Title (en)

COOLING CONTROL DEVICE

Title (de)

KÜHLUNGSSTEUERUNGSVORRICHTUNG

Title (fr)

DISPOSITIF DE COMMANDE DE REFROIDISSEMENT

Publication

EP 3358163 A4 20180808 (EN)

Application

EP 16851118 A 20160912

Priority

- JP 2015194810 A 20150930
- JP 2016076811 W 20160912

Abstract (en)

[origin: EP3358163A1] A cooling control device includes a first heat exchanger to which a coolant of an internal combustion engine is supplied, a radiator to which the coolant of is supplied, a coolant pump supplying the coolant, a flow amount control valve controlling a flow amount of the coolant, and a control unit controlling the flow amount control valve. The control unit acquires a first amount of heat which is accumulated in the coolant, a second amount of heat which is accumulated in the coolant by a heat exchange with the first heat exchanger, and a third amount of heat for changing a temperature level of the coolant to a targeted temperature level. A targeted dissipation amount is set from the first, second and third amounts of heat, and an opening of the flow amount control valve is set by a feedforward control.

IPC 8 full level

F01P 7/16 (2006.01); **F01P 3/20** (2006.01); **F02M 26/23** (2016.01)

CPC (source: EP US)

F01P 3/20 (2013.01 - EP US); **F01P 5/10** (2013.01 - US); **F01P 7/16** (2013.01 - EP US); **F01P 7/167** (2013.01 - EP US); **F01P 11/08** (2013.01 - US); **F02M 26/23** (2016.02 - EP US); F01P 2007/146 (2013.01 - US); F02M 26/22 (2016.02 - EP US)

Citation (search report)

- [A] JP 2012047121 A 20120308 - MITSUBISHI ELECTRIC CORP
- [A] JP 2006112330 A 20060427 - AISAN IND, et al
- [A] US 2012059566 A1 20120308 - TSUNOOKA TAKASHI [JP], et al
- See references of WO 2017056944A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3358163 A1 20180808; **EP 3358163 A4 20180808**; **EP 3358163 B1 20190814**; CN 107923303 A 20180417; JP 2017067018 A 20170406; JP 6488970 B2 20190327; US 2018252147 A1 20180906; WO 2017056944 A1 20170406

DOCDB simple family (application)

EP 16851118 A 20160912; CN 201680050116 A 20160912; JP 2015194810 A 20150930; JP 2016076811 W 20160912; US 201615756644 A 20160912