(22) Date of filing of Application: 24/08/2024

(21) Application No.202431064052 A

(43) Publication Date: 30/08/2024

## (54) Title of the invention: "SMART ELECTRIC VEHICLE WIRELESS CHARGING STATION"

(51) International classification	:H02J0007000000, H02J0050120000, B60L0053120000, H02J0050100000, B60L0053660000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to	·N A

:NA

:NA

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## (57) Abstract

Application Number

Filing Date

A wireless charging system for electric cars is the subject of this innovation, which permits wireless power transfer without the requirement for physical connections. This system facilitates the efficient and sustainable use of energy by integrating many power sources, such as solar, wind, and fuel cells, to feed electricity to a compound electrical charging controller. The method maximizes energy transfer and extends travel time without requiring huge batteries by enabling dynamic wireless charging of electric vehicles while they are in motion. This feature lowers infrastructure expenses while improving the charging process' overall efficiency. The inconveniences associated with conventional cable charging methods are eliminated with wireless charging technology, which provides electric vehicles with quick, affordable, and dependable charging systems. For a better user experience, these systems operate efficiently and expedite the billing procedure. An option to conventional fixed charging technologies is of electric vehicles. It provides efficient and convenient in-motion charging for electric vehicles without the need for cables by using magnetic fields or induction. The efficiency, practicality, sustainability, and potential to completely transform the way electric vehicles are fueled and charged are all highlighted in these abstracts, which also show the cutting-edge features and advantages of smart electric vehicle wireless charging stations.

No. of Pages: 16 No. of Claims: 8