Title (en)

METHOD AND DEVICE FOR CONTROLLING THE AUTHORIZATION OF CHARGING PROCESSES OF ELECTRICALLY POWERED VEHICLES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KONTROLLE DER BERECHTIGUNG VON AUFLADEVORGÄNGEN ELEKTRISCH BETRIEBENER FAHRZEUGE

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR CONTRÔLER L'AUTORISATION DE PROCESSUS DE CHARGE DE VÉHICULES FONCTIONNANT À L'ÉLECTRICITÉ

Publication

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Application

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Abstract (en)

[origin: WO2011045249A2] The invention relates to a method for controlling the authorization of charging processes of electrically powered vehicles. According to the invention, a control unit is provided between a main connection and a plurality of charging outlet connected to the control unit by means of a power line. A vehicle to be charged is connected to one of the charging outlets, and the total charge current fed from the main connection to the charging outlets via the control unit is captured. Charging power requests are transmitted from each of the vehicles connected to the charging outlets to the control unit, and the entire charging current is compared to the sum of charging currents reported by the vehicles connected to the charging outlets. The charging outlets are switched off if the total charging current exceeds the sum. Connecting a vehicle to be charged comprises transmitting authorization information from the vehicle to the control unit. The authorization information is compared by the control unit to a list of authorized vehicles in order to check the authorization of the vehicle. Transmitting charging power requests and authorization information is provided by modulating an alternating current signal on the power line, wherein the alternating current signal reflects the authorization request or the charging power request. The invention further relates to a control device for performing the invention.

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