

Title (en)

ARRANGEMENT AND METHOD FOR COOLING OF COOLANT IN A COOLING SYSTEM IN A VEHICLE

Title (de)

ANORDNUNG UND VERFAHREN ZUR KÜHLUNG EINES KÜHLMITTELS IN EINEM KÜHLSYSTEM IN EINEM FAHRZEUG

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR REFROIDISSEMENT D'AGENT DE REFROIDISSEMENT DANS UN SYSTÈME DE REFROIDISSEMENT DANS UN VÉHICULE

Publication

EP 2795078 A4 20150909 (EN)

Application

EP 12860999 A 20121203

Priority

- SE 1151273 A 20111223
- SE 2012051334 W 20121203

Abstract (en)

[origin: WO2013095262A1] The present invention relates to an arrangement and method for cooling of coolant in a cooling system in a vehicle. The cooling system comprises a first cooling circuit comprising a first coolant pump (11) to circulate coolant through the first cooling circuit, a first radiator (13) to cool the coolant, and a thermostat (12) which opens to direct coolant to the first radiator (13) when the coolant is above the thermostat's regulating temperature (t2), and a second cooling circuit which comprises a second radiator (20) for cooling of coolant. The cooling system comprises flow means (23, 29) adapted to transferring a portion of coolant from the first cooling circuit to the second cooling circuit so that this portion of the coolant is cooled in the second radiator (20) when the coolant in the first cooling circuit is within a temperature range defined by a lowest temperature (t1) at which the coolant initially needs cooling and a highest temperature which is equal to the thermostat's regulating temperature (t2).

IPC 8 full level

F01P 7/16 (2006.01)

CPC (source: EP SE US)

F01P 7/16 (2013.01 - US); **F01P 7/165** (2013.01 - EP SE US); **F28F 27/02** (2013.01 - US); **F01P 2003/182** (2013.01 - EP US); **F01P 2007/146** (2013.01 - US); **F01P 2025/32** (2013.01 - EP US); **F01P 2060/04** (2013.01 - EP US); **F01P 2060/06** (2013.01 - EP US); **F01P 2060/14** (2013.01 - EP US)

Citation (search report)

- [A] WO 2007122345 A1 20071101 - RENAULT SA [FR], et al
- [A] WO 03042515 A1 20030522 - VALEO THERMIQUE MOTEUR SA [FR], et al
- [A] US 5353757 A 19941011 - SUSA SUMIO [JP], et al
- [A] WO 2007031670 A1 20070322 - RENAULT SA [FR], et al
- [A] GB 950020 A 19640219 - MANFRED BEHR
- [A] WO 2004085807 A1 20041007 - SCANIA CV ABP [SE], et al
- [A] WO 2004090303 A1 20041021 - BEHR GMBH & CO KG [DE], et al
- [A] WO 2008080872 A1 20080710 - VALEO ENGINE COOLING AB [SE], et al
- See also references of WO 2013095262A1

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 2013095262 A1 20130627; BR 112014012865 A2 20170613; CN 104011343 A 20140827; EP 2795078 A1 20141029; EP 2795078 A4 20150909; EP 2795078 B1 20170301; JP 2015502497 A 20150122; KR 20140109437 A 20140915; RU 2014130262 A 20160220; SE 1151273 A1 20130624; SE 536283 C2 20130730; US 2014326443 A1 20141106

DOCDB simple family (application)

SE 2012051334 W 20121203; BR 112014012865 A 20121203; CN 201280062826 A 20121203; EP 12860999 A 20121203; JP 2014548733 A 20121203; KR 20147019563 A 20121203; RU 2014130262 A 20121203; SE 1151273 A 20111223; US 201214358569 A 20121203