d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- (e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.
- (f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.
- (g) Statement and Undertaking on Form 3
- (h) Declaration of Inventorship on Form 5 ✓
- (i) Power of Authority ✓

(j)

Total fee ₹4500 in Bank Draft bearing No 207766 Date 08/03/2022 on City Union Bank.

I hereby declare that to the best of my knowledge, information and belief the fact and matters slated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this 09th day of March 2022

Signature: Rany

Name: Dr. Ramji Kalidoss

To,

The Controller of Patents

The Patent Office, at Chennai

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application: 19/12/2022

(51) International classification G06Q0050060000, B60L0053660000

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(62) Divisional to Application

No

No

Number

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(54) Title of the invention: AN IMPROVISED DESIGN AND DEVELOPMENT OF SOLAR CHARGING STATION FOR EV.

(71)Name of Applicant:

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4)Mr. SHAILESH M. DESHMUKH

5)Mr. MAHESH AHUJA

6)Dr. BAIDY ANATH BAG

7)Dr G CHANDRA SEKHAR

8) Dr SARATH K.S.

9)SUGANYA. K

10)ABDUL KHURSHID

Name of Applicant : NA

Address of Applicant : NA

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:B60L0053300000, H02J0007000000, H02J0007350000,

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10)ABDUL KHURSHID

Address of Applicant : ASSISTANT PROFESSOR, DEPARTMENT OF MECHANICAL ENGINEERING, DOOR NUMBER: 10-10-91, BESIDE SIMHAGIRI HOSPITAL, NEW GAJUWAKA, VISAKHPATNAM - 530026, ANDHRA PRADESH, INDIA.

A solar charging station is there to support the growing sales of electric vehicles. These charging stations provide long-lasting solar power and thus these types of charging stations are very cost-effective recharge centers. All these solar panels are renewable energy. But in other types of electric charging stations, all the electricity available is from thermal power plant or nuclear power plant. These solar panels can charge up to 4KW, These stations can charge 10 to 12 electric skies per day. It takes 6 to 8 hours to charge an electric vehicle. And the truly environmentally friendly electricity is the electricity generated by this type of solar panel or wind turbine. So this type of electricity will protect the actual environment from pollution. These types of charging stations are set up near places like petrol stations, residential and recreational facilities. Thus people will use this type of charging stations more and more.

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





| Design | App | lication | Details |
|--------|-------|----------|---------|
| 200.9 | , ,,, | | - |

Application Number:

347901-001

Cbr Number:

206355

Cbr Date:

13/08/2021 22:48:43

Applicant Name:

1. Dr. Aaditya Khare 2. Dr. C. R. Rene Robin 3. Dr. D. Doreen Hepzibha Miram

4. Dr. Rajeshwar Verma 5. Divyanshi Choudhary 6. Sudhir Singh Rajput

7. Dr. Peeyush Pant 8. Dr. Ayan Mukherjee 9. Prof.Ramesh Chandra Panda

10. Dr P Karthigeyan

Design Application Status

Application Status:

Application Accepted, Certificate of Design Generated.

Back (/DesignApplicationStatus/)

Disclaimer: Application status is available for the application filed on or after 1st April 2009 with application no 222230. The information under "Design Application Status" is dynamically retrieved and is under testing, therefore the information retrieved by this system is not valid for any legal proceedings under the Design Act 2000. In case of any discrepancy you may contact the appropriate Patent Office or send your comments to following email IDs:

Design Office, Kolkata: controllerdesign.ipo@nic.in Controller General of Patents, Designs and Trademarks

| Design Number | 347831-001 | | | |
|---|----------------|--|--|--|
| Class | 14-03 | | | |
| Apple Inc. One Apple Park Way, Cupertino, CA 95014 US | | | | |
| Date of Registration 12/08/2021 | | | | |
| Title | REMOTE CONTROL | | | |

Priority

| 1110111 | | | | |
|-----------------|------------|---------|--|--|
| Priority Number | Date | Country | | |
| 29/771,496 | 23/02/2021 | U.S.A. | | |



| Design Number | 347900-001 | | |
|---------------|------------|--|--|
| Class | 12-11 | | |

OLA ELECTRIC MOBILITY PRIVATE LIMITED Regent Insignia, #414, 3rd Floor, 4th Block, 17th Main, 100 Feet Road, Koramangala, Bangalore - 560034

| Date of Registration | 13/08/2021 | | |
|----------------------|---------------------------|--|--|
| Title | Handlebar for two wheeler | | |
| | | | |



Priority NA

| Design Number | 347901-001 | | |
|---------------|------------|--|--|
| Class | 23-04 | | |

