Title (en)

DETERMINING OPERATING STATES OF AN INTERNAL COMBUSTION ENGINE BY MEANS OF A GENERATOR REGULATOR OF AN ELECTRIC MACHINE WHICH IS COUPLED TO THE INTERNAL COMBUSTION ENGINE

Title (de)

ERMITTELN VON BETRIEBSZUSTÄNDEN EINER BRENNKRAFTMASCHINE DURCH EINEN GENERATORREGLER EINER MIT DER BRENNKRAFTMASCHINE GEKOPPELTEN ELEKTRISCHEN MASCHINE

Title (fr)

DÉTERMINATION D'ÉTATS DE FONCTIONNEMENT D'UN MOTEUR À COMBUSTION INTERNE PAR UN RÉGULATEUR D'ALTERNATEUR D'UNE MACHINE ÉLECTRIQUE RELIÉE AU MOTEUR À COMBUSTION INTERNE

Publication

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Application

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Abstract (en)

[origin: WO2018041583A1] The invention relates to a method for determining an operating state (128a, 132a) of an internal combustion engine (112), comprising the following steps: determining the temporal course of a rotational speed (n) of an electric machine (114) coupled to the internal combustion engine (112); determining a mean value (DMD) of the rotational speed (122) from the temporal course of the rotational speed (122) and determining at least one rotational speed pattern (128, 132), produced by the internal combustion engine (112), from the temporal course of the rotational speed (122), the rotational speed pattern having an oscillation (O) superimposed over the temporal course of the mean value (DMD) of the rotational speed (122); and determining at least one operating state (128a, 132a) of the internal combustion engine (112) by comparing the mean value (DMD) of the rotational speed (122) to a first threshold value (Thl) and comparing an undulation (W) of the oscillation (O) superimposed over the temporal course of the mean value (DMD) of the rotational speed (122) to a rotational speed range (B). Furthermore, the invention relates to a corresponding computing unit (118) which is configured to carry out the method, to an electric machine (114) comprising the computing unit (118) and to a corresponding computer program.

IPC 8 full level

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Citation (search report)

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