Title (en)

METHOD FOR THE ROBUST IDENTIFICATION OF KNOCKING IN AN INTERNAL COMBUSTION ENGINE, CONTROL DEVICE, AND MOTOR VEHICLE

Title (de)

VERFAHREN ZUR ROBUSTEN KLOPFERKENNUNG IN EINER VERBRENNUNGSKRAFTMASCHINE, STEUERGERÄT UND KRAFTFAHRZEUG

Title (fr)

PROCÉDÉ D'IDENTIFICATION ROBUSTE DE CLIQUETIS DANS UN MOTEUR À COMBUSTION INTERNE, DISPOSITIF DE COMMANDE ET VÉHICULE À MOTEUR

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2022089866A1] The invention relates to a method for automatically identifying knocking in an internal combustion engine having a plurality of cylinders, variable inlet valve stroke and a knocking sensor. The invention further relates to a corresponding control device and to a motor vehicle equipped therewith. In the method, the internal combustion engine is operated with a closing of the inlet valve still in the induction stroke. In a predefined measurement time frame, a signal of the knocking sensor is received and evaluated with respect to a criterion for detecting knocking. A basic threshold value predefined for the identification of knocking is modified by means of a predefined variable interference factor, which depends on a relative point in time at which an inlet valve of at least one of the cylinders closes in relation to a predefined reference point. A signal based on the sensor signal is only identified as knocking if it reaches at least the modified basic threshold value.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2022089866A1

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