

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE OF A VEHICLE, IN PARTICULAR A MOTOR VEHICLE

Title (de)

VERFAHREN ZUM BETREIBEN EINER BRENNKRAFTMASCHINE EINES FAHRZEUGS, INSBESONDERE EINES KRAFTFAHRZEUGES

Title (fr)

MODE DE FONCTIONNEMENT D'UN MOTEUR A COMBUSTION INTERNE D'UN VEHICULE, NOTAMMENT D'UN VEHICULE AUTOMOBILE

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Application

EP 03775271 A 20031031

Priority

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Abstract (en)

[origin: WO2004046529A1] The invention relates to a method for operating an internal combustion engine of a vehicle, in particular a motor vehicle. Said method comprises a first operating range that represents a lean-operation range, whereby the operation switches from a lean-operation to a rich operation range by means of an engine control device in order to discharge the nitrogen oxide accumulator catalyst. According to the invention, the engine control device blocks a switch to the lean-operation range, if the higher fuel-consumption quantity for discharging the catalyst over a predefinable evaluation period, extending over several lean-operation phases, is identical to or greater than the lower fuel-consumption quantity, consumed by a lean operation in said monitoring period. The lower fuel-consumption quantity is determined as a function of a raw nitrogen-oxide mass flow value, averaged over the evaluation period, as a function of a fuel economy quantity, averaged over said period and achieved in the lean-operation phases that fall in said evaluation period in relation to the homogeneous operating range phases in said evaluation period and as a function of the time, averaged over the evaluation period, between two torque requests that exceed a predefinable load and/or speed threshold value and require a switch from the lean-operation range. The higher fuel-consumption quantity is determined as a function of a charged state of the accumulator catalyst, averaged over the evaluation period.

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