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Wireless bidirectional power system for electric vehicles - A review

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Abstract:

Wireless Electric Transfer (WET) is a cutting-edge technology that allows power to be transmitted without physical contact. Most power technology is being converted to wireless technology by various methods as technology advances. Even if electric vehicles and plug-in hybrids are relatively new and viable, it is insufficient to keep the power source unplugged a night before. When an electric car park in a designated parking area with a transmitter circuit in place, charging will begin automatically. The Inductively Coupled Power Transfer System (ICPT) was discovered to be an excellent way for charging electric automobiles wirelessly after a study of a few wireless charging systems (Electric Vehicles). Bidirectional IPT (Inductively Coupled Power Transfer System) presented in this paper is suitable for Vehicle to Grid (V2G) systems. For Electric Vehicle charging, this Bidirectional Wireless Power Transfer is a dependable, powerful, and effective technology. Wireless power approaches comprise two classes: non-radiative and radiative. The study will also improve the system's practicality, dependability, and efficiency.

Keywords:

Electric vehicles, inductively coupled power transfer, wireless power transfer, vehicle to grid.