

Title (en)

Module for a cooling circuit and circuit comprising such a module

Title (de)

Modul für einen Kühlungskreislauf und Kreislauf mit solchem Modul

Title (fr)

Module pour circuit de refroidissement et circuit comprenant un tel module

Publication

EP 1380736 B1 20070905 (EN)

Application

EP 03015554 A 20030710

Priority

FR 0208861 A 20020712

Abstract (en)

[origin: EP1380736A1] The present invention relates to a central module for a cooling circuit in a vehicle with an internal combustion engine. <??>Module (1) characterised in that it forms a hollow rigid body with a plurality of cavities, made up by assembly of three structural sub-modules (1', 1'' and 1'''), namely a first sub-module (1') comprising a hollow part (12) with a flow distribution chamber (12'), two portions of conduits (13, 13') of the sub-circuit (9) supplying the radiator (7') of the main unit heater (7), a portion of conduit (14) of the sub-circuit (10) supplying the radiator (8') of the secondary unit heater (8) and a portion of conduit (15) of the sub-circuit (11) supplying the heat exchanger (6), a second sub-module (1'') comprising at least a part of the casing (16) of the heat exchanger (6), additional portions of conduits (17, 17') of the sub-circuit (11) supplying the latter and an additional portion of conduit (18) of the sub-circuit (9) supplying the radiator (7') and a third sub-module (1''') comprising the feed pump (5), end portions of conduit (19, 19' and 19'') respectively of the sub-circuit (9) supplying the radiator (7'), of the sub-circuit (11) supplying the heat exchanger (6) and of the sub-circuit (10) supplying the radiator (8') and portions of conduit (20 and 20') forming a part of the common segment of the portion of main circuit (3) extending upstream and downstream of the feed pump (5). <IMAGE>

IPC 8 full level

F01P 11/00 (2006.01); **F01P 5/10** (2006.01); **F01P 7/16** (2006.01); **F01P 11/02** (2006.01)

CPC (source: EP)

F01P 5/10 (2013.01); **F01P 7/165** (2013.01); **F01P 11/00** (2013.01); **F01P 11/029** (2013.01); **F01P 2060/08** (2013.01); **F01P 2070/00** (2013.01)

Cited by

FR3058679A1; CN112855334A; US11629675B2; WO2018087444A1

Designated contracting state (EPC)

AT DE ES GB IT

DOCDB simple family (publication)

EP 1380736 A1 20040114; **EP 1380736 B1 20070905**; AT E372451 T1 20070915; DE 60316077 D1 20071018; DE 60316077 T2 20080605; ES 2290388 T3 20080216; FR 2842250 A1 20040116; FR 2842250 B1 20040924

DOCDB simple family (application)

EP 03015554 A 20030710; AT 03015554 T 20030710; DE 60316077 T 20030710; ES 03015554 T 20030710; FR 0208861 A 20020712