

Title (en)

Exhaust gas purification device for internal combustion engine

Title (de)

Abgasreinigungsvorrichtung für eine Brennkraftmaschine

Title (fr)

Dispositif d'épuration de gaz d'échappement pour un moteur à combustion interne

Publication

**EP 1176290 A1 20020130 (EN)**

Application

**EP 01117848 A 20010723**

Priority

- JP 2000223053 A 20000724
- JP 2000272186 A 20000907
- JP 2001040086 A 20010216

Abstract (en)

An exhaust gas purification device of an internal combustion engine in accordance with the present invention is provided with a NOx absorbent (70), which is provided in an exhaust passage (106,107) of the internal combustion engine (101), for occluding nitrogen oxide when an oxygen concentration of inflow exhaust gas is high and emitting the occluded nitrogen oxide when the oxygen concentration of the inflow exhaust gas falls, and poisoning eliminating means for, if necessity for eliminating poisoning of the NOx absorbent due to oxide arises, executing poisoning elimination processing of the NOx absorbent when the internal combustion engine is in a decelerating operation state and an idling operation state, and further provided with a particulate filter (20) on which a NOx absorbent is carried and poisoning eliminating means for, if necessity for eliminating poisoning of the particulate filter due to oxide and/or due to particulate matters arises, executing poisoning elimination processing of the particulate filter on condition that a decelerating operation state of the internal combustion engine is detected. <IMAGE>

IPC 1-7

**F01N 3/08**; **F01N 3/20**; **F02D 41/02**; **F02M 25/07**; **F01N 3/025**; **F02D 21/08**; **F02D 41/40**

IPC 8 full level

**F01N 3/025** (2006.01); **F01N 3/08** (2006.01); **F01N 3/20** (2006.01); **F02D 41/02** (2006.01); **F02D 41/12** (2006.01); **F02B 37/00** (2006.01); **F02D 41/00** (2006.01); **F02D 41/40** (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP KR)

**F01N 3/0253** (2013.01 - EP); **F01N 3/0821** (2013.01 - EP); **F01N 3/0842** (2013.01 - EP); **F01N 3/0871** (2013.01 - EP); **F01N 3/20** (2013.01 - KR); **F02D 41/029** (2013.01 - EP); **F02D 41/12** (2013.01 - EP); **F01N 2430/00** (2013.01 - EP); **F01N 2610/03** (2013.01 - EP); **F02B 37/00** (2013.01 - EP); **F02D 41/0055** (2013.01 - EP); **F02D 41/405** (2013.01 - EP); **F02M 26/05** (2016.02 - EP); **F02M 26/10** (2016.02 - EP); **F02M 26/15** (2016.02 - EP); **F02M 26/23** (2016.02 - EP); **F02M 26/33** (2016.02 - EP)

Citation (search report)

- [X] EP 0598917 A1 19940601 - TOYOTA MOTOR CO LTD [JP]
- [X] US 5992142 A 19991130 - POTT EKKEHARD [DE]
- [A] DE 19850757 A1 20000217 - VOLKSWAGEN AG [DE]
- [DA] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 11 29 November 1996 (1996-11-29)

Cited by

WO2008145667A1; FR2841935A1; EP1582719A1; FR2862097A1; EP1388647A3; FR2890686A1; FR2862103A1; FR2862098A1; FR2942855A1; EP1435443A3; EP1867846A1; EP3521596A1; US7313911B2; US8511070B2; US7634907B2; US7603850B2; WO2005049993A1; US6978602B2; US7549285B2; US7584606B2; US10174668B2; US8371110B2; WO2005049994A1; WO2016087133A1; WO2007031669A1; WO2005047679A1; WO2004076829A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1176290 A1 20020130**; **EP 1176290 B1 20070228**; DE 60126871 D1 20070412; DE 60126871 T2 20071115; KR 100441481 B1 20040723; KR 20020009459 A 20020201

DOCDB simple family (application)

**EP 01117848 A 20010723**; DE 60126871 T 20010723; KR 20010044119 A 20010723