

Title (en)

METHOD FOR INCREASING THE NO_x CONVERSION RATE OF DETERIORATED NO_x STORAGE CATALYSTS

Title (de)

VERFAHREN ZUR ERHÖHUNG DER NO_x-UMSATZRATE VON GESCHÄDIGTEN NO_x-SPEICHERKATALYSATOREN

Title (fr)

PROCEDE POUR ACCROITRE LE TAUX DE CONVERSION DE NO_x DE CATALYSEURS ACCUMULATEURS DE NO_x ALTERES

Publication

EP 1198666 A1 20020424 (DE)

Application

EP 00929557 A 20000526

Priority

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- EP 0004808 W 20000526

Abstract (en)

[origin: DE19926148A1] Disclosed is a method for compensating deterioration or ageing of NO_x storage catalysts by specifically increasing the NO_x conversion rate in accordance with a specific excess consumption threshold value. According to extent of damage ascertained, the following measures are proposed either individually or in a combined manner so that the catalyst can be used over a longer period without being replaced: modification of the lean-rich operation period until NO_x regeneration or desulphation is initiated or terminated; constant or chronologically variable off-setting to the lambda-input of a fresh NO_x storage catalyst while NO_x regeneration or desulphation is carried out to a maximum extent of $\lambda > 0.25$; modification of the exhaust gas recirculation rate, ignition point, start of injection, duration of injection, tumble valve position, valve control times, compression and/or supercharging pressure in order to reduce lean NO_x raw emission in accordance with certain marginal conditions for exhaust gas temperature, exhaust gas mass flow and HC or CO emission rate; extension of the operating mode, with $\lambda = 1$, to characteristic mapping ranges wherein lean operation is possible for a non-deteriorated catalyst.

IPC 1-7

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Citation (search report)

See references of WO 0077371A1

Citation (examination)

- EP 0733786 A2 19960925 - TOYOTA MOTOR CO LTD [JP]
- US 5778666 A 19980714 - CULLEN MICHAEL JOHN [US], et al

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