

Title (en)

COOLING DEVICE FOR AN ENGINE EXHAUST GAS RECIRCULATION CIRCUIT

Title (de)

KÜHLVORRICHTUNG FÜR EINEN ABGASRÜCKFÜHRUNGSKREISLAUF EINES MOTOR

Title (fr)

DISPOSITIF DE REFROIDISSEMENT POUR UN CIRCUIT DE RECIRCULATION DE GAZ D'ECHAPPEMENT D'UN MOTEUR

Publication

EP 2553232 B1 20141224 (FR)

Application

EP 11712225 A 20110328

Priority

- FR 1052413 A 20100331
- EP 2011054750 W 20110328

Abstract (en)

[origin: WO2011120931A1] The invention relates to a cooling device for an engine (1) exhaust gas recirculation circuit, notably that of a motor vehicle, said circuit comprising a valve (2) for controlling the circulation of said gas, said device comprising a heat exchanger (3), known as the EGR exchanger, intended to allow an exchange of heat between the exhaust gases passing through said recirculation circuit and a coolant fluid, and means (4) of cooling said valve. According to the invention, said device comprises a cooling loop (5), known as a high-temperature cooling loop and configured so that said valve cooling means (4) have a first fluid passing through them, and a second cooling loop (12), known as a low-temperature cooling loop and configured so that the EGR exchanger (3) has passing through it a second fluid at a temperature lower than that of the first fluid. The invention also relates to an assembly of an exhaust gas recirculation circuit and of such a cooling device, and to a system for supplying an engine, notably a supercharged diesel engine, with charge gases and comprising an engine air supply circuit and such an assembly.

IPC 8 full level

F01P 7/16 (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP KR US)

F01P 7/16 (2013.01 - KR); **F01P 7/165** (2013.01 - EP US); **F02M 26/13** (2016.02 - EP US); **F02M 26/22** (2016.02 - EP US); **F02M 26/28** (2016.02 - EP US)

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

DOCDB simple family (publication)

WO 2011120931 A1 20111006; CN 103038475 A 20130410; CN 103038475 B 20160803; EP 2553232 A1 20130206; EP 2553232 B1 20141224; FR 2958327 A1 20111007; FR 2958327 B1 20120323; JP 2013524069 A 20130617; JP 5898174 B2 20160406; KR 101821963 B1 20180125; KR 20130021377 A 20130305; US 2013220290 A1 20130829; US 9599069 B2 20170321

DOCDB simple family (application)

EP 2011054750 W 20110328; CN 201180027107 A 20110328; EP 11712225 A 20110328; FR 1052413 A 20100331; JP 2013501796 A 20110328; KR 20127028492 A 20110328; US 201113637609 A 20110328