

Title (en)

COOLING CIRCUIT FOR AN ENGINE WITH EXHAUST GAS RECIRCULATION AND METHOD FOR THE OPERATION OF AN INTERNAL COMBUSTION ENGINE WITH A COOLING CIRCUIT THEREOF

Title (de)

KÜHLKREIS FÜR EINE BRENNKRAFTMASCHINE MIT EINER ABGASRÜCKFÜHRUNG UND VERFAHREN ZUM BETRIEB EINER BRENNKRAFTMASCHINE MIT EINEM SOLCHEN KÜHLKREIS

Title (fr)

CIRCUIT DE REFROIDISSEMENT D'UN MOTEUR AVEC RECIRCULATION DES GAZ D'ÉCHAPPEMENT ET PROCÉDÉ POUR FAIRE FONCTIONNER UN MOTEUR À COMBUSTION INTERNE AVEC UN TEL CIRCUIT DE REFROIDISSEMENT

Publication

EP 2652305 B1 20180221 (DE)

Application

EP 11794043 A 20111205

Priority

- DE 102010055072 A 20101218
- EP 2011006084 W 20111205

Abstract (en)

[origin: WO2012079715A1] The invention relates to a cooling circuit (1) for an internal combustion engine (2) having exhaust gas recirculation. The internal combustion engine (2) has a coolant inlet (3) and a coolant outlet (4). The cooling circuit (1) further comprises a main cooler (5) having a cooler inlet (6) and a cooler outlet (7), an EGR cooler (8) having an EGR cooler inlet (9) for coolant, and an EGR outlet (10) for coolant, and a main control device (11) disposed upstream of the internal combustion engine (2) in the flow direction of the coolant. In order that the EGR cooler (8) can provide the performance required, and that maximum operating reliability of the cooling circuit (1) and the modules provided in the cooling circuit (1) is possible, according to the invention the cooling circuit (1) has an auxiliary control device (12) disposed downstream of the exhaust gas recirculation cooler (8) in the flow direction of the coolant, and/or an exhaust gas recirculation control device (13) disposed upstream of the exhaust gas recirculation cooler (8) in the flow direction of the coolant. The invention further relates to a method for operating an internal combustion engine (2) having such a cooling circuit (1).

IPC 8 full level

F02M 26/28 (2016.01)

CPC (source: EP)

F02M 26/28 (2016.02); **F01P 3/12** (2013.01); **F01P 2060/16** (2013.01)

Cited by

CN106948976A

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 2012079715 A1 20120621; CN 103370524 A 20131023; DE 102010055072 A1 20120621; EP 2652305 A1 20131023; EP 2652305 B1 20180221

DOCDB simple family (application)

EP 2011006084 W 20111205; CN 201180067746 A 20111205; DE 102010055072 A 20101218; EP 11794043 A 20111205