

Title (en)
EXHAUST GAS PURIFYING DEVICE

Title (de)
ABGASREINIGUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE PURIFICATION DE GAZ D'ECHAPPEMENT

Publication
EP 1669563 A1 20060614 (EN)

Application
EP 04787865 A 20040910

Priority
• JP 2004013225 W 20040910
• JP 2003319850 A 20030911

Abstract (en)
Provided is a plasma assisted exhaust emission control device with less electric power consumption and with no harmful gas discharged into atmosphere. A filter body (7) is constituted by porous members through which exhaust gas (2) passes for capturing of particulates in the exhaust gas (2) and is provided with rod-like and cylindrical electrodes (9,10) so as to generate plasma in the filter body (7), thereby providing a plasma regenerative particulate filter (11). The particulate filter (11) is accommodated in a filter casing (12) within an exhaust pipe (3). Oxidation catalysts (16,17) are arranged respectively upstream and downstream of and adjacent to the particular filter (11) in the filter casing (12) so as to obtain heat insulation effect to the particulate filter (11).

IPC 1-7
F01N 3/02; F01N 3/08

IPC 8 full level
F01N 3/02 (2006.01); **F01N 3/027** (2006.01); **B01D 46/42** (2006.01); **B01D 53/94** (2006.01); **B01J 19/08** (2006.01); **F01N 3/01** (2006.01); **F01N 3/022** (2006.01); **F01N 3/023** (2006.01); **F01N 3/025** (2006.01); **F01N 3/029** (2006.01); **F01N 3/035** (2006.01); **F01N 3/08** (2006.01); **F01N 3/18** (2006.01); **F01N 3/24** (2006.01); **F01N 3/28** (2006.01); **F01N 13/02** (2010.01); **F01N 13/04** (2010.01)

CPC (source: EP US)
B03C 3/025 (2013.01 - EP US); **B03C 3/06** (2013.01 - EP US); **B03C 3/155** (2013.01 - EP US); **B03C 3/41** (2013.01 - EP US); **B03C 3/49** (2013.01 - EP US); **F01N 3/0275** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F01N 3/103** (2013.01 - EP US); **F01N 13/0097** (2014.06 - EP US); **F01N 13/017** (2014.06 - EP US); **B03C 2201/12** (2013.01 - EP US); **B03C 2201/30** (2013.01 - EP US); **F01N 2240/28** (2013.01 - EP US)

Cited by
US9010086B2; CN108839540A; CN102498269A; EP1947303A4; RU2496012C1; DE102009041091A1; US2012186233A1; CN102574130A; RU2503829C2; US8790448B2; WO2012035033A1; WO2021038194A1; WO2018087505A1; WO2011029730A1; WO2010012553A1; WO2011029728A1; US9784161B2; US7954313B2; US8628606B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1669563 A1 20060614; EP 1669563 A4 20061220; EP 1669563 B1 20080625; DE 602004014627 D1 20080807; JP 2005083346 A 20050331; US 2007028603 A1 20070208; WO 2005026506 A1 20050324

DOCDB simple family (application)
EP 04787865 A 20040910; DE 602004014627 T 20040910; JP 2003319850 A 20030911; JP 2004013225 W 20040910; US 57153506 A 20060310