

Title (en)
LEAN REGENERATION OF NO_x STORAGE UNITS

Title (de)
MAGER-REGENERATION VON NO_x-SPEICHERN

Title (fr)
REGENERATION D'ACCUMULATEURS DE NO_x DE MOTEURS A MELANGE PAUVRE

Publication
EP 1049861 A1 20001108 (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 NO_x 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 $\lambda - 1$, the oscillation being a sinusoidal or triangular oscillation of variable amplitude and/or frequency and the frequency being $\lambda - 0.1$ 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.

IPC 1-7
F02D 41/02; F01N 3/08

IPC 8 full level
F01N 3/08 (2006.01); **F02D 41/00** (2006.01); **F02D 41/02** (2006.01); **F02D 41/34** (2006.01); **F02B 1/04** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP)
F01N 3/0842 (2013.01); **F01N 3/0871** (2013.01); **F02D 41/0082** (2013.01); **F02D 41/0275** (2013.01); **F02B 1/04** (2013.01); **F02D 41/1408** (2013.01)

Citation (search report)
See references of WO 9936689A1

Designated contracting state (EPC)
DE ES FR GB IT SE

DOCDB simple family (publication)
DE 19801815 A1 19990722; DE 59806001 D1 20021121; EP 1049861 A1 20001108; EP 1049861 B1 20021016; WO 9936689 A1 19990722

DOCDB simple family (application)
DE 19801815 A 19980119; DE 59806001 T 19981217; EP 9808290 W 19981217; EP 98965852 A 19981217