

(54) Title of the invention : AN IOT BASED INTELLIGENT CHARGING SYSTEM FOR RECHARGING BATTERIES OF ELECTRIC VEHICLE

(51) International classification :A61K0039000000, H04L0005000000, G01N0033574000, A61P0027020000, C07C0233250000

(86) International Application No :PCT//  
Filing Date :01/01/1900

(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)Dr. Sujit Kumar**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Jain (Deemed-to-be University), Bengaluru, India 562112 Bengaluru -----

**2)Dr. Sasanka Sekhor Sharma****3)Mr.G.Gnanakumar****4)Mrs. T. Shanmuga Priya****5)Dr. T. Vijay Muni****6)Dr.M.Mohan Prasad****7)Mr. S. Siva Chandran**

Name of Applicant : NA

Address of Applicant : NA

## (72)Name of Inventor :

**1)Dr. Sujit Kumar**

Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Jain (Deemed-to-be University), Bengaluru, India 562112 Bengaluru -----

**2)Dr. Sasanka Sekhor Sharma**

Address of Applicant :Assistant Professor, Department of Electrical Engineering, Assam Engineering College, Assam Science and Technological University, Jalukbari, Guwahati, India 781013 Guwahati -----

**3)Mr.G.Gnanakumar**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Panimalar Institute of Technology, Varadarajapuram, Chennai – 600123, Tamilnadu, India Chennai -----

**4)Mrs. T. Shanmuga Priya**

Address of Applicant :Associate Professor, Department of Electrical and Electronics Engineering, Mother Teresa College of Engineering and Technology, Mettusalai, Pudukkottai district – 622102 Tamilnadu, India Pudukkottai -----

**5)Dr. T. Vijay Muni**

Address of Applicant :Assistant Professor, Department of Electrical & Electronics Engineering, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur (Dt.), Andhra Pradesh - 522302 Vaddeswaram -----

**6)Dr.M.Mohan Prasad**

Address of Applicant :Associate Professor, Department of Mechanical Engineering, M.Kumarasamy College of Engineering, Karur - 639 113, Tamil Nadu Karur -----

**7)Mr. S. Siva Chandran**

Address of Applicant :Assistant Professor, Department of Mechanical Engineering, Sri Sai Ram Engineering College, West Tambaram, Chennai 600044, Tamil Nadu, India Chennai -----

## (57) Abstract :

The present invention discloses an IoT based intelligent charging system for recharging batteries of electric vehicle. The system includes, but not limited to, an IoT connectivity with a processor for managing an electric vehicle battery includes determining a management condition associated with the electric vehicle battery's state of charge, collecting state of charge information from an electric vehicle terminal, and determining if the state of charge information meets the predetermined state of charge management condition. Further, a supercapacitor with AI based output acts as the main source of electricity for the electric motor, which powers the vehicle transmission, and the electric motor, which is part of an electric vehicle. Accompanied Drawing [FIG. 1]

No. of Pages : 20 No. of Claims : 8