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Certificate of Registration for a UK Design

Design number: 6424079

Grant date: 20 February 2025

Registration date: 16 February 2025

This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Dr. RAVINDRA FAKIRRAO PATHRE, Mr. YOGESH RAMESHWAR KAYANDE,

SACHIN SHANKAR JADHAV, Dr. DIGAMBAR DAMODHAR BHUTEKAR, Ms.

MONIKA GULABRAO RATHOD, Mr. AMOL PRAKASHRAO

KUKKADGAONKAR, Mr. PRASHANT DHARMANAND KAMBLE

in respect of the application of such design to:

Insect Trap with Real-Time Connectivity

International Design Classification:

Version: 15-2025

Class: 22 ARMS, PYROTECHNIC ARTICLES, ARTICLES FOR HUNTING,
FISHING AND PEST KILLING

Subclass: 06 TRAPS, ARTICLES FOR PEST KILLING

Adam Williams

Comptroller-General of Patents, Designs and Trade Marks
Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.





ORIGINAL

क्रम सं/ Serial No. : 189917



पेटेंट कार्यालय, भारत सरकार

The Patent Office, Government Of India

डिजाइन के पंजीकरण का प्रमाण पत्र

Certificate of Registration of Design

डिजाइन सं. / Design No.

438078-001

तारीख / Date

22/11/2024

पारस्परिकता तारीख / Reciprocity Date*

देश / Country

प्रमाणित किया जाता है कि संलग्न प्रति में वर्णित डिजाइन जो **PORTABLE FUNGAL SPORE DETECTION DEVICE** से संबंधित है, का पंजीकरण, श्रेणी 10-05 में 1.Mr. Yogesh Ramkisan Urdukhe 2. Miss Pragati Uday Shirsath 3.Mr. Tanaji Prabhakar Yewate 4.Mr. Deepak Babasaheb More 5.Dr. Umesh Pandurang Mogle के नाम में उपर्युक्त संख्या और तारीख में कर लिया गया है।

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-05 in respect of the application of such design to **PORTABLE FUNGAL SPORE DETECTION DEVICE** in the name of 1.Mr. Yogesh Ramkisan Urdukhe 2. Miss Pragati Uday Shirsath 3.Mr. Tanaji Prabhakar Yewate 4.Mr. Deepak Babasaheb More 5.Dr. Umesh Pandurang Mogle.

डिजाइन अधिनियम, 2000 तथा डिजाइन नियम, 2001 के अध्याधीन प्रावधानों के अनुसरण में।

In pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

जारी करने की तिथि : 13/01/2025
Date of Issue



उत्तम चंद्र सिंह
उत्तम चंद्र सिंह

महानियंत्रक पेटेंट, डिजाइन और व्यापार चिह्न
Controller General of Patents, Designs and Trade Marks

*पारस्परिकता तारीख (यदि कोई हो) जिसकी अनुमति दी गई है तथा देश का नाम। डिजाइन का स्वत्वाधिकार पंजीकरण की तारीख से दस वर्षों के लिए होगा जिसका विस्तार, अधिनियम एवं नियम के निबंधनों के अधीन, पाँच वर्षों की अतिरिक्त अवधि के लिए किया जा सकेगा। इस प्रमाण पत्र का उपयोग विधिक कार्यवाहियों अथवा विदेश में पंजीकरण प्राप्त करने के लिए नहीं हो सकता है।

The reciprocity date (if any) which has been allowed and the name of the country. Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years. This Certificate is not for use in legal proceedings or for obtaining registration abroad.



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सत्यमेव जयते

भारत सरकार
GOVERNMENT OF INDIA

पेटेंट कार्यालय
THE PATENT OFFICE

पेटेंट प्रमाणपत्र
PATENT CERTIFICATE
(Rule 74 of The Patents Rules)

क्रमांक : 022124022
SL No :



पेटेंट सं. / Patent No. : 429588
आवेदन सं. / Application No. : 202221045945
फाइल करने की तारीख / Date of Filing : 11/08/2022
पेटेंटी / Patentee : 1.Manohar Kashiram Jopale 2.Amol Haridas Kategaonkar
3.Bharat Namdev Shelke 4.Gayatri Madhukar Gaidhane et al.

