

Title (en)
DEVICE FOR INDUCTIVELY CHARGING AN ELECTRIC VEHICLE, AND METHOD FOR DETECTING ELECTRICALLY CONDUCTIVE FOREIGN BODIES IN SUCH A DEVICE

Title (de)
VORRICHTUNG ZUM INDUKTIVEN LADEN EINES ELEKTROFAHRZEUGS UND VERFAHREN ZUR DETEKTION VON ELEKTRISCH LEITFÄHIGEN FREMDKÖRPERN IN EINER SOLCHEN VORRICHTUNG

Title (fr)
DISPOSITIF DE CHARGE PAR INDUCTION D'UN VÉHICULE ÉLECTRIQUE ET PROCÉDÉ DE DÉTECTION DE CORPS ÉTRANGERS ÉLECTROCONDUCTEURS DANS UN DISPOSITIF DE CE TYPE

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Abstract (en)
[origin: WO2018091192A1] The invention relates to a device for inductively charging an electric vehicle (17), comprising a primary coil (11) for generating a main magnetic field (10) and a sensor coil system (30) for detecting electrically conductive foreign bodies, having at least one sensor coil. The sensor coils are arranged and connected relative to the primary coil (11) such that no voltages are induced by the main magnetic field (10) if interference magnetic fields generated by foreign bodies are absent in the sensor coil system (30), and a voltage is induced by the main magnetic field (10) if an interference magnetic field generated by a foreign body is present in the sensor coil system (30). The invention also relates to a method for detecting electrically conductive foreign bodies in a device according to the invention, wherein a main magnetic field (10) is generated by means of the primary coil (11), a voltage induced in the sensor coil system (30) by the main magnetic field (10) is measured, and an electrically conductive foreign body is detected if the measured voltage exceeds a specified threshold.

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Citation (search report)
See references of WO 2018091192A1

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