

Title (en)

EXHAUST PURIFYING DEVICE FOR INTERNAL COMBUSTION ENGINE

Title (de)

ABGASREINIGUNGSVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)

DISPOSITIF D'ÉPURATION DES GAZ D'ÉCHAPPEMENT POUR MOTEUR À COMBUSTION INTERNE

Publication

**EP 2343440 A4 20121226 (EN)**

Application

**EP 09824733 A 20091022**

Priority

- JP 2009068543 W 20091022
- JP 2008284505 A 20081105

Abstract (en)

[origin: EP2343440A1] An exhaust purification system provided with an exhaust manifold (19), a catalytic converter (21) which is arranged at a downstream side of the exhaust manifold (19) at an angle with respect to the exhaust manifold (19) and which houses an NO X storage and reduction catalyst (20), and a reducing agent feed system (22) which feeds reducing agent into exhaust gas which passes through the inside of the exhaust manifold. The part of the inner wall surface of the casing (30) of the catalytic converter which faces the exhaust manifold outlet is provided with a projecting part (35) which projects out toward the diametrically outward direction of the casing (30). Part of the wall surface which defines the projecting part is formed so that a velocity component, in an axial direction of the casing, of at least part of the flow of exhaust gas which flows into the projecting part, is oriented in an opposite direction to the direction heading toward the NO X storage and reduction catalyst. The exhaust purification system of an internal combustion engine which suppresses an increase in pressure loss of the exhaust gas and causes the reducing agent which was fed from the reducing agent feed system to disperse in the exhaust gas is provided.

IPC 8 full level

**F01N 3/08** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP US)

**B01F 23/2132** (2022.01 - EP US); **B01F 25/25** (2022.01 - EP US); **F01N 3/0842** (2013.01 - EP US); **F01N 3/28** (2013.01 - EP US);  
**F01N 3/2892** (2013.01 - EP US); **F01N 3/2066** (2013.01 - EP US); **F01N 2240/20** (2013.01 - EP US); **F01N 2470/18** (2013.01 - EP US)

Citation (search report)

- [XP] EP 2075428 A2 20090701 - MITSUBISHI MOTORS CORP [JP], et al
- See references of WO 2010053033A1

Cited by

EP3587756A1; US10865686B2; WO2014032685A1; US9273641B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2343440 A1 20110713; EP 2343440 A4 20121226;** CN 102187070 A 20110914; JP 5104960 B2 20121219; JP WO2010053033 A1 20120405;  
US 2011225958 A1 20110922; WO 2010053033 A1 20100514

DOCDB simple family (application)

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US 200913127594 A 20091022