पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 42/2024	शुक्रवार	दिनांक: 18/10/2024
ISSUE NO. 42/2024	FRIDAY	DATE: 18/10/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :06/10/2024
(21) Application No.202441075576 A
(43) Publication Date : 18/10/2024

(54) Title of the invention : HYBRID CHARGER FOR RELIABLE AND CONTINUOUS POWER SUPPLY USING SOLAR AND WIND ENERGY

(51) International classification :H02S10/12, H02S40/38, H02J7/00, H02J7/14, H02J7/35, F03D9/25
(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 :**
1)CMR COLLEGE OF ENGINEERING & TECHNOLOGY
Address of Applicant :KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401. Hyderabad ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)B. BALAKRISHNA
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
2)K. RAJU
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
3)B. SURESH RAM
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
4)K SATHISH
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
5)G. KARTHIK REDDY
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
6)B. CHARITH
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
7)CH. SAHASRA
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------
8)T. NAVYA
Address of Applicant :CMR College of Engineering & Technology, Kandlakoya, Medchal Road, Hyderabad hyderabad ---------- ----------

(57) Abstract :
HYBRID CHARGER FOR RELIABLE AND CONTINUOUS POWER SUPPLY USING SOLAR AND WIND ENERGY ABSTRACT The present invention relates to a hybrid charger designed to provide continuous and reliable power for electronic devices by harnessing both solar and wind energy. The system integrates a solar panel that converts sunlight into electrical energy and a wind-powered dynamo that generates electricity from wind, ensuring a consistent power supply in variable environmental conditions. A charge controller regulates the energy flow from both sources, preventing overcharging, while a lithium-ion battery stores the harvested energy. A DC booster further enhances the system by upscaling the stored energy for compatibility with a variety of devices. This dual-source charging solution is especially suitable for outdoor activities and vehicles such as bicycles, offering a reliable power supply in remote and off-grid locations. The hybrid charger enhances energy security, making it ideal for camping, hiking, and emergency scenarios where access to conventional power sources is limited.

No. of Pages : 15 No. of Claims : 10