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Department of Industrial Policy & Promotion,  
Ministry of Commerce & Industry,  
Government of India



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231035362 A

(19) INDIA

(22) Date of filing of Application :21/06/2022

(43) Publication Date : 29/07/2022

(54) Title of the invention : IoT Based Solar Powered Battery less Street Light

<p>(51) International classification : F03B0013060000, G05D0009120000, F24S0060300000, F03B0003120000, F03B0013000000</p> <p>(86) International Application No : PCT//</p> <p>(87) International Filing Date : 01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number : NA</p> <p>(61) Filing Date : NA</p> <p>(62) Divisional to Application Number : NA</p> <p>(62) Filing Date : NA</p>	<p>(71)Name of Applicant : 1)SWAMI VIVEKANANDA UNIVERSITY Address of Applicant : Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121 India Bara Kanthalia ----- Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)MR. ABHISHEK DHAR Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 2)MR. SAIKAT MAJUMDAR Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 3)MR. SAURABH ADHIKARI Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 4)MR. TITAS KUMAR NAG Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 5)MR. SOURAV SAHA Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 6)MS. RITUPARNA MITRA Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 7)MR. AVIK DATTA Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia ----- 8)MR. KOUSHIK CHATTERJEE Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY, Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal - 700121, India Bara Kanthalia -----</p>
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(57) Abstract :

The motivation of the inventionlies in designing a solar-hydro power-basedsystemthat effectively usestored water in the overhead tank as a running head for rotating the turbine, and generation of electricity. The main advantage of this system is that geyser pump works in the day time from the electrical energy produced solely by the PV panels. There is no dependency in water pumping methodology with the external power circuit so there is no consumption of electrical energy from the single-phase power supply. During the night time, the stored potential energy in the overhead water reservoir is converted to kinetic energy for successfully running the turbine generator set. Water level sensors are used that identify the water level of the tank, i.e. lower and upper water levels, and accordingly the water is passed downward through the pipe for successfully running the turbine. The electrical load is considered as 20 W LED lamps. It is expected the total solar-hydropower system can supply power continuously for three consecutive hours.

No. of Pages : 9 No. of Claims : 4