Literature survey

4. A Reliable Sensor Network Infrastructure for Electric Vehicles to Enable Dynamic Wireless Charging Based on Machine Learning (2022)

Introduction:

Electric are gaining popularity in the recent past, due to the environmental change and energy crisis in the world, as an alternative source of transportation. EV(s) are very friendly to the environment, because of its free pollution nature. Developed countries in the world such as China, United Kingdom, and USA take initiatives to resolve the energy crisis in the world with an alternative technology.

To design new improved techniques for EV(s) charging are greatly emphasized on the management of different elec- trical machines, such as induction machine, magnet syn- chronous machine and switch reluctance machines

Advantages:

1.Unlimited mobility and no recharging hassles.

2.Due to dynamic and static energy transfer.

3.Applicable to all types of vehicles.

4.One technology for slow- and high-speed charging.

5.Safe, invisible and tamper-proof.

6.High power, high efficiency and cost-effective.

7.Low installation and maintenance requirements.

Disadvantages:

Firstly, negative mutual inductance between adjacent transmitter coils could generate negative current stress when several transmitting coils are supplied simultaneously. Secondly, design cost will be increased with many transmitting coils in a given length of the track.

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