



Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021101982

The Commissioner of Patents has granted the above patent on 19 May 2021, and certifies that the below particulars have been registered in the Register of Patents.

**Name and address of patentee(s):**

Abhishek Dasore of School of Mechanical Engineering, RGM College of Engineering & Technology Nandyal Andhra Pradesh 518501 India

Prerana Nashine of Department of Mechanical Engineering, Manipur Technical University, Government Polytechnic Campus, Takypat Imphal Manipur 795004 India

Upendra Rajak of Department of Mechanical Engineering, RGM College of Engineering & Technology, Nerawada 'X' Roads, Kurnool District Nandyala Andhra Pradesh 518501 India

Shobha Lata Sinha of Professor, Department of Mechanical Engg, National Institute of Technology, Great Eastern Rd, Amanaka Raipur Chhattisgarh 492013 India

Gaurav Dwivedi of Assistant Professor, Energy Centre, Maulana Azad National Institute of Tech. Bhopal Madhya Pradesh 462051 India

Thokchom Subhaschandra Singh of Lecturer, Department of Mechanical Engg, National Institute of Technology, Langol Rd, Lamphelpat Imphal Manipur 795004 India

Anoop Kumar Shukla of Asst. Professor, Dept of Mechanical Engg, Amity University, Amity Rd, Sector 125 Noida Uttar Pradesh 201301 India

Achintya Sharma of Research Scholar, Dept of Mech. Engg., Amity University, Amity Rd, Sector 125 Noida Uttar Pradesh 201301 India

S V Ratan Kumar of Asst Professor, Dept. of EC Engg. (ECE), RGM College of Engineering & Technology, Nerawada 'X' Roads, Kurnool District Nandyala Andhra Pradesh 518501 India

Prem Kumar Chaurasiya of Asst Professor, Mechanical Engineering, Sagar Institute of Science & Technology, Gandhi Nagar Bhopal Madhya Pradesh 462036 India

Tulala Rajasanthosh Kumar of Department of Mechanical Engineering, Oriental Inst. of Science & Technology, Raisen Road, Oppo-Patel Nagar Bhopal Madhya Pradesh 462021 India

**Title of invention:**

A CHARGER OF LITHIUM ION BATTERY FOR SOLAR CELL

**Name of inventor(s):**

Dasore, Abhishek; Nashine, Prerana; Rajak, Upendra; Sinha, Shobha Lata; Dwivedi, Gaurav; Singh, Thokchom Subhaschandra; Shukla, Anoop Kumar; Sharma, Achintya; Kumar, S. V. Ratan; Chaurasiya, Prem Kumar and Kumar, Tulala Rajasanthosh

**Term of Patent:**

Eight years from 16 April 2021



Dated this 19<sup>th</sup> day of May 2021

Commissioner of Patents

**PATENTS ACT 1990**

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.



Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021101982

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 19<sup>th</sup> day of May 2021

Commissioner of Patents

## PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.



**Sect 120(1A)** Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

- (1) Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:
  - (a) a declaration that the threats are unjustifiable; and
  - (b) an injunction against the continuance of the threats; and
  - (c) the recovery of any damages sustained by the applicant as a result of the threats.
- (2) Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

*Certain threats of infringement proceedings are always unjustifiable.*

- (1) If:
- (a) a person:
    - (i) has applied for an innovation patent, but the application has not been determined; or
    - (ii) has an innovation patent that has not been certified; and
  - (b) the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be;
- then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

(2) If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

(3) If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

**certified**, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent



Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021100783

The Commissioner of Patents has granted the above patent on 7 April 2021, and certifies that the below particulars have been registered in the Register of Patents.

**Name and address of patentee(s):**

Rashmi Dwivedi of Department of Mechanical Engineering, Sagar Institute of Science & Technology Ratibad Madhya Pradesh 462044 India

Upendra Rajak of Department of Mechanical Engineering, RGM College of Engineering & Technology Nandyal Andrapradesh 518501 India

Tikendra Nath Verma of Department of Mechanical Engineering, Maulana Azad National Institute of Techn Bhopal Madhya Pradesh 462051 India

Abhishek Dasore of School of Mechanical Engineering, RGM College of Engineering & Technology Nandyal Andrapradesh 518501 India

Manoj Panchal of School of Mechanical Engineering, RGM College of Engineering & Technology Nandyal Andrapradesh 518501 India

Ramakrishna Balijepalli of School of Mechanical Engineering, RGM College of Engineering & Technology Nandyal Andrapradesh 518501 India

Govinda Raju Matha of Department of Mechanical Engineering, Viswanadha Inst of Tech and Management, Mindivanipalem, Sontyam, Anandapuram Visakhapatnam Andhra Pradesh 531173 India

Peyyety V S Muralikrishna of Aditya College of Engineering & Technolo, ADB road, Surampalem East Godavari Andhra Pradesh 533437 India

Raja Tulala of Department of Mechanical Engineering, Oriental Group of Colleges Bhopal Madhya Pradesh 462021 India

Rohit Kumar of Department of Mechanical Engineering, Madan Mohan Malaviya University of Tech Gorakhpur Uttar Pradesh 273008 India

**Title of invention:**

A COMPOSITE NANO-COATED INTERNAL COMBUSTION ENGINE CYLINDER

**Name of inventor(s):**

Dwivedi, Rashmi; Rajak, Upendra; Verma, Tikendra Nath; Dasore, Abhishek; Panchal, Manoj; Balijepalli, Ramakrishna; Matha, Govinda Raju; Muralikrishna, Peyyety V S; Tulala, Raja and Kumar, Rohit

**Term of Patent:**

Eight years from 9 February 2021



Dated this 7<sup>th</sup> day of April 2021

Commissioner of Patents

**PATENTS ACT 1990**

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.





Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021100783

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 7<sup>th</sup> day of April 2021

Commissioner of Patents

## PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

## Extracts from the Patents Act, 1990

**Sect 120(1A)** Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

**Sec 128                      Application for relief from unjustified threats**

- (1) Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:
- (a) a declaration that the threats are unjustifiable; and
  - (b) an injunction against the continuance of the threats; and
  - (c) the recovery of any damages sustained by the applicant as a result of the threats.
- (2) Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

**Sec 129A                      Threats related to an innovation patent application or innovation patent and courts power to grant relief.**

*Certain threats of infringement proceedings are always unjustifiable.*

- (1) If:
- (a) a person:
    - (i) has applied for an innovation patent, but the application has not been determined; or
    - (ii) has an innovation patent that has not been certified; and
  - (b) the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be; then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

*Courts power to grant relief in respect of threats made by the applicant for an innovation patent or the patentee of an uncertified innovation patent*

- (2) If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

*Courts power to grant relief in respect of threats made by the patentee of certified innovation patent*

- (3) If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

**Schedule 1                      Dictionary**

***certified***, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent





Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021102000

The Commissioner of Patents has granted the above patent on 19 May 2021, and certifies that the below particulars have been registered in the Register of Patents.

**Name and address of patentee(s):**

Manoj Verma of Department of Energy & Environmental, Chhattisgarh Swami Vivekanand Technical Durg Chhattisgarh 491107 India

Harish Kumar Ghritlahre of Department of Energy & Environmental Eng, University Teaching Department (UTD), Chhattisgarh Swami Vivekanand Technical Bhilai, Durg Chhattisgarh 491107 India

Y. Siva Kumar Reddy of Mechanical Engineering Department, RGM College of Engineering and Technology Nandyal Andhra Pradesh 518501 India

Shobha Lata Sinha of Professor, Department of Mechanical Eng, National Institute of Technology Raipur Raipur Chhattisgarh 492013 India

K Rajyalakshmi of Department of Mathematics, Koneru Lakshmaiah Education Foundation Guntur Andhra Pradesh 522502 India

Abhishek Dasore of School of Mechanical Engineering, RGM College of Engineering and Technology Nandyal Andhra Pradesh 518501 India

Ramakrishna Balijepalli of Department of Mechanical Engineering, RGM College of Engineering and Technology Nandyal Andhra Pradesh 518501 India

Prem Kumar Chaurasiya of Mechanical Engineering, Sagar Institute of Science & Technology Bhopal Madhya Pradesh 462036 India

Krishnakant Dhakar of Department of Industrial & Production Eng, Shri G.S. Institute of Technology & Science Indore Madhya Pradesh 452003 India

Upendra Rajak of Department of Mechanical Engineering, RGM College of Engineering and Tech. Nandyal Andhra Pradesh 518501 India

**Title of invention:**

A SMART DEVICE FOR MAINTAIN GREENHOUSE CONTROLLING ENVIRONMENTS PARAMETERS.

**Name of inventor(s):**

Verma, Manoj; Ghritlahre, Harish Kumar; Reddy, Y. Siva Kumar; Sinha, Shobha Lata; Rajyalakshmi, K.; Dasore, Abhishek; Balijepalli, Ramakrishna; Chaurasiya, Prem Kumar; Dhakar, Krishnakant and Rajak, Upendra

**Term of Patent:**

Eight years from 18 April 2021



Dated this 19<sup>th</sup> day of May 2021

Commissioner of Patents

**PATENTS ACT 1990**

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.



Australian Government

IP Australia

# CERTIFICATE OF GRANT INNOVATION PATENT

**Patent number:** 2021102000

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.

**Priority details:**

**Number**  
UNKNOWN

**Date**  
18 April 2021

**Filed with**  
AU



Dated this 19<sup>th</sup> day of May 2021

Commissioner of Patents

## PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.



**Sect 120(1A)** Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

- (1) Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:
  - (a) a declaration that the threats are unjustifiable; and
  - (b) an injunction against the continuance of the threats; and
  - (c) the recovery of any damages sustained by the applicant as a result of the threats.
- (2) Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

*Certain threats of infringement proceedings are always unjustifiable.*

- (1) If:
- (a) a person:
    - (i) has applied for an innovation patent, but the application has not been determined; or
    - (ii) has an innovation patent that has not been certified; and
  - (b) the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be;
- then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

(2) If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

(3) If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

**certified**, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent