

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 B1 20070228 (EN)

Application

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

Abstract (en)

[origin: EP1176290A1] 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 8 full level

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CPC (source: EP KR)

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Citation (examination)

- EP 0984142 A1 20000308 - TOYOTA MOTOR CO LTD [JP]
- EP 0862941 A2 19980909 - TOYOTA MOTOR CO LTD [JP]

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

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