International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.14, pp 198-206, 2017

Wireless Charging of Electric Vehicles by Solar Powered Charging Station

Rajbansi Devmani Kamalbahadur*, S. Prabhu Ram, Konar S. Suresh, M.R.Venugopalan, R.Karthikeyan

Department of Electrical and Electronics Engineering, Velammal Institute of Technology, Chennai, Tamil Nadu, India

Abstract : Burning of fossil fuel is one of the major reasons for polluting the environment. This pollution and depletion of fossil fuel has opened up the market of electric vehicles and an emergence of use of renewable sources of energy. In electric vehicles, plug-in based charging method has major drawbacks such as charging a vehicle at a time, less reliability and spatial issues. To overcome these problems, this paper proposes the use of wireless power transfer (WPT) method for charging electric vehicles in parking stations and charging docks using solar energy, due to its numerous advantages. This paper also consists of detailed analysis of parallel-parallel compensator for increasing the effectiveness of WPT.
Keywords : Renewable energy, WPT, ICPT, resonance, PP compensation.

Rajbansi Devmani Kamalbahadur *et al* /International Journal of ChemTech Research**,** 2017,10(14): 198-206.

*****