

Title (en)

CONTROLLABLE COOLING SYSTEM FOR A MOTOR VEHICLE, COOLANT PUMP THEREFOR, IMPELLER FOR USE IN THE COOLANT PUMP, AND METHOD FOR CONTROLLING A COOLANT FLOW IN SUCH A COOLING SYSTEM

Title (de)

REGELBARES KÜHLSYSTEM FÜR EIN KRAFTFAHRZEUG, KÜHLMITTELPUMPE HIERFÜR, IN DER KÜHLMITTELPUMPE VERWENDBARES FLÜGELRAD SOWIE VERFAHREN ZUM REGELN EINES KÜHLMITTELFLOSSES IN EINEM DERARTIGEN KÜHLSYSTEM

Title (fr)

SYSTÈME DE REFROIDISSEMENT RÉGLABLE POUR VÉHICULE AUTOMOBILE, POMPE DE LIQUIDE DE REFROIDISSEMENT APPROPRIÉE, ROUE À AILETTES S'UTILISANT DANS LADITE POMPE DE LIQUIDE DE REFROIDISSEMENT ET PROCÉDÉ POUR RÉGULER UN FLUX DE LIQUIDE DE REFROIDISSEMENT DANS UN SYSTÈME DE REFROIDISSEMENT DE CE TYPE

Publication

EP 2681425 B1 20160706 (DE)

Application

EP 11793659 A 20111129

Priority

- DE 102011001090 A 20110304
- EP 2011005982 W 20111129

Abstract (en)

[origin: WO2012119622A2] The invention relates to a controllable cooling system (1) for a motor vehicle comprising a coolant circuit, which delivers a coolant to an internal combustion engine and draws off coolant therefrom, as well as a mechanically operated controllable main coolant pump (3) and an electrically operated controllable secondary coolant pump (5). The cooling system further comprises a control device which controls the main coolant pump (3) and the secondary coolant pump (5) on the basis of operating states of the internal combustion engine. The invention further provides an electrically operated controllable secondary coolant pump (5) for such a cooling system (1), an impeller (25) which can be used in said secondary coolant pump (5) and a method for controlling the coolant flow in a such cooling system (1).

IPC 8 full level

F01P 5/12 (2006.01); **F04D 15/00** (2006.01); **F04D 25/06** (2006.01)

CPC (source: EP US)

F01P 5/12 (2013.01 - EP US); **F04D 13/06** (2013.01 - EP US); **F04D 13/12** (2013.01 - EP US); **F04D 15/0038** (2013.01 - EP US); **F04D 15/029** (2013.01 - EP US); **F28F 1/00** (2013.01 - US); **F01P 2005/125** (2013.01 - EP US)

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 102011001090 A1 20120906; CN 103459798 A 20131218; CN 103459798 B 20160316; EP 2681425 A2 20140108; EP 2681425 B1 20160706; ES 2587598 T3 20161025; US 2013333863 A1 20131219; WO 2012119622 A2 20120913; WO 2012119622 A3 20121026

DOCDB simple family (application)

DE 102011001090 A 20110304; CN 201180068966 A 20111129; EP 11793659 A 20111129; EP 2011005982 W 20111129; ES 11793659 T 20111129; US 201114002158 A 20111129