

Title (en)

METHOD FOR DESULPHURISING AT LEAST ONE NOX STORAGE CATALYST LOCATED IN THE EXHAUST GAS CHANNEL OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR ENTSCHEFELUNG VON WENIGSTENS EINEM IN EINEM ABGASKANAL EINER VERBRENNUNGSKRAFTMASCHINE ANGEORDNETEN NO X-SPEICHERKATALYSATORS

Title (fr)

PROCEDE POUR LA DESULFURATION D'AU MOINS UN CATALYSEUR DE STOCKAGE DES NOX PLACE DANS UN CONDUIT D'ECHAPPEMENT D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1301698 A1 20030416 (DE)

Application

EP 01949366 A 20010529

Priority

- DE 10032561 A 20000705
- EP 0106098 W 20010529

Abstract (en)

[origin: WO0202921A1] The invention relates to a method for desulphurising at least one NOx storage catalyst located in the exhaust gas channel of an internal combustion engine. According to the inventive method, at least one gas sensor is located downstream from the NOx storage catalyst. When desulphurising is required, a minimum temperature of the NOx storage catalyst and a rich working mode of the internal combustion engine with $\lambda < 1$ is adjusted by at least temporarily influencing at least one working parameter of the internal combustion engine. The invention is characterised in that a) the internal combustion engine (14) is operated in a first phase (t1) when a need for desulphurising has been established, in the presence of a minimum temperature, initially according to a lean working mode with $\lambda > 1$ until a first threshold value (Sm) for lambda is reached in the gas sensor (21), b) the internal combustion engine (14), is operated in a second phase (t2) in a rich working mode with $\lambda < 1$ once the first threshold value (Sm) has been reached until a second threshold value (Sf) for lambda is reached in the gas sensor (21) or a measured or calculated H2S concentration downstream from the NOx storage catalyst reaches a threshold (Ss), c) the first phase (t1) and the following second phase (t2) are repeated until a measurable degree of sulphurisation is reached.

IPC 1-7

F02D 41/02; F01N 3/023; F02D 41/14

IPC 8 full level

F01N 3/023 (2006.01); **F02D 41/02** (2006.01); **F02D 41/14** (2006.01); F01N 3/08 (2006.01)

CPC (source: EP)

F01N 3/023 (2013.01); **F01N 3/0842** (2013.01); **F02D 41/028** (2013.01); **F02D 41/1441** (2013.01); **F02D 41/1444** (2013.01); F01N 2570/04 (2013.01)

Citation (search report)

See references of WO 0202921A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

WO 0202921 A1 20020110; DE 10032561 A1 20020711; DE 50112377 D1 20070531; EP 1301698 A1 20030416; EP 1301698 B1 20070418

DOCDB simple family (application)

EP 0106098 W 20010529; DE 10032561 A 20000705; DE 50112377 T 20010529; EP 01949366 A 20010529