Patent Search

Invention Title	ANALYSIS OF HYBRID SOLAR AND WIND BASED ELECTRIC VEHICLE
Publication Number	18/2024
Publication Date	03/05/2024
Publication Type	INA
Application Number	202441032457
Application Filing Date	24/04/2024
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	MECHANICAL ENGINEERING
Classification (IPC)	F03D0009000000, G06Q0010060000, H02S0010120000, F03D0009250000, F03D0009110000

Inventor

Name	Address	Country
Dr. B.M. MANJUNATHA	ASSOCIATE PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING, RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING AND TECHNOLOGY, NANDYAL, ANDHRA PRADESH- 518501, INDIA	India
Dr. ANJAY KUMAR MISHRA	RESEARCH PROFESSOR, OPERATION MANAGEMENT KATHMANDU COLLEGE OF MANAGEMENT, KATHMANDU - 44600, NEPAL	Nepal
Dr.S.BOOBALAN	PROFESSOR & HEAD, EEE, MOHAMAD SATHAK ENGINEERING COLLEGE, KILAKARAI, TAMILNADU- 623806	India
KATTA CHINA NAGARAJU	ASSISTANT PROFESSOR, ECE DEPARTMENT, GODAVARI INSTITUTE OF ENGG AND TECHNOLOGY(A)- RAJAHMUNDRY, ANDHRA PRADESH, INDIA	India
Dr. KANNAN VELLINGIRI	CLDC RESEARCH AND DEVELOPMENT, NO.997, METTUPALAYAM ROAD, NEAR X-CUT SIGNAL, R.S.PURAM, COIMBATORE, TAMIL NADU -641002. INDIA (BHARAT)	India
Mr.J LOGESHWARAN	RESEARCH SCHOLAR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, SRI ESHWAR COLLEGE OF ENGINEERING, COIMBATORE- TAMIL NADU	India
Dr. E.GEETHA	PROFESSOR, MEDICAL ELECTRONICS, SENGUNTHAR ENGINEERING COLLEGE, TIRUCHENGODE, TAMILNADU- 637205, INDIA	India
Dr. RAJESH BHASKAR SURVASE	ASST. PROFESSOR, GEOGRAPHY (EARTH SCIENCE), EKNATH SITARAM DIVEKAR COLLEGE VARVAND, PUNE, MAHARASHTRA,- 412215, INDIA	India
MENDA SREEVANI	DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL- 500043, HYDERABAD, INDIA	India
SHARMITHA D	ASSISTANT PROFESSOR II , KUMARAGURU COLLEGE OF TECHNOLOGY, ELECTRICAL & ELECTRONICS ENGINEERING, CHINNAVEDAMPATTI, COIMBATORE - 641049, TAMIL NADU.	India

Applicant

Name	Address	Country
Dr. B.M. MANJUNATHA	ASSOCIATE PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING, RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEERING AND TECHNOLOGY, NANDYAL, ANDHRA PRADESH- 518501, INDIA	India
Dr. ANJAY KUMAR MISHRA	RESEARCH PROFESSOR, OPERATION MANAGEMENT KATHMANDU COLLEGE OF MANAGEMENT, KATHMANDU - 44600, NEPAL	Nepal
Dr.S.BOOBALAN	PROFESSOR & HEAD, EEE, MOHAMAD SATHAK ENGINEERING COLLEGE, KILAKARAI, TAMILNADU- 623806	India
KATTA CHINA NAGARAJU	ASSISTANT PROFESSOR, ECE DEPARTMENT, GODAVARI INSTITUTE OF ENGG AND TECHNOLOGY(A)- RAJAHMUNDRY, ANDHRA PRADESH, INDIA	India
Dr. KANNAN VELLINGIRI	CLDC RESEARCH AND DEVELOPMENT, NO.997, METTUPALAYAM ROAD, NEAR X-CUT SIGNAL, R.S.PURAM, COIMBATORE, TAMIL NADU -641002. INDIA (BHARAT)	India
Mr.J LOGESHWARAN	RESEARCH SCHOLAR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, SRI ESHWAR COLLEGE OF ENGINEERING, COIMBATORE- TAMIL NADU	India
Dr. E.GEETHA	PROFESSOR, MEDICAL ELECTRONICS, SENGUNTHAR ENGINEERING COLLEGE, TIRUCHENGODE, TAMILNADU- 637205, INDIA	India
Dr. RAJESH BHASKAR SURVASE	ASST. PROFESSOR, GEOGRAPHY (EARTH SCIENCE), EKNATH SITARAM DIVEKAR COLLEGE VARVAND, PUNE, MAHARASHTRA,- 412215, INDIA	India
MENDA SREEVANI	DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, INSTITUTE OF AERONAUTICAL ENGINEERING, DUNDIGAL- 500043, HYDERABAD, INDIA	India
SHARMITHA D	ASSISTANT PROFESSOR II , KUMARAGURU COLLEGE OF TECHNOLOGY, ELECTRICAL & ELECTRONICS ENGINEERING, CHINNAVEDAMPATTI, COIMBATORE - 641049, TAMIL NADU.	India

Abstract:

ABSTRACT ANALYSIS OF HYBRID SOLAR AND WIND BASED ELECTRIC VEHICLE Hybrid electric vehicles (HEVs) are a promising alternative to traditional vehicles powere internal combustion engines, offering lower emissions and better fuel efficiency. However, their reliance on batteries remains a significant limitation to their widespre adoption. Hybrid solar and wind-based electric vehicles (HSW-EVs) have emerged as a potential solution to address this. The design of HSW-EVs incorporates a combi panels and wind turbines to harness renewable energy and charge the vehicle's batteries. The PV panels convert solar energy into electricity, while the wind turbines energy from the wind. This hybrid system provides a more constant and reliable energy source compared to standalone solar or wind-based systems, as wind energy is usually highest at night while solar energy production peaks during the day. An analysis of HSW-EVs involves studying the performance of their hybrid system in ter energy generation, along with other factors such as vehicle range, speed, and battery capacity. Additionally, the impact of environmental factors, such as varying weat conditions, on the energy production and overall performance of the HSW-EV must be considered. Furthermore, a cost-benefit analysis can determine the economic HSW-EVs and their potential to reduce operational costs in the long run.

Complete Specification

Description:FORM 2
THE PATENTS ACT,1970
(39 of 1970)
&
THE PATENT RULES, 2003
Complete Specification
(See section10 and rule13)
1. Title of the Invention: ANALYSIS OF HYBRID SOLAR AND WIND BASED ELECTRIC VEHICLE

2. Applicants
Name Nationality Address
Dr. B.M. MANJUNATHA Indian ASSOCIATE PROFESSOR, ELECTRICAL AND ELECTRONICS ENGINEERING, RAJEEV GANDHI MEMORIAL COLLEGE OF ENGINEEF AND TECHNOLOGY, NANDYAL, ANDHRA PRADESH- 518501, INDIA
Dr. ANJAY KUMAR MISHRA Indian RESEARCH PROFESSOR , OPERATION MANAGEMENT , KATHMANDU COLLEGE OF MANAGEMENT , KATHMANDU - 44600
Dr.S.BOOBALAN Indian PROFESSOR & HEAD, EEE, MOHAMAD SATHAK ENGINEERING COLLEGE, KILAKARAI, TAMILNADU- 623806

View Application Status