1.Dr. Aaditya Khare Associate Professor Electrical and Electronics Engineering Institute Name - Raipur Institute of Technology mandir hasaud arang road raipur C.G, Pin 492001, Chhattisgarh Swami Vivekanand University Bhilai Dist. DURG CHHATTISGARH 2. Dr. C. R. Rene Robin Professor & Dean (Innovation), Sri Sairam Engineering College, Chennai 600044 3. Dr. D. Doreen Hepzibha Miram Director, Computational Intelligence Research Foundation ,Chennai 600023 4. Dr. Rajeshwar Verma Assistant professor, Mechanical Engineering, Chhattisgarh Swami Vivekananda Techanical University Bhilai, Raipur Institute of Technology, Raipur, Pincode - 492001, et al.

| Date of Registration | 13/08/2021 |
|----------------------|--|
| Title | ECO-FRIENDLY DEVICE FOR CARBON- DI- OXIDE ADSORPTION |
| Priority NA | |







| D | esian | An | plica | ation | Details |
|---|-------|----|-------|-------|---------|
|---|-------|----|-------|-------|---------|

Application Number:

347810-001

Cbr Number:

206281

Cbr Date:

12/08/2021 07:58:57

Applicant Name:

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5. Ramchander Nirudi 6. Mr. Rehan Husain 7. Dr. Ayan Mukherjee 8. Dr. Kuldip Sharma

9. Prof. Ramesh Chandra Panda 10. Dr P Karthigeyan

Design Application Status

Application Status:

Design Accepted and Published, Journal No is 29/2022 and Journal Date is 22/07/2022

Back (/DesignApplicationStatus/)

Disclaimer: Application status is available for the application filed on or after 1st April 2009 with application no 222230. The information under "Design Application Status" is dynamically retrieved and is under testing, therefore the information retrieved by this system is not valid for any legal proceedings under the Design Act 2000. In case of any discrepancy you may contact the appropriate Patent Office or send your comments to following email IDs:

Design Office, Kolkata: controllerdesign.ipo@nic.in Controller General of Patents, Designs and Trademarks

| Design Number | 347810-001 |
|---------------|------------|
| Class | 24-01 |

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| Date of Registration | 12/08/2021 |
|----------------------|--|
| Title | MAMMOGRAPH- BREAST CANCER DIAGNOSTIC DEVICE |
| D : 1/ N/ | |



Priority NA

| Design Number | 347818-001 |
|---------------|------------|
| Class | 29-02 |
| | |

KONINKLIJKE PHILIPS N.V. Eindhoven OF High Tech Campus 52, 5656 AG Eindhoven, The Netherlands.

| Date of Registration | 12/08/2021 |
|----------------------|------------|
| Title | AIR MASK |



| Priority Number | Date | Country |
|-----------------|------------|---------|
| 008435358-0002 | 15/02/2021 | EUIPO |

| 13 |
|----|
| 7/ |
| |

| Design Number | 347847-001 |
|---------------|------------|
| Class | 06-01 |

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| Date of Registration | 12/08/2021 |
|----------------------|--------------------------|
| Title | MULTI-UTILITY BABY CHAIR |





िटेंट कार्यालय भासकीय जनीत

OFFICIAL JOURNAL OF THE PATENT OFFICE

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ISSUE NO. 13/2023

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दिनांक: 31/03/2023 DATE: 31/03/2023

पेटेंड चार्या**चय का एक प्रकाशन** PUBLICATION OF THE PATENT OFFICE

2) PATENT APPLICATION PUBLICATION PRINTER DESCRIPTION

(22) Date of thing of Application :17 (3:2023

(21) Application No.202331018339 A

(43) Publication Date: 31/03/2023

(54) Title of the invention: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING-BASED TECHNIQUES IN

:006N-0368CO-G06N-030000, G06N-0304FO, C06N-070000, (52) mernational classification G06M 20000 a international Application No. Filing Date :01/01/1956 mercational Publication No. : NA "aten of Addition to Application Sting Dak :NA 4: On isional to Application Number :NA ill ng Date :NA

71 Name of Applicant: 1 Dr. Sanit Kanner 3)Dr. Vimal Sugar 4 Mr. Varatia Daviatrao Chapke 5 Mls. Sachalata Sachin Narkhede 6) Ashish Negl 7) Privedi Udny Nandial 8) Dr Kamlesh Kumar 9) Dr. K. Venkuta Ramana 10)P. Devipriya HPrnkosh () 12)Dr. Anlmach Kamor Shorma Some of Applicant: NA 72 Name of Inventor : f)Tir. Suntt Numar Address of Applicant: Assistant Professor, Post-Graduate Department of Physics College of Commerce, Arta & Science, Pathpara Jniversity, Kankarbagh, Patna, Bihar, India. Andless of Applican: Associate Professor, Post-Graduate Department of Physics Bhupendra Narayan Mandal University, North Campus, Madhepura, Bihar - 85212 Schuts Suchacida Sacina Normacue
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(57) Abstract

