

Title (en)
METHOD FOR CARRYING OUT THE SELECTIVE CATALYTIC REDUCTION OF NITROGEN OXIDES WITH AMMONIA IN THE LEAN EXHAUST GAS OF A COMBUSTION PROCESS

Title (de)
VERFAHREN ZUR SELEKTIVEN KATALYTISCHEN REDUKTION VON STICKOXIDEN MIT AMMONIAK IM MAGEREN ABGAS EINES VERBRENNUNGSPROZESSES

Title (fr)
PROCEDE POUR LA REDUCTION CATALYTIQUE SELECTIVE D'OXYDES D'AZOTE AVEC DE L'AMMONIAC DANS DES EFFLUENTS GAZEUX MAIGRES DEGAGES PAR UN PROCESSUS DE COMBUSTION

Publication
EP 1395352 A1 20040310 (DE)

Application
EP 02740480 A 20020418

Priority
• DE 10124548 A 20010519
• EP 0204274 W 20020418

Abstract (en)
[origin: WO02094420A1] The invention relates to a method for carrying out the selective catalytic reduction of nitrogen oxides with ammonia in the lean exhaust gas of a combustion process executed using a first lean air/fuel mixture. According to the invention, the ammonia required for the selective reduction is obtained from a second rich air/fuel mixture, which contains nitrogen monoxide, by reducing the nitrogen monoxide in a NH_3 synthesis stage to ammonia while forming a product gas stream. The ammonia produced thereby is separated out from the product gas stream and is stored in a storage medium for the requirement-orientated use during the selective catalytic reduction.

IPC 1-7
B01D 53/94; **F01N 3/08**; **B01D 53/32**; **C01C 1/02**

IPC 8 full level
F01N 3/08 (2006.01); **B01D 53/56** (2006.01); **B01D 53/94** (2006.01); **C01C 1/02** (2006.01); **F01N 3/20** (2006.01)

CPC (source: EP US)
B01D 53/9409 (2013.01 - EP US); **B01D 53/9436** (2013.01 - EP US); **C01C 1/02** (2013.01 - EP US); **F01N 2570/18** (2013.01 - EP US); **F01N 2610/02** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02094420 A1 20021128; DE 10124548 A1 20021128; EP 1395352 A1 20040310; JP 2004535284 A 20041125; US 2004136890 A1 20040715

DOCDB simple family (application)
EP 0204274 W 20020418; DE 10124548 A 20010519; EP 02740480 A 20020418; JP 2002591130 A 20020418; US 47797103 A 20031117