

Title (en)

Internal combustion engine exhaust gas purification device

Title (de)

Vorrichtung zur Reinigung des Abgases einer Brennkraftmaschine

Title (fr)

Dispositif d'épuration des gaz d'échappement d'un moteur a combustion interne

Publication

**EP 1020620 B1 20040310 (DE)**

Application

**EP 99124898 A 19991217**

Priority

DE 19900967 A 19990113

Abstract (en)

[origin: EP1020620A1] Ozone generator for exhaust gas purification injects ozone (8) into the exhaust line just ahead of the oxidation catalyst Preferred Features: The exhaust line includes a catalyst (5), especially an oxidation catalyst, and/or a gas mixer (6). Ozone enters the exhaust gases, before they enter the catalyst and/or mixer. The point of introduction is spaced (b) upstream of the catalyst and/or mixer. The source is in the exhaust line itself or in a line introducing air or secondary air, upstream (b) of the catalyst and/or mixer. The ozone source is an ozone generator (7), supplied with fresh air or exhaust gases.

IPC 1-7

**F01N 3/08**; **F01N 3/20**; **F01N 3/22**

IPC 8 full level

**F01N 3/023** (2006.01); **F01N 3/08** (2006.01); **F01N 3/20** (2006.01); **F01N 3/22** (2006.01)

CPC (source: EP)

**F01N 3/0231** (2013.01); **F01N 3/08** (2013.01); **F01N 3/0892** (2013.01); **F01N 3/206** (2013.01); **F01N 3/22** (2013.01); **F01N 2240/38** (2013.01)

Citation (examination)

- EP 0341832 A2 19891115 - JOHNSON MATTHEY INC [US]
- EP 1117474 A1 20010725 - JOHNSON MATTHEY PLC [GB]
- EP 1060004 A1 20001220 - JOHNSON MATTHEY PLC [GB]

Cited by

EP1702665A1; EP1026373A3; CN102278243A; EP2072770A3; FR2844000A1; EP1329600A1; FR2862340A1; EP1538312A1; EP1333169A1; EP1116863A3; US7510600B2; US7121079B2; WO2004015250A1; WO2005035951A1; WO03027452A1; WO2004020798A1; WO2018118835A1; DE102017213980A1; WO2019029949A1; US10871443B2; DE102017213196A1; WO2019025186A1; US10358964B2; US11237141B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1020620 A1 20000719**; **EP 1020620 B1 20040310**; AT E261544 T1 20040315; DE 19900967 A1 20000720; DE 59908807 D1 20040415

DOCDB simple family (application)

**EP 99124898 A 19991217**; AT 99124898 T 19991217; DE 19900967 A 19990113; DE 59908807 T 19991217