Title (en)

LEAN REGENERATION OF NOx STORAGE UNITS

Title (de)

MAGER-REGENERATION VON NOx-SPEICHERN

Title (fr)

REGENERATION D'ACCUMULATEURS DE NOx DE MOTEURS A MELANGE PAUVRE

Publication

EP 1049861 B1 20021016 (DE)

Application

EP 98965852 A 19981217

Priority

- DE 19801815 A 19980119
- EP 9808290 W 19981217

Abstract (en)

[origin: DE19801815A1] A lean-burn internal combustion engine exhaust gas cleaning process comprises alternate exposure of catalyst portions to rich and lean exhaust gas in a relatively oxygen-rich exhaust gas. An exhaust gas cleaning process, for a lean-burn, lambda regulated internal combustion (i.c) engine with a NOx storage catalyst and a lambda probe, comprises exposing each volume element of the catalyst at alternating times and locations to rich and lean exhaust gas when the exhaust gas is a stoichiometric or lean exhaust gas with relatively high oxygen concentration. The lambda value preferably oscillates about a mean value lambda m of \-1, the oscillation being a sinusoidal or triangular oscillation of variable amplitude and/or frequency and the frequency being \-0.1 Hz. The mean value lambda m is generated by cylinder-selective regulation of the engine, in which some of the cylinders are operated with different rich lambda values and the others are operated with different lean lambda values. Regulation of the lean exhaust gas is achieved by changing the fuel reduction rate or by varying the dead times of the injected quantity changes.

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