

Title (en)

Exhaust gas recirculation device for engines

Title (de)

Abgasrückführeinrichtung für Brennkraftmaschinen

Title (fr)

Dispositif de recirculation de gaz d'échappement pour moteurs à combustion interne

Publication

EP 1331388 A3 20031112 (EN)

Application

EP 03001389 A 20030127

Priority

JP 2002018790 A 20020128

Abstract (en)

[origin: EP1331388A2] An EGR device for engines, capable of recirculating a SOF-removed EGR gas irrespective of the set condition of a catalyst in an exhaust system and without needing to extend an EGR conduit (7) and provide a universal joint; reducing the manufacturing cost in consequence; and preventing the deposition of SOF in an intake air system. The EGR conduit (7) is connected at one end thereof to an exhaust pipe (2C) collected portion of an exhaust manifold (2), and at the other end thereof to an engine-side fixing flange, and a catalyst (6) used exclusively for EGR is provided in the EGR conduit (7). A part of an exhaust gas flowing in the exhaust manifold (2) is recirculated as an EGR gas into the intake air system for an engine via the EGR conduit (7), and, during this time, the SOF contained in the EGR gas is removed by the catalyst (6). <IMAGE>

IPC 1-7

F02M 25/07; **F01N 3/10**; **F01N 7/10**; **F01N 3/02**

IPC 8 full level

F01N 3/28 (2006.01); **F01N 13/10** (2010.01); **F02M 25/07** (2006.01)

CPC (source: EP KR)

F01N 3/28 (2013.01 - EP KR); **F02M 26/12** (2016.02 - KR); **F02M 26/14** (2016.02 - EP KR); **F02M 26/35** (2016.02 - EP KR); **F02M 26/41** (2016.02 - EP KR); **F02M 26/43** (2016.02 - EP KR); **F02M 26/12** (2016.02 - EP)

Citation (search report)

- [XY] US 5785030 A 19980728 - PAAS NORBERT [US]
- [XY] GB 2320057 A 19980610 - FORD MOTOR CO [GB]
- [Y] US 6039033 A 20000321 - KIM KYUNG WOON [KR], et al
- [Y] US 5979421 A 19991109 - YAMASHITA NORIYUKI [JP], et al
- [Y] US 6334437 B1 20020101 - JESSBERGER THOMAS [DE]

Cited by

FR2895015A1; EP1422412A3; FR2935434A1; FR2954957A1; FR2926845A1; FR2954954A1; EP1703116A3; FR2935436A1; CN102926854A; FR2935435A1; FR2954956A1; FR2954955A1; EP3845755A1; EP2481908A1; CN102619647A; US11306687B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

EP 1331388 A2 20030730; **EP 1331388 A3 20031112**; **EP 1331388 B1 20051116**; DE 60302258 D1 20051222; DE 60302258 T2 20060601; JP 2003214261 A 20030730; JP 3988028 B2 20071010; KR 100549979 B1 20060208; KR 20030064630 A 20030802

DOCDB simple family (application)

EP 03001389 A 20030127; DE 60302258 T 20030127; JP 2002018790 A 20020128; KR 20030004710 A 20030124