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित A METHOD FOR MANUFACTURING NANOPARTICLES OF COBALT OXIDE WITH TRAPPED NEON नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख अगस्त 2022 के ग्यारहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled A METHOD FOR MANUFACTURING NANOPARTICLES OF COBALT OXIDE WITH TRAPPED NEON as disclosed in the above mentioned application for the term of 20 years from the 11th day of August 2022 in accordance with the provisions of the Patents Act, 1970.



अनुदान की तारीख : 21/04/2023
Date of Grant :

पेटेंट नियंत्रक
Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, अगस्त 2024 के ग्यारहवें दिन को और उसके पश्चात प्रत्येक वर्ष में उसी दिन देय होगी।

Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 11th day of August 2024 and on the same day in every year thereafter.

(51) International Patent Classification:
Not classified(21) International Application Number:
PCT/IN2022/050587(22) International Filing Date:
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(25) Filing Language: English

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IN 20221006276 (POA)
Filed on 05 February 2022 (05.02.2022)
IN PCT/IN2022/006276 (POA)
Filed on 05 February 2022 (05.02.2022)

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(71) Applicants: JOPALE, Manohar Kashiram [IN/IN]; MVP's, Arts, Commerce and Science College, Tryambakeshwar Dist.Nashik, Nashik 422212 (IN). KATE-GAONKAR, Amol Haridas [IN/IN]; Research Centre and Post Graduate, Department of Chemistry, M.V.P. Samaj's,

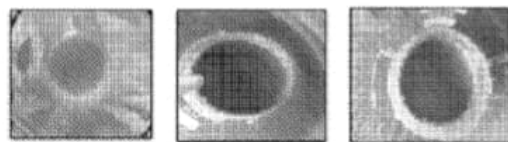
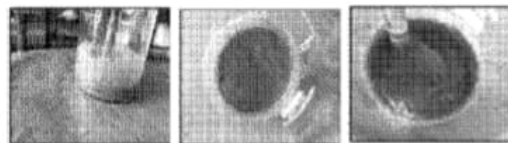
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,

(54) Title: RAPID GREEN PROCESS USING OPAQUE LATEX OF *JATROPHA CURCAS* PLANT FOR THE PREPARATION OF HIGHLY PURE NICKEL OXIDE

Images during Nickel Oxide Preparation.

Latex of *Jatropha curcas*Latex + $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$ Latex + $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$ + Heat

Just at solidification

Yellow colour mixture

Yellow colour semisolid



Near to solidification

Calcination at 400 °C

Calcination at 650 °C

Fig4 Nickel Oxide Preparation

(57) Abstract: Nickel oxide has number of applications in fields like electronic, magnetic and in industries the requirement of nickel oxide (NiO) is in large quantity and in high purity state. The present rapid green process invented for the preparation of nickel oxide (NiO) from analytical reagent grade solid nickel chloride ($\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$) and specifically opaque latex of *Jatropha curcas* plant as a green solvent. This process results in covering the green chemistry principles like waste prevention, all atoms converted to oxide, less hazards, non-toxic material generation, due to short time requirement for the real time analysis pollution prevention occurred, energy required for this process was minimized. Material was analysed by using XRD, EDAX and SEM characterization methods. This results in perfectly matches to (JCPDF: 00-432-0490) card number for NiO.

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202221006276 A

(19) INDIA

(22) Date of filing of Application :05/02/2022

(43) Publication Date : 12/08/2022

(54) Title of the invention : RAPID GREEN PROCESS USING OPAQUE LATEX OF JATROPHA CURCAS PLANT FOR THE PREPARATION OF HIGHLY PURE NICKEL OXIDE

(51) International classification :C01G0053040000, H01M0004860000, C01G0053090000, G02F0001152300, C12N0001200000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)Name of Applicant :

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2)Dr. Amol Haridas Kategaonkar

Name of Applicant : NA

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(57) Abstract :

Nickel oxide has number of applications in fields like electronic, magnetic and in industries the requirement of nickel oxide (NiO) is in large quantity and in high purity state. The present rapid green process invented for the preparation of nickel oxide (NiO) from analytical reagent grade solid nickel chloride ($\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$) and specifically opaque latex of Jatropha curcas plant as a green solvent. This process results in covering the green chemistry principles like waste prevention, all atoms converted to oxide, less hazards, non-toxic material generation, due to short time requirement for the real time analysis pollution prevention occurred, energy required for this process was minimized. Material was analysed by using XRD, EDAX and SEM characterization methods. This results in perfectly matches to (JCPDF: 00-432-0490) card number for NiO.