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING-BASED TECHNIQUES IN THEORETICAL PHYSICS AND PURE MATHEMATICS Artificial intelligence and machine learning-based techniques in theoretical physician Two different types of resonant light causes. ARTHORISTICAL INTELLIGENCE AND MACHINE LEARNING-BASED TECHNIQUES IN THEORETICAL PHYSICS AND PURE MATHEMATICS Arthorn intenigence and machine interference. The frequency modulation in the cort of light searce, the polarizer is tarranged between the alkali metal element and the photodetector. A modulated light source produces a side of the eyepiece of the goggies and the luminator is branched in the alkali metal element. It includes at least one seasor for measuring the brightness of the incident visible my, and the sensor is located on the side of the eyeplece of the goggles and the luminour is measured in a spitially distributiony maneur by at least one poggles household. The photodetector and the alkalinous metal unit is the polarizer. A laser with a sideband is injected into an aikelinous metal and by a road-slated light source.

पेटेंट कार्यालय शासकीय जनेल

OFFICIAL JOURNAL OF THE PATENT OFFICE

निर्गमन सं. 14/2023 ISSUE NO. 14/2023

शुक्रवार FRIDAY दिनांकः 07/04/2023

DATE: 07/04/2023

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18092

APPLICATION PUBLICATION

(21) Application No.202341017402 A

as of filing of Application: 15/03/2023

(43) Publication Date : 07/04/2023

Fitle of the invention: DESIGN OF SIX SIGNIA METHODOLOGIES IN DATA MINING TO ANALYZE THE SUPPLY HAIN QUALITY OF ORGANIZATION

:C07K 143500, G06F 162458, G06Q 100600, G06Q Six International classification 100800, H02G 110000 (36) International Application No :PC"17/ Fifing Date :01/01/1900 87) International Publication No. : NA (h1) Patent of Addition to Application Number :NA :NA Filing Date (62) Divisional to Application :NA Filing Date :NA

(71)Name of Applicant: 1)Dr. R.Lathn Address of Applicant: Assistant Professor, Department BBA&MAHrm(SS), Ethiraj College for women, Chennai, 600008.. Chennai ---2) Dr. Sunit Kumar 3)Mrs. Anlta sagar 4)S. Fouzin Sayeedunnisa 5)Syed Azar Ali 6)Dr. Nitin Probhu Kulkarni 7)Dr. A. Alecswari 8)Dr. Pasupuleti Subrahmanya Ranjit 9) V Lakshmi Narayana 10)Mohd Asif Shah 11)Prof Dr Raju Agrawal 12)Dr. P Vamsi Krishna Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor: 1)Dr. R.Latha Address of Applicant : Assistant Professor, Department BBA&MAHtm(SS), Ethiraj College for women, Chennai, 600008.. Chennai -2)Dr. Sunit Kumar Address of Applicant : Associate Professor, Department of Statistics, Central University of South Bihar, Gaya Panchananpur, P.O.- Fatchpur P.D.- Tekari, Gaya City:-Gaya State:- Bihar PIN CODE:-824236 Gaya 3)Mrs. Anita sagar Address of Applicant :Post-Graduate Department of Physics, College of Commerce, Arts & Science, Patliputra University, Kankarbagh, Patna City:- Patna State:- Bihar PIN CODE:-800020 Patna -4)S. Fouzla Saycedunnisa Address of Applicant : Associate Professor, MJCET, Hyderabad 500034 Hyderabad -----5)Syed Azur All Address of Applicant :Asst.prof. Information Technology Department, Muffakham Jah College of Engineering and Technology, Banjara hills, Hyderabad 500008 Hyderabad -6)Dr. Nitin Prabhu Kulkarni Address of Applicant :Materials Management ,Savitribai Phule Pune University, (IBMR College A.Nager) Pune -Dr. A. Aleeswari Address of Applicant (Professor, Department Of Management Studies, Psna College Of Engineering And Technology, Dindigul - 624622 Dindigul -8)Dr. Pasupuleti Subrahmanya Ranjit Address of Applicant :Professor/Department of Mechanical Engineering/Aditya Engineering College/Surampalem 533437 Surampalem -9) V Lakshmi Narayana Address of Applicant :Associate Professor, Department of Humanities and Sciences, Va dhaman Co lege of Engineering, Shamshabad, 501218 Hyderabad -10) Mohd Asil Shah Address of Applicant Adjunct Faculty, School of Business, Woxsen University, Kamkole, Sadasivpet, Hyderabad, Telangana, 502345, India. Hyderabad 11)Prof Dr Ruju Agrawal Address of Applicant :Director, S S Jain Subodh Management Institute Jaipur --12)Dr. P Varasi Krishna Address of Applicant Assistant Professor, School of Management, Malla Reddy University,

Design of Six Signa Methodologies in Data Mining to analyze the Supply Chain Quality of Organization is the proposed invention. The invention focuses on predicting the pros and consinherent in the country shall be a proposed invention. inherent in the supply chain management of an organisation. Six Sigma methodologies are implemented to identify the aspects of supply chain by mining the data.

Hyderahad, 500043 Flyderahad

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