

Title (en)

CATALYST SYSTEM FOR REDUCING NITROGEN OXIDES

Title (de)

KATALYSATOR-SYSTEM ZUR REDUKTION VON STICKOXIDEN

Title (fr)

SYSTÈME DE CATALYSEUR POUR LA RÉDUCTION D'OXYDES D'AZOTE

Publication

EP 3180107 A1 20170621 (DE)

Application

EP 15757157 A 20150812

Priority

- EP 14180742 A 20140813
- EP 2015068507 W 20150812

Abstract (en)

[origin: WO2016023928A1] The invention relates to a catalyst system for reducing nitrogen oxides, which comprises a nitrogen oxide storage catalyst and an SCR catalyst, wherein the nitrogen oxide storage catalyst comprises at least two catalytically active washcoat layers on a supporting body, wherein a lower washcoat layer A contains cerium oxide, an alkaline earth compound and/or alkali compound, and platinum and palladium and an upper washcoat layer B, which is arranged over the washcoat layer A, contains cerium oxide, platinum and palladium and no alkli compound and no alkaline earth compound. The invention also relates to a method for converting NOx in exhaust gases of motor vehicles that are operated by means of engines that are operated in a lean manner.

IPC 8 full level

B01D 53/94 (2006.01); B01J 23/63 (2006.01); B01J 29/76 (2006.01); B01J 35/00 (2006.01); F01N 3/08 (2006.01); F01N 3/20 (2006.01)

CPC (source: CN EP KR US)

**B01D 53/9418 (2013.01 - EP KR US); B01D 53/9422 (2013.01 - EP KR US); B01D 53/9477 (2013.01 - CN EP KR US);
B01J 23/02 (2013.01 - US); B01J 23/10 (2013.01 - US); B01J 23/44 (2013.01 - US); B01J 23/464 (2013.01 - US);
B01J 23/63 (2013.01 - EP KR US); B01J 29/763 (2013.01 - EP KR US); B01J 35/19 (2024.01 - EP KR US); B01J 35/56 (2024.01 - EP KR US);
B01J 37/0244 (2013.01 - EP KR US); B01J 37/0246 (2013.01 - US); F01N 3/0814 (2013.01 - CN EP KR US); F01N 3/0842 (2013.01 - US);
F01N 3/2066 (2013.01 - CN EP KR US); F01N 13/009 (2014.06 - KR); B01D 53/9418 (2013.01 - CN); B01D 53/9422 (2013.01 - CN);
B01D 2255/1021 (2013.01 - CN EP US); B01D 2255/1023 (2013.01 - CN EP US); B01D 2255/202 (2013.01 - CN EP US);
B01D 2255/204 (2013.01 - CN EP US); B01D 2255/2042 (2013.01 - CN EP US); B01D 2255/2047 (2013.01 - CN EP US);
B01D 2255/2065 (2013.01 - CN EP US); B01D 2255/20738 (2013.01 - CN EP US); B01D 2255/20746 (2013.01 - CN EP US);
B01D 2255/20761 (2013.01 - CN EP US); B01D 2255/50 (2013.01 - CN EP US); B01D 2255/9022 (2013.01 - CN EP US);
B01D 2255/91 (2013.01 - CN EP US); B01D 2258/012 (2013.01 - CN EP US); F01N 3/281 (2013.01 - CN EP US);
F01N 3/2828 (2013.01 - CN EP US); F01N 13/009 (2014.06 - CN EP US); F01N 2330/06 (2013.01 - CN EP US); F01N 2370/02 (2013.01 - US);
F01N 2510/063 (2013.01 - CN EP US); Y02A 50/20 (2017.12 - EP US); Y02T 10/12 (2013.01 - CN EP US)**

Citation (search report)

See references of WO 2016023928A1

Cited by

US10226754B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2985068 A1 20160217; CN 107148310 A 20170908; EP 3180107 A1 20170621; JP 2017524520 A 20170831; JP 6700250 B2 20200527;
KR 20170040352 A 20170412; US 10443463 B2 20191015; US 2017218809 A1 20170803; WO 2016023928 A1 20160218**

DOCDB simple family (application)

**EP 14180742 A 20140813; CN 201580043268 A 20150812; EP 15757157 A 20150812; EP 2015068507 W 20150812;
JP 2017505629 A 20150812; KR 20177006771 A 20150812; US 201515328658 A 20150812**