

Title (en)

Cooling control device of an internal combustion engine of a vehicle during hot start

Title (de)

Kühlungsregelungsvorrichtung einer Fahrzeugbrennkraftmaschine während eines Heissstarts

Title (fr)

Dispositif de régulation du refroidissement d'un moteur thermique de véhicule automobile dans un état de démarrage à chaud

Publication

**EP 1113157 B1 20040818 (FR)**

Application

**EP 00128308 A 20001222**

Priority

FR 9916769 A 19991230

Abstract (en)

[origin: EP1113157A1] A fluid goes through the cooling circuit (1) under the action of a pump (2). One circuit branch comprises a radiator (5) associated with a motoventilator group (6) and a second heating branch (4) comprises an aerotherm (9). Pump and motoventilator are controlled by a motor, which can work under a starting mode or an established mode following a law.

IPC 1-7

**F01P 7/04**; **F01P 7/16**

IPC 8 full level

**F01P 7/04** (2006.01); **F01P 7/16** (2006.01); **F01P 5/12** (2006.01); **F01P 7/14** (2006.01)

CPC (source: EP US)

**F01P 7/048** (2013.01 - EP US); **F01P 7/164** (2013.01 - EP US); **F01P 7/167** (2013.01 - EP US); **F01P 2005/125** (2013.01 - EP US); **F01P 2007/146** (2013.01 - EP US); **F01P 2025/13** (2013.01 - EP US); **F01P 2025/30** (2013.01 - EP US); **F01P 2025/32** (2013.01 - EP US); **F01P 2025/62** (2013.01 - EP US); **F01P 2025/66** (2013.01 - EP US); **F01P 2037/02** (2013.01 - EP US); **F01P 2060/08** (2013.01 - EP US)

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**EP 1113157 A1 20010704**; **EP 1113157 B1 20040818**; AT E274137 T1 20040915; DE 60013082 D1 20040923; DE 60013082 T2 20050818; FR 2803334 A1 20010706; FR 2803334 B1 20020322; US 2001017110 A1 20010830; US 6470838 B2 20021029

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