

Title (en)

METHOD FOR OPTIMIZING THE SERVICE LIFE OF A BATTERY

Title (de)

VERFAHREN ZUR OPTIMIERUNG DER LEBENSDAUER EINER BATTERIE

Title (fr)

PROCÉDÉ POUR OPTIMISER LA DURÉE DE VIE D'UNE BATTERIE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2020260173A1] The invention relates to a method for optimizing the service life of a battery and to a device and a vehicle having means for implementing such a method. The method for managing the state of charge of a battery according to the invention comprises a step of determining a target state of charge as a function of the temperature of the battery, said target state of charge tending, in accordance with a reference degradation profile, to decrease when the temperature increases so as to control the degradation of the battery, and a step of charging the battery until the target state of charge is reached. Advantageously, since the reference degradation profile describes the relative increase in the internal resistance of the battery as a function of the time that has elapsed since the start of life of the battery at a reference state of charge and at a reference temperature, the target state of charge is effectively determined iteratively such that, at the end of a step of estimating the relative increase in the internal resistance, the estimated relative increase tends to remain lower than the relative increase extracted from the reference degradation profile. The device according to the invention is particularly suitable for the lithium batteries of combustion motor vehicles.

IPC 8 full level

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