

Title (en)

PURIFICATION STRUCTURE INCLUDING A CATALYSIS SYSTEM SUPPORTED BY A ZIRCON IN REDUCED STATE

Title (de)

REINIGUNGSSTRUKTUR MIT KATALYSESYSTEM MIT ZIRKON IN REDUZIERTEM ZUSTAND

Title (fr)

STRUCTURE DE PURIFICATION INCORPORANT UN SYSTEME DE CATALYSE SUPPORTEE PAR UNE ZIRCONNE A L'ETAT REDUIT

Publication

EP 2379207 A1 20111026 (FR)

Application

EP 09803879 A 20091216

Priority

- FR 2009052576 W 20091216
- FR 0858720 A 20081217

Abstract (en)

[origin: WO2010076509A1] The invention relates to a structure for filtering a gas emitted by a diesel engine and laden with gaseous pollutants such as nitrogen oxides NO_x and solid particles, such as a particle filter, characterised in that said filtering structure includes a catalytic system including at least one noble or transition metal suitable for reducing NO_x and a carrier material, wherein said carrier material includes or is made of zirconium oxide partially substituted by a trivalent cation M³⁺ or by a divalent cation M²⁺, said zirconium oxide being in a reduced state, with a sub-stoichiometric oxygen content.

IPC 8 full level

B01D 53/94 (2006.01); **B01J 21/06** (2006.01); **B01J 37/08** (2006.01); **B01J 37/16** (2006.01)

CPC (source: EP US)

B01D 53/945 (2013.01 - EP US); **B01J 23/58** (2013.01 - EP US); **B01J 23/63** (2013.01 - EP US); **B01J 23/78** (2013.01 - EP US); **B01J 23/83** (2013.01 - EP US); **B01J 23/894** (2013.01 - EP US); **B01J 23/8946** (2013.01 - EP US); **B01J 37/16** (2013.01 - EP US); **C04B 38/0006** (2013.01 - EP US); **B01D 2255/10** (2013.01 - EP US); **B01D 2255/20715** (2013.01 - EP US); **B01D 2258/012** (2013.01 - EP US); **B01J 35/33** (2024.01 - EP US); **B01J 35/56** (2024.01 - EP US); **B01J 35/612** (2024.01 - EP US); **B01J 37/348** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2010076509A1

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)

FR 2939695 A1 20100618; **FR 2939695 B1 20111230**; CN 102256688 A 20111123; CN 102256688 B 20150128; EA 201170830 A1 20111230; EP 2379207 A1 20111026; JP 2012512020 A 20120531; JP 5587907 B2 20140910; KR 20110096044 A 20110826; US 2011250112 A1 20111013; US 8802044 B2 20140812; WO 2010076509 A1 20100708

DOCDB simple family (application)

FR 0858720 A 20081217; CN 200980150676 A 20091216; EA 201170830 A 20091216; EP 09803879 A 20091216; FR 2009052576 W 20091216; JP 2011541560 A 20091216; KR 20117013808 A 20091216; US 200913139736 A 20091216