

Title (en)

Cooling system for vehicles with fluid-cooled combustion engine

Title (de)

Kühlsystem für Fahrzeuge mit flüssigkeitsgekühlter Brennkraftmaschine

Title (fr)

Système de refroidissement pour véhicules dotés d'un moteur à combustion interne refroidi par du liquide

Publication

**EP 2169233 A3 20170329 (DE)**

Application

**EP 09009316 A 20090717**

Priority

DE 102008049204 A 20080927

Abstract (en)

[origin: EP2169233A2] The liquid-cooling system has coolant pump (4), where the flow in coolant pump is regulated by a control element. The coolant pump is formed with multiple two-pass, where each two-pass is separated by refrigerant circuits that are associated pump venting (35).

IPC 8 full level

**F04D 1/00** (2006.01); **F01P 7/16** (2006.01); **F04D 15/00** (2006.01); **F04D 15/02** (2006.01)

CPC (source: EP)

**F01P 7/161** (2013.01); **F04D 1/00** (2013.01); **F04D 15/0038** (2013.01); **F04D 15/0209** (2013.01); **F01P 2007/146** (2013.01); **F05D 2270/64** (2013.01)

Citation (search report)

[X1] DE 102006034960 A1 20080131 - AUDI AG [DE]

Cited by

US9528521B2; WO2015192820A1; DE102010026132A1; EP2455615A3; US2014212267A1; FR2978207A1; CN103459798A; CN103591020A; DE102014009367B3; EP3290713A1; WO2013034126A1; WO2012116676A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**EP 2169233 A2 20100331; EP 2169233 A3 20170329; EP 2169233 B1 20210331; DE 102008049204 A1 20100401**

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