

Title (en)

METHOD AND DEVICE FOR COOLING A MOTOR VEHICLE ENGINE

Title (de)

VERFAHREN UND EINRICHTUNG ZUR KÜHLUNG EINER BRENNKRAFTMASCHINE EINES KRAFTFAHRZEUGS

Title (fr)

PROCEDE ET DISPOSITIF DE REFROIDISSEMENT D'UN MOTEUR DE VEHICULE AUTOMOBILE

Publication

EP 1264086 A1 20021211 (FR)

Application

EP 01907697 A 20010125

Priority

- FR 0100238 W 20010125
- FR 0003436 A 20000317

Abstract (en)

[origin: WO0169056A1] The invention concerns a method for cooling a motor vehicle engine, which consists in regulating the volume and the flow rate of a coolant in a hydraulic circuit (2) provided with a branch pipe (4) equipped with an actuator (14) electronically monitored and provided with means (9) forming a radiator. The method comprises a first step which consists in determining the temperature (T) of the coolant, a step which consists in comparing said temperature with a predetermined threshold temperature (T₂) from which the engine is said to be hot , and, when the temperature (T) of the fluid is higher than the threshold temperature (T₂), the flow rate in the radiator branch pipe (4) is regulated so as to maintain the temperature (T) of the coolant around a predetermined setpoint value (T_c). The invention is characterised in that the curve representing the opening (O) of the thermostat valve (4) based on the temperature (T) of the coolant exhibits hysteresis (h₁, h₂) around the setpoint temperature (T_{c1}, T_{c2}), so as to adjust the temperature (T) of the coolant to the setpoint temperature (T_{c1}, T_{c2}). The invention also concerns a device for cooling a motor vehicle engine.

IPC 1-7

F01P 7/16

IPC 8 full level

F01P 7/04 (2006.01); **F01P 7/16** (2006.01); **F01P 11/16** (2006.01); **F02M 31/10** (2006.01); **F01P 7/14** (2006.01)

CPC (source: EP US)

F01P 7/167 (2013.01 - EP US); **F01P 7/048** (2013.01 - EP US); **F01P 7/164** (2013.01 - EP US); **F01P 2007/143** (2013.01 - EP US);
F01P 2007/146 (2013.01 - EP US); **F01P 2023/00** (2013.01 - EP US); **F01P 2025/08** (2013.01 - EP US); **F01P 2025/13** (2013.01 - EP US);
F01P 2025/60 (2013.01 - EP US); **F01P 2025/62** (2013.01 - EP US); **F01P 2025/64** (2013.01 - EP US); **F01P 2025/66** (2013.01 - EP US);
F01P 2060/02 (2013.01 - EP US); **F01P 2060/04** (2013.01 - EP US)

Citation (search report)

See references of WO 0169056A1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

FR 2806444 A1 20010921; FR 2806444 B1 20020607; DE 60123587 D1 20061116; DE 60123587 T2 20070809; EP 1264086 A1 20021211;
EP 1264086 B1 20061004; ES 2273806 T3 20070516; JP 2003528241 A 20030924; JP 4606683 B2 20110105; US 2003196612 A1 20031023;
US 6880495 B2 20050419; WO 0169056 A1 20010920

DOCDB simple family (application)

FR 0003436 A 20000317; DE 60123587 T 20010125; EP 01907697 A 20010125; ES 01907697 T 20010125; FR 0100238 W 20010125;
JP 2001567912 A 20010125; US 22115303 A 20030106