

Title (en)

METHOD FOR OPERATING A DIESEL ENGINE HAVING AN EXHAUST GAS CLEANING SYSTEM COMPRISING A NITROGEN OXIDE STORAGE CATALYTIC CONVERTER

Title (de)

VERFAHREN ZUM BETREIBEN EINES DIESELMOTORS MIT EINER EINEN STICKOXID-SPEICHERKATALYSATOR AUFWEISENDEN ABGASREINIGUNGSANLAGE

Title (fr)

PROCÉDÉ POUR FAIRE FONCTIONNER UN MOTEUR DIESEL AVEC UN SYSTÈME D'ÉPURATION DE GAZ D'ÉCHAPPEMENT COMPORTANT UN CATALYSEUR D'ACCUMULATION D'OXYDES D'AZOTE

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Application

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Abstract (en)

[origin: WO2010060503A1] The invention relates to a method wherein an air-fuel mixture having a lambda value is combusted in a combustion chamber of the diesel engine (1) and exhaust gas arising therefrom is fed into the nitrogen oxide storage catalytic converter (6). Starting from operation of the diesel engine (1) in a first operating mode, wherein the air-fuel mixture comprises a first lambda value greater than one, operation of the diesel engine (1) in a second operating mode is selected for regenerating the nitrogen oxide storage catalytic converter (6), wherein the air-fuel mixture comprises a second lambda value of less than one. Directly before selecting the second operating mode, a transition phase is inserted, in which the diesel engine (1) is operated in a third operating mode, wherein a third lambda value less than that of the first operating mode, and slightly greater than one, is set for the air-fuel mixture. According to the invention, operation of the diesel engine (1) takes place in the third operating mode and is controlled relative to the lambda value of the air-fuel mixture such that an exhaust gas lambda value is captured by means of a lambda sensor (9) disposed downstream of the nitrogen oxide storage catalytic converter (6) in the exhaust gas cleaning system (2), and said value is used as a control parameter for controlled adjustment of a prescribable target value for the third lambda value.

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