

Title (en)
Cooling system

Title (de)
Kühlsystem

Title (fr)
Système de refroidissement

Publication
EP 2503123 A1 20120926 (EN)

Application
EP 11159335 A 20110323

Priority
EP 11159335 A 20110323

Abstract (en)
A system for cooling exhaust gas for recirculation in an engine comprising a radiator for cooling engine coolant having an upstream water tank with a radiator inlet, a central radiator part and a downstream water tank with a first radiator outlet; a first cooling circuit having an upstream radiator conduit adapted to carry coolant from the engine to the radiator inlet and a downstream radiator conduit adapted to carry coolant from the radiator outlet and to the engine; a bypass conduit connected between the upstream radiator conduit and the downstream radiator conduit adapted to allow coolant to bypass the radiator; a first thermostat controlled valve arranged in the upstream radiator conduit at the engine outlet and connected to the bypass conduit, the first thermostat controlled valve is adapted to direct coolant flow to the radiator and/or to the bypass conduit; an exhaust gas recirculation cooler for cooling exhaust gas comprised in an exhaust gas cooling circuit. The downstream water tank and the central radiator part of the radiator is divided in a sub-cooler part having a second radiator outlet and a main part, wherein the exhaust gas cooling circuit is connected to the sub-cooler part such that it provides coolant to the exhaust gas recirculation cooler.

IPC 8 full level
F01P 7/16 (2006.01); **F01P 3/18** (2006.01); **F01P 5/10** (2006.01); **F01P 5/12** (2006.01)

CPC (source: EP)
F01P 7/165 (2013.01); **F01P 2003/185** (2013.01); **F01P 2005/105** (2013.01); **F01P 2005/125** (2013.01)

Citation (search report)

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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

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DOCDB simple family (application)
EP 11159335 A 20110323