

Title (en)

EXHAUST GAS PURIFYING DEVICE FOR INTERNAL COMBUSTION ENGINE, AND SWIRL GENERATING DEVICE

Title (de)

ABGASREINIGUNGSVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR SOWIE WIRBELERZEUGUNGSVORRICHTUNG

Title (fr)

DISPOSITIF D'ÉPURATION DES GAZ D'ÉCHAPPEMENT POUR MOTEUR À COMBUSTION INTERNE, ET DISPOSITIF GÉNÉRANT UN TOURBILLON

Publication

EP 2325451 A4 20130220 (EN)

Application

EP 09814449 A 20090831

Priority

- JP 2009065168 W 20090831
- JP 2008241382 A 20080919

Abstract (en)

[origin: EP2325451A1] An exhaust gas purifying device for an internal combustion engine, provided with a swirl generating means for generating a swirl which has a strong swirl force and applying reduced resistance to the swirl. A swirl generating device for generating a swirl which has a strong swirl force and applying reduced resistance to the swirl is also provided. An exhaust gas purifying device (100) for an internal combustion engine is provided with an exhaust pipe (1), a reduction catalyst (2), a reducing agent supply means (3), and a swirl generating means (40). The swirl generating means (40) has two blades (410, 420) formed by dividing a substantially elliptic plate into two in the direction of the major axis thereof. The two blades (410, 420) are integrated together such that the two blades are rotated relative to each other about the minor axis of the plate so as to cross each other, and the two blades are mounted such that the direction of the major axis is parallel to the direction of flow of exhaust gas.

IPC 8 full level

B01F 3/04 (2006.01); **B01F 5/04** (2006.01); **B01F 5/06** (2006.01); **F01N 1/08** (2006.01); **F01N 3/28** (2006.01); **B04C 3/00** (2006.01)

CPC (source: EP US)

B01F 23/2132 (2022.01 - EP US); **B01F 25/3141** (2022.01 - EP US); **B01F 25/4315** (2022.01 - EP US); **B01F 25/4316** (2022.01 - EP US); **B01F 25/43162** (2022.01 - EP); **B01F 25/431974** (2022.01 - EP); **F01N 1/086** (2013.01 - EP US); **F01N 3/2892** (2013.01 - EP US); **B01F 25/43162** (2022.01 - US); **B01F 25/431974** (2022.01 - US); **B04C 2003/006** (2013.01 - EP US); **F01N 2240/20** (2013.01 - EP US)

Citation (search report)

- [YD] JP 2006029233 A 20060202 - NISSAN DIESEL MOTOR CO, et al
- [XY] US 3751009 A 19730807 - ARCHER S
- [XY] US 3643927 A 19720222 - CROUCH ROSS A
- [XY] JP S5195070 U 19760730
- [XY] JP S54105972 U 19790726
- [XY] JP S57204305 A 19821215 - TOKYO SHIBAURA ELECTRIC CO
- [XY] JP S62269733 A 19871124 - SANKO SEISAKUSHO KK
- See references of WO 2010032604A1

Cited by

ITBO20110533A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2325451 A1 20110525; EP 2325451 A4 20130220; CN 102137991 A 20110727; JP 2010071240 A 20100402; US 2011185710 A1 20110804; WO 2010032604 A1 20100325

DOCDB simple family (application)

EP 09814449 A 20090831; CN 200980133982 A 20090831; JP 2008241382 A 20080919; JP 2009065168 W 20090831; US 200913063039 A 20090831