

Title (en)

THERMAL ENGINE FOR AN AUTOMOTIVE VEHICLE COMPRISING A WATER-PUMP BLEEDING DUCT

Title (de)

VERBRENNUNGSMOTOR FÜR EIN KRAFTFAHRZEUG MIT EINEM WASSERPUMPENLÜFTUNGSLKANAL& x9;

Title (fr)

MOTEUR THERMIQUE DE VEHICULE AUTOMOBILE COMPORTANT UN CONDUIT DE DEGAZAGE DE POMPE A EAU

Publication

**EP 2104780 B1 20100428 (FR)**

Application

**EP 07858535 A 20071009**

Priority

- FR 2007052104 W 20071009
- FR 0654988 A 20061120

Abstract (en)

[origin: WO2008062116A1] The invention relates to a thermal engine (10) for an automotive vehicle, of the type comprising at least one cylinder block (11) comprising a first inner circuit (12) for circulating a cooling liquid, of the type in which the first inner circuit (12) includes an outer supply duct (14) having an inlet opening giving into a reception chamber (18) for a rotor of the engine water pump formed in the block (11), said chamber (18) comprising in its intermediate portion (20) a supply opening (22) having a level (N<sub>1</sub>) located above the level (N<sub>2</sub>) of the inlet opening (16) of the inner supply duct (14) of the first inner circuit (12), characterised in that it comprises an additional degassing duct (26) connecting the upper portion (24) of the reception chamber (18) or water pump volute with an element of the engine cooling circuit.

IPC 8 full level

**F01P 5/10** (2006.01); **F01P 11/02** (2006.01); **F01P 11/04** (2006.01)

CPC (source: EP US)

**F01P 5/10** (2013.01 - EP US); **F01P 11/0204** (2013.01 - EP US); **F01P 11/028** (2013.01 - EP US); **F01P 11/04** (2013.01 - EP US)

Cited by

DE102014207071B4; DE102014207071A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2908823 A1 20080523; FR 2908823 B1 20090130**; AT E466176 T1 20100515; DE 602007006237 D1 20100610;  
EP 2104780 A1 20090930; EP 2104780 B1 20100428; JP 2010510438 A 20100402; US 2010012056 A1 20100121; US 8640658 B2 20140204;  
WO 2008062116 A1 20080529

DOCDB simple family (application)

**FR 0654988 A 20061120**; AT 07858535 T 20071009; DE 602007006237 T 20071009; EP 07858535 A 20071009; FR 2007052104 W 20071009;  
JP 2009537679 A 20071009; US 51569907 A 20071009