

Title (en)

AN AIR SUCTION AND EXHAUST GASES RECIRCULATION SYSTEM FOR A DIESEL ENGINE

Title (de)

LUFTANSAUG- UND ABGASRÜCKFÜHRSYSTEM FÜR DIESELMOTOR

Title (fr)

SYSTÈME D'ALIMENTATION D'AIR ET DE RECIRCULATION DE GAZ D'ÉCHAPPEMENT POUR MOTEUR DIESEL

Publication

**EP 2959154 A1 20151230 (EN)**

Application

**EP 14703610 A 20140211**

Priority

- IT RM20130103 A 20130222
- EP 2014052651 W 20140211

Abstract (en)

[origin: WO2014128026A1] An air suction and exhaust gases recirculation system (1, 2) for a diesel engine (30) it is described, comprising: - a suction duct (3, 4) provided to channel air aspirated from the atmosphere to at least one cylinder (5) of said engine (30), the suction duct (3, 4) including an intake manifold (3) and a suction line connected to the intake manifold (3) which is positioned upstream of said intake manifold (3); and - a recirculation system of the exhaust gases (2) provided to introduce back into the suction duct (3, 4) a part of the exhaust gases coming from an exhaust pipe (6) of said engine (30), said recirculation system (2) comprising a recirculation duct of the exhaust gases (8, 9, 10) fitted with an output gate (11) for said part of the exhaust gas which is suitable for communicating with the suction duct (3, 4). The intake manifold (3) comprises an input cross-section (17), having a first fluid transit area, to permit the input into the intake manifold (3) of the air coming from the suction line 4. The suction duct (3, 4) further comprises a duct cross-section (18), having a second fluid transit area, which is situated upstream of said output gate (11). The air suction and exhaust gas recirculation system (1, 2) is characterised in that the second fluid transit area is an invariant and reduced area compared to the first fluid transit area.

IPC 8 full level

**F02M 35/10** (2006.01); **F02M 26/13** (2016.01)

CPC (source: EP)

**F02M 26/13** (2016.02); **F02M 35/10019** (2013.01); **F02M 35/10222** (2013.01)

Citation (search report)

See references of WO 2014128026A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2014128026 A1 20140828**; AR 094865 A1 20150902; CN 105074190 A 20151118; CN 105074190 B 20171024; EP 2959154 A1 20151230; EP 2959154 B1 20180117; ES 2670527 T3 20180530; IT RM20130103 A1 20140823; TW 201502364 A 20150116; TW I606176 B 20171121

DOCDB simple family (application)

**EP 2014052651 W 20140211**; AR P140100569 A 20140224; CN 201480010192 A 20140211; EP 14703610 A 20140211; ES 14703610 T 20140211; IT RM20130103 A 20130222; TW 103105595 A 20140220