

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 EINES VERBRENNUNGSMOTORS DURCH EINEN GENERATORREGLER EINER MIT DEM VERBRENNUNGSMOTOR GEKOPPELTEN ELEKTRISCHEN MASCHINE

Title (fr)

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

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Application

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Abstract (en)

[origin: WO2017129330A1] The invention relates to a method for determining an operating state (128a - 136a) of an internal combustion engine (112) by means of a control unit (118), preferably a regulator (120) of an electric machine (114) which is coupled to the internal combustion engine (112) and which comprises the steps of determining the time profile of at least one phase signal (121) of the electric machine (114), of determining the time profile of a rotational speed (122) of the electric machine (114) from the phase signal (121), of analysing the time profile of the rotational speed (122) and of deriving at least one rotational speed pattern (128 - 136), brought about by the internal combustion engine (112), from the time profile of the rotational speed (122), and of determining at least one operating state (128a - 136a) of the internal combustion engine (112) on the basis of the at least one derived rotational speed pattern (128 - 136). Furthermore, the invention relates to a corresponding computing unit (118) which is configured to carry out the method, to an electric machine (114) having the computing unit (118) and to a corresponding computer program.

IPC 8 full level

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