Title (en)

EXHAUST EMISSION CONTROL SYSTEM FOR LEAN ENGINES AND METHOD FOR OPERATING THE SYSTEM

Title (de)

ABGASREINIGUNGSANLAGE FÜR MAGERMOTOREN UND VERFAHREN ZUM BETREIBEN DER ANLAGE

Title (fr)

INSTALLATION D'ÉPURATION DES GAZ D'ÉCHAPPEMENT POUR MOTEURS À MÉLANGE PAUVRE ET PROCÉDÉ DE MISE EN UVRE DE L'INSTALLATION

Publication

EP 2104782 A1 20090930 (DE)

Application

EP 07857042 A 20071221

Priority

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- EP 06026858 A 20061223
- EP 07857042 A 20071221

Abstract (en)

[origin: WO2008077602A1] An exhaust emission control system for controlling the emission of exhaust gases of a lean engine with several cylinders contains a first exhaust pipe (3) for the exhaust gases of a first group of cylinders (2) and a second exhaust pipe (31) for the exhaust gases of a second group of cylinders (2'). A nitrogen oxide storage catalyst (6, 6') is disposed in each exhaust pipe. Downstream from the storage catalysts, the two exhaust pipes are united at an opening to a common exhaust pipe (5). The common exhaust pipe contains an SCR catalyst (7). The first and second groups of cylinders are periodically supplied opposite to each other alternately with a lean and a fat air/fuel mixture. Accordingly, lean or fat exhaust gases are produced in the cylinders during combustion and are emitted to the corresponding exhaust pipes. Lean and fat exhaust gases are matched to one another in such a way that, after the exhaust gases are brought together in the common exhaust pipe, a lean exhaust gas results. During the regeneration of the storage catalysts, ammonium may be formed, stored by the SCR catalyst, and reacted with nitrogen oxides which unintentionally pass through the storage catalysts during the storage phase.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2008077602A1

Citation (examination)

WO 2004061278 A1 20040722 - DAIMLER CHRYSLER AG [DE], et al

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 2007011319 W 20071221; BR PI0721036 A 20071221; CA 2673628 A 20071221; EP 07857042 A 20071221; JP 2009541903 A 20071221; KR 20097015405 A 20071221; US 51998907 A 20071221