

पेटेंट कार्यालय  
शासकीय जर्नल

**OFFICIAL JOURNAL  
OF  
THE PATENT OFFICE**

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निर्गमन सं. 53/2021  
ISSUE NO. 53/2021

शुक्रवार  
**FRIDAY**

दिनांक: 31/12/2021  
DATE: 31/12/2021

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पेटेंट कार्यालय का एक प्रकाशन  
PUBLICATION OF THE PATENT OFFICE

(54) Title of the invention : Design of Electric Vehicle Using Non-Conventional Energy Source with the Impact of em-coil Housing Generator Setup & Wind Turbine System Hybridity

<p>(51) International classification :F03D0009250000, F03D0009320000, B60K0016000000, H02K0053000000, B60L0008000000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)<b>Name of Applicant :</b>  <b>1)Sathiyavel</b>  Address of Applicant :Dr.A.P.J.Abdulkalam Research centre,Marichetti Halli(Village &amp; Post ) -----  <b>2)Dr.Somnath G Kolgiri</b>  <b>3)Dr.S.Karthick</b>  <b>4)Dr.B.Gokula Krishnan</b>  <b>5)Dr.M.P.SenthilKumar</b>  <b>6)S.Purushothaman</b>  <b>Name of Applicant : NA</b>  <b>Address of Applicant : NA</b></p> <p>(72)<b>Name of Inventor :</b>  <b>1)Sathiyavel</b>  Address of Applicant :Dr.A.P.J.Abdulkalam Research centre,Marichetti Halli(Village &amp; Post ) -----  <b>2)Dr.Somnath G Kolgiri</b>  Address of Applicant :Associate professor &amp; Head of Department,Department of Mechanical Engineering,S.B.Patil College of Engineering,Pune. -----  <b>3)Dr.S.Karthick</b>  Address of Applicant :Associate Professor, Department of Electrical,Electronics and Communication Engineering,GITAM School of Technology,GITAM Deemed to be university,Bengaluru campus,Karnataka. -----  <b>4)Dr.B.Gokula Krishnan</b>  Address of Applicant :Associate professor,Department of Electrical and Electronics Engineering,PSV College of Engineering and Technology,Krishnagiri. -----  <b>5)Dr.M.P.SenthilKumar</b>  Address of Applicant :Professor/Department of Mechanical Engineering,PSV college of Engineering and Technology,Krishnagiri. ---  -----  <b>6)S.Purushothaman</b>  Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering VSB Engineering College, Karur -----  -----</p>
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## (57) Abstract :

A device for generating electrical energy (1250 watts) from the rotation of a wheel (250 watts) of a front side vehicle, Setup up the 500 watts of Wind turbine connected front and horizontal side (500watts) is disclosed. First method is disposed within a pneumatic tire and includes a coil housing having an interior chamber, which is aligned for receiving a magnet within the chamber. The permanent magnet (2) is mounted within a magnet housing which has a first end aligned for reception in the groove of the Electromagnet coil (1) housing, and a Second end in communication with the interior wall of a tire (5).As the tire rotates, electricity generated between the magnet and the coil. In the second method, vehicle is moving at the same time electric power generating by using front and back side connecting wind turbine (6) system. The Turbine acts as fence to the wind. While the wind forces at Electric vehicle which is in running condition, proceed the Turbine to move, certain of the wind energy transferred to the Rotor. When the rotor gyrated, the shaft also comes under gyrations, which transfers the mechanical energy into revolving energy. Generally with wind turbine Motor (7), the field winding is on the stator and the armature winding is on the rotor. Wind turbine Motors are in built with Shaft which makes further Operation for energy conversion through the concept of revolving energy to electrical energy process. The energy conversion is based on Faraday's laws of electromagnetic induction that dynamically induces an electro motive force into the wind turbine motor armature coils as it revolves. The revolving armature coil pass through this static magnetic field which in turn makes an electrical current in the coils. In turbine motor, the armature rotates so the full produced current must pass through a commutator and carbon brushes arrangement provided that electricity exists at its output terminal. Total number of turbine follows series and parallel configuration, finally all the method of electric power is connected in series and based on that power, and Electric vehicle becomes self-charging one.

No. of Pages : 23 No. of Claims : 5