

Title (en)

PARTICLE REDUCTION HAVING A COMBINED SCR AND NH3 SLIP CATALYST

Title (de)

PARTIKELMINDERUNG MIT KOMBINIERTEM SCR- UND NH3- SCHLUPF - KATALYSATOR

Title (fr)

RÉDUCTION DE PARTICULES AVEC UN CATALYSEUR COMBINÉ SCR ET CONTRE LES DÉGAGEMENTS DE NH3

Publication

**EP 2349537 A1 20110803 (DE)**

Application

**EP 09748051 A 20091104**

Priority

- EP 2009007906 W 20091104
- DE 102008055890 A 20081105

Abstract (en)

[origin: WO2010051983A1] The present invention relates to a particulate filter, comprising a porous carrier body, an SCR-active component and an oxidation catalyst, wherein the SCR-active component is present as a coating on the exhaust gas inlet surface and on the inside surface of the porous carrier body, and the oxidation catalyst is present as a coating on the exhaust gas outlet surface of the porous carrier body. According to the invention, the oxidation catalyst changes the function thereof, depending on the operating conditions. In normal operation, it serves as an NH3 slip catalyst for oxidizing excess NH3, and during filter regeneration, it operates according to the 3-way principle for converting NOx and CO. The invention also relates to a method for producing the particulate filter, to the use of the particulate filter for treating exhaust gases from the combustion of fossil or synthetic fuels or biofuels, and to an exhaust gas purification system containing the particulate filter according to the invention.

IPC 8 full level

**B01D 53/94** (2006.01); **B01J 23/40** (2006.01); **B01J 29/072** (2006.01); **F01N 3/035** (2006.01)

CPC (source: EP US)

**B01D 53/9468** (2013.01 - EP US); **B01J 23/40** (2013.01 - EP US); **B01J 23/42** (2013.01 - EP US); **B01J 23/44** (2013.01 - EP US); **B01J 23/464** (2013.01 - EP US); **B01J 23/96** (2013.01 - EP US); **B01J 29/072** (2013.01 - EP US); **B01J 29/46** (2013.01 - EP US); **B01J 35/30** (2024.01 - EP US); **B01J 35/56** (2024.01 - EP US); **B01J 35/657** (2024.01 - EP US); **B01J 37/024** (2013.01 - EP US); **B01J 37/0246** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F01N 3/103** (2013.01 - EP US); **F01N 3/2066** (2013.01 - EP US); **B01D 53/9418** (2013.01 - EP US); **B01D 53/944** (2013.01 - EP US); **B01D 2251/2067** (2013.01 - EP US); **B01D 2255/1021** (2013.01 - EP US); **B01D 2255/1025** (2013.01 - EP US); **B01D 2255/20738** (2013.01 - EP US); **B01D 2255/504** (2013.01 - EP US); **B01D 2255/9155** (2013.01 - EP US); **B01D 2258/012** (2013.01 - EP US); **B01D 2325/10** (2013.01 - EP US); **F01N 2250/02** (2013.01 - EP US); **F01N 2510/0682** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US); **Y10S 502/52719** (2013.01 - EP US); **Y10S 502/52724** (2013.01 - EP US)

Citation (search report)

See references of WO 2010051983A1

Cited by

EP2483537A4

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**DE 102008055890 A1 20100512**; EP 2349537 A1 20110803; US 2011229391 A1 20110922; US 8883100 B2 20141111; WO 2010051983 A1 20100514

DOCDB simple family (application)

**DE 102008055890 A 20081105**; EP 09748051 A 20091104; EP 2009007906 W 20091104; US 200913127849 A 20091104