IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 15, May 2023

Wireless Charging of Electric Vehicle While Driving

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Abstract: *The main functions of wireless charging is to transmit power by an electromagnetic field across a given space. As electric vehicles are a better alternative to curb the ongoing pollution it is vital to make amendments in the battery charging process to attain greater reliability. Electric vehicle battery charging can be done by plug in charging at charging stations or by wireless power transfer.*
Wireless power transfer can be implemented as a static or dynamic charging system. Dynamic charging system can be implemented to charge the vehicle even when it is in motion. By using inductive power transfers the power from source can be transferred to the chargeable batteries through transformer windings. For preplanned routes such dynamic charging stations can be set up for charging batteries. This will not only increase the use of electric vehicles but also make them efficient and reliable for large distances as well. The paper specially presents an evaluation on how the future EV development and wireless charging methods can be implemented.

Keywords: Wireless Power Transfer[WPT],Wireless Charging of Electric vehicles[WCEV],Wireless Electric Vehicle Charging System [WEVCS]

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