

Title (en)

METHOD FOR ESTIMATING THE THERMAL STATE OF AN ENGINE COMPONENT AND METHOD FOR CONTROLLING POWERTRAIN COMMANDS

Title (de)

VERFAHREN ZUR ABSCHÄTZUNG DES THERMISCHEN ZUSTANDES EINES MOTORBAUTEILS UND VERFAHREN ZUR STEUERUNG VON ANTRIEBSSTRANGBEFEHLEN

Title (fr)

PROCÉDÉ D'ESTIMATION DE L'ÉTAT THERMIQUE D'UN COMPOSANT MOTEUR ET PROCÉDÉ DE PILOTAGE DE COMMANDES GMP

Publication

**EP 4051897 A1 20220907 (FR)**

Application

**EP 20796867 A 20201005**

Priority

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Abstract (en)

[origin: WO2021084173A1] The present invention relates to a method for estimating the thermal state of an internal component of a heat engine of a powertrain, allowing thermal management to be improved in the event of engine shut-off. More specifically, the invention proposes, on the one hand, a method involving estimating the internal temperature (T<sub>m</sub>) of the engine based on the heat flow generated by the combustion of the working engine and on the action of the cooling fluid and, on the other hand, a method for controlling authorisations for engine shut-offs (CS\_auth) and a method for controlling the activation duration of a cooling pump as a function of said temperature (T<sub>m</sub>) in order to avoid thermal shocks. The invention is applicable to conventional and hybrid powertrains.

IPC 8 full level

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