

Title (en)

Compact cooling device for internal combustion engine and method for manufacturing such a device

Title (de)

Kühlvorrichtung mit geringem Platzbedarf für Verbrennungsmotor, und Herstellungsverfahren einer solchen Vorrichtung

Title (fr)

Dispositif de refroidissement à encombrement réduit pour moteur à combustion interne et procédé de fabrication d'un tel dispositif

Publication

**EP 2789824 B1 20170510 (FR)**

Application

**EP 14163806 A 20140408**

Priority

FR 1353293 A 20130411

Abstract (en)

[origin: CN104100348A] The invention relates to a compact cooling device for an internal combustion engine and a method for manufacturing such a device. A cooling device for a motor vehicle engine connected to a cooling fluid feed system, where said cooling device comprises two superposed subassemblies (E1, E2), where the first subassembly (E1) comprises a feed body (6) connected to the feed aperture and a tube (2) connected to the feed body (6), the free end (2.2) of which forms a first evacuation end, where the tube (2) extends laterally relative to the feed body and is shaped so as to have a desired orientation, where the second subassembly (E2) comprises a feed body (10) connected to the feed aperture and a tube (4) connected to the feed body (10) the free end (4.2) of which forms the second evacuation end, where the tube extends laterally relative to the feed body and is shaped so as to have a desired orientation, and where the feed bodies (6, 10) are securely attached to one another in sealed fashion.

IPC 8 full level

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CPC (source: EP US)

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**F01M 2001/083** (2013.01 - EP US); **Y10T 29/49249** (2015.01 - EP US)

Citation (examination)

ANONYMOUS: "need to find double banjo bolts | Norton Bulletin Board | BritBike Forum", INTERNET ARTICLE, 29 August 2011 (2011-08-29), XP055226216, Retrieved from the Internet <URL:<http://www.britbike.com/forums/ubbthreads.php?ubb=showflat&Number=386074>> [retrieved on 20151105]

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DE102016221353A1; FR3075474A1; FR3047769A1; CN108952922A; EP3550119A1; WO2019122742A1; WO2017140817A1; US10774700B2

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DOCDB simple family (publication)

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CN 104100348 A 20141015; CN 104100348 B 20181221; DE 14163806 T1 20141231; ES 2637177 T3 20171011; FR 3004489 A1 20141017;  
FR 3004489 B1 20170428; IN 1294MU2014 A 20150904; JP 2014206165 A 20141030; JP 6316071 B2 20180425; KR 102120925 B1 20200609;  
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US 201414247354 A 20140408