

Title (en)

COOLANT CIRCUIT FOR A LIQUID-COOLED TRANSMISSION

Title (de)

KÜHLMITTELKREISLAUF FÜR FLÜSSIGKEITSGEKÜHLTE GETRIEBE

Title (fr)

CIRCUIT À FLUIDE DE REFROIDISSEMENT POUR BOÎTE DE VITESSES À REFROIDISSEMENT PAR LIQUIDE

Publication

EP 3320197 B1 20190417 (DE)

Application

EP 16728292 A 20160608

Priority

- DE 102015212733 A 20150708
- EP 2016062934 W 20160608

Abstract (en)

[origin: WO2017005438A1] The invention relates to a coolant circuit (1) with an engine cooling circuit (10, 11) in which coolant can be circulated in order to cool an internal combustion engine (6, 8) that has a cylinder head cooling circuit (10) and a crankcase cooling circuit (11) separated from the cylinder head cooling circuit; a transmission cooling circuit (19) for cooling a transmission (20), said transmission cooling circuit branching off from the motor cooling circuit (10, 11); a valve (14) which is arranged in the transmission cooling circuit (19); and a controller (26) which is designed to open and close the valve (14) depending on an operating state of the internal combustion engine and/or the transmission. In particular, the transmission cooling circuit (19) branches off from the crankcase cooling circuit (11) to a section along which the crankcase cooling circuit (19) is separated from the cylinder head cooling circuit (10).

IPC 8 full level

F01P 3/20 (2006.01)

CPC (source: EP US)

F01P 3/06 (2013.01 - US); **F01P 3/12** (2013.01 - US); **F01P 3/20** (2013.01 - EP US); **F01P 7/14** (2013.01 - US);
F01P 2003/027 (2013.01 - EP US); **F01P 2007/146** (2013.01 - US); **F01P 2025/62** (2013.01 - EP US); **F01P 2025/64** (2013.01 - EP US);
F01P 2060/045 (2013.01 - EP US)

Citation (examination)

WO 2007128123 A1 20071115 - MAGNA POWERTRAIN USA INC [CA], et al

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)

WO 2017005438 A1 20170112; CN 107532500 A 20180102; CN 107532500 B 20191210; DE 102015212733 A1 20170112;
EP 3320197 A1 20180516; EP 3320197 B1 20190417; US 10480389 B2 20191119; US 2018066566 A1 20180308

DOCDB simple family (application)

EP 2016062934 W 20160608; CN 201680022283 A 20160608; DE 102015212733 A 20150708; EP 16728292 A 20160608;
US 201715796922 A 20171030