

Title (en)

COOLANT CONDENSER ASSEMBLY

Title (de)

KÄLTEMITTELKONDENSATORBAUGRUPPE

Title (fr)

MODULE DE CONDENSEUR À RÉFRIGÉRANT

Publication

EP 2606291 A1 20130626 (DE)

Application

EP 11745804 A 20110819

Priority

- DE 102010039518 A 20100819
- EP 2011064322 W 20110819

Abstract (en)

[origin: WO2012022807A1] The invention relates to a coolant condenser assembly for an air conditioning system for a motor vehicle, comprising cooling pipes (2) for the passage of a coolant, two collective pipes for fluidically connecting the cooling pipes (2), and preferably a collecting vessel having at least one overflow opening by means of which the collecting vessel is fluidically connected to the cooling pipes (2) and/or to the collective pipe, the cooling pipes (2) having a superheating region (11) for cooling the vaporous coolant, a condensation region (12) for condensing the coolant as at least one parallel section (19, 21, 23) and a supercooling region (13) as a supercooling parallel section for cooling the liquid coolant. The problem addressed by the invention is that the coolant in the supercooling region (13) of the coolant condenser assembly should be cooled intensely without the coolant condenser assembly requiring greater space in the supercooling region (13). This problem is solved in that the flow cross-sectional areas of the cooling pipes (2) in the supercooling region (13) are smaller than the product of 1.0 or 0.9 or 0.7 or 0.5 and the flow cross-sectional areas of the cooling pipes (2) in the superheating region (11) and/or the condensation region (12).

IPC 8 full level

F25B 39/04 (2006.01)

CPC (source: EP)

F25B 39/04 (2013.01); **F25B 40/02** (2013.01); **F25B 40/04** (2013.01); **F25B 2339/044** (2013.01); **F25B 2500/01** (2013.01);
F28D 2021/0084 (2013.01)

Citation (search report)

See references of WO 2012022807A1

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)

DE 102010039518 A1 20120223; EP 2606291 A1 20130626; EP 2606291 B1 20190731; WO 2012022807 A1 20120223

DOCDB simple family (application)

DE 102010039518 A 20100819; EP 11745804 A 20110819; EP 2011064322 W 20110819