

Title (en)  
Coolant circuit

Title (de)  
Kühlmittelkreislauf

Title (fr)  
Circuit d'agent réfrigérant

Publication  
**EP 2562379 B1 20151014 (DE)**

Application  
**EP 11178432 A 20110823**

Priority  
EP 11178432 A 20110823

Abstract (en)

[origin: EP2562379A1] The circuit has a pump (4), a cooler (6) and a control element (7) comprising a thermostat (12) i.e. partial load thermostat, and a proportional valve (13) separated from the thermostat. The thermostat and the valve are arranged parallel to an outlet casing (8). The valve has a block water pipe (14) for a motor block water jacket (3), a heater pipe (16) for a heater (9) and a cooler pipe (17) for the cooler, where the thermostat has a connection pipe for the cooler. The thermostat and the valve are switched independent of each other, where the jacket ends into a cooler return line (23).

IPC 8 full level  
**F01P 7/14** (2006.01); **F01P 7/16** (2006.01); **F01P 3/02** (2006.01)

CPC (source: EP RU)  
**F01P 3/207** (2013.01 - RU); **F01P 7/14** (2013.01 - EP); **F01P 7/165** (2013.01 - EP RU); **F01P 2003/028** (2013.01 - EP);  
**F01P 2007/146** (2013.01 - RU); **F01P 2060/08** (2013.01 - EP)

Cited by

WO2021163743A1; US2022194211A1; CN112065565A; CN115135862A; AT514793A1; AT514793B1; CN108425733A; CN111502815A;  
US2022364494A1; US11624311B2; DE102018107128B4; US10858980B2

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)  
**EP 2562379 A1 20130227; EP 2562379 B1 20151014;** RU 2012135988 A 20140227; RU 2605493 C2 20161220

DOCDB simple family (application)  
**EP 11178432 A 20110823;** RU 2012135988 A 20120822