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# A New Approach to Electric Vehicle Charging using a Wireless Method

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Abstract: Electric cars must be recharged at power stations using a plug-in or static wireless charging technique. It takes longer to recharge, and some locations have no local power stations. Even if electric vehicles are currently a dominant force in the transportation sector, there are certain disadvantages. The main drawback of electric vehicles is the charging system, and because plug-in charging is an old technique, many companies have switched to wireless charging. However, there is one similarity between wireless and plug-in charging: both recharge vehicles while they are in a static position. Dynamic wireless charging is a new technique that can speed up vehicle charging and saves the battery charging wait time. Vehicles can be charged while it moving on the road resulting in the reduction of battery size. Dynamic wireless charging (DWC) technology is an innovation that is attracting the electric vehicle (EV) sectors because of its ability to solve several problems, including messy cables, safety concerns in wet situations, battery size issues, and battery charging wait times.

**Keywords:** Wireless Power Transfer, Compensation topologies, coil design

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