

Title (en)

METHOD AND DEVICE FOR DETERMINING AN OPERATING STRATEGY OF AN ELECTRICALLY DRIVEN VEHICLE, PREFERABLY A FUEL CELL VEHICLE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG EINER BETRIEBSSTRATEGIE EINES ELEKTRISCH ANGETRIEBENEN FAHRZEUGS, VORZUGSWEISE EINES BRENNSTOFFZELLEN-FAHRZEUGS

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR DÉTERMINER UNE STRATÉGIE DE FONCTIONNEMENT D'UN VÉHICULE À PROPULSION ÉLECTRIQUE, DE PRÉFÉRENCE D'UN VÉHICULE À PILE À COMBUSTIBLE

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Abstract (en)

[origin: WO2022268552A1] The invention relates to a method and a device for determining an operating strategy of an electrically operated vehicle, preferably a fuel cell vehicle. The invention also relates to a vehicle comprising a device of this type. The method involves determining (1) an optimal (in terms of predefined first target criteria) automatically adjusting target speed curve (7) of the vehicle on an upcoming route section (30) and a target charge status curve (8) of the high-voltage battery (27) according to route data (5) for the upcoming route section (30). The method also involves carrying out a model-predictive speed control (2) according to the determined target speed curve (7), wherein an optimal (in terms of a predefined second target criterion) curve of an electrical torque and/or an electrical drive power (9), preferably an electrical power of the inverter (22), of an electrical drive unit of the vehicle is determined. The method further involves carrying out a model-predictive control (3) of a charge status of the high-voltage battery according to the determined target charge status curve (8) and the curve of the torque and/or the electrical drive power, preferably the electrical power of the inverter, determined by the speed control (2).

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