1. Calculated sample was analysed for its purity from XRD database which shows exact match of XRD patterns with reference JCPDS (00-432-0490) database of nickel oxide.

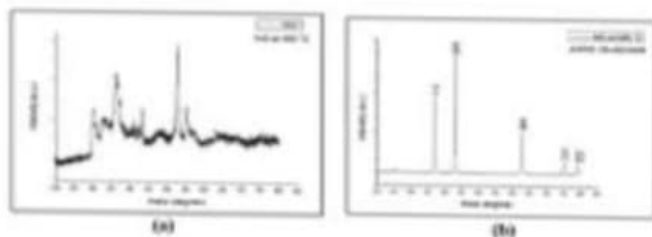


Fig. XRD patterns of Nickel Oxide (NiO) in Jatropha curcas latex at 400°C

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

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

(21) Application No. 202221045945 A

(43) Publication Date : 26/08/2022

(54) Title of the invention : A METHOD FOR MANUFACTURING NANOPARTICLES OF COBALT OXIDE WITH TRAPPED NEON

(51) International classification : B01J0023750000, C01G0051000000, A23K0050100000, H01G0011460000, C01G0051080000
(86) International Application No : NA
Filing Date : NA
(87) 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) Bharat Namdev Shelke

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5) Ramhari Vishnu Rote

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Address of Applicant : Mvp Samaj's, Arts, Commerce And Science College, Tryambakeshwar Dist. Nashik 422212 Maharashtra India Nashik -----

(57) Abstract :

A method for manufacturing nanoparticles of cobalt oxide (Co3O4) with trapped neon provides a unique process for manufacturing cobalt oxide with improved glossy



30/01/15
उज्जत पी. पैडि
पेटेंट नियंत्रक
Controller of Patents

Note. - The fees for renewal of this patent, if it is to be maintained, will fall / has fallen due on 29th day of May 2027 and on the same day in every year thereafter.

*Since the Number of Patentees / Inventors is more, the name of Patentees / Inventors are continued on Page No. 2



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पेटेंट प्रमाणपत्र के लिए अनुलग्नक/Annexure to Patent Certificate

पेटेंट सं. / Patent No.

577913

आवेदन सं. / Application No.

202521051999

फाइल करने की तारीख / Date of Filing

29/05/2025

पेटेंटी / Patentee (जारी/Continued)

5.Parag Upendra Bhalchandra 6.Deepa Kashinath Bogle



Application Filing Receipt

Government of India Patent Office

Intellectual Property Office Building,
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Mumbai-400037
Phone- 022-24137701,24142026
Fax: 022-24130387
e-mail: mumbai-patent@nic.in

CBR Number : 10821

CBR date: 21-03-2025

Application Type: ORDINARY APPLICATION

Priority Number:

Priority Date:

Priority Country: Not Selected

To,

Ravindra Fakirrao Pathre

Plot no 88, gut no 169, Shivnagar, Chate school road Satara parisar, Satara, Aurangabad, Maharashtra

Received documents purporting be to an application for patent numbered 202521025720 dated 21-03-2025 by Ravindra Fakirrao Pathre of Plot no 88, gut no 169, Shivnagar, Chate school road Satara parisar, Satara, Aurangabad, Maharashtra relating to Solar insect trap for collection and pest control together with the Complete and fee(s) of ₹1600 { One Thousand Six Hundred only}.

Note:

1. In case of Patent Application accompanied by a Provisional Specification, a complete Specification should be filed within 12 months from the date of filing of the Provisional Specification, failing which the application will be deemed to be abandoned under Section 9(1) of the Patent Act, 1970.
2. You may withdraw the application at any time before the grant of patent, if you wish so. If, in addition to withdrawal, you also wish to prevent the publication of application in the Patent Office Journal, the application should be withdrawn within fifteen months from the date of priority or date of filing, whichever is earlier.
3. If not withdrawn, your application will be published in the Patent Office Journal after eighteen months from the date of priority or date of filing, whichever is earlier.
4. If you wish to get your application examined, you should file a request for examination in Form-18 within 31 months from the date of priority or date of filing, whichever is earlier, failing which the application will be treated as withdrawn by the applicant under Section 11(B)(4) of the Patent Act, 1970.

(For Controller of Patents)