

Title (en)
Cooling device

Title (de)
Kühlaggregat

Title (fr)
Appareil de refroidissement

Publication
EP 1452820 A3 20051109 (DE)

Application
EP 04002114 A 20040131

Priority
DE 10307488 A 20030221

Abstract (en)
[origin: EP1452820A2] Cooling unit for a motor vehicle comprises a ventilator hood (1) and heat exchangers. At least one heat exchanger (2) has collecting tanks (3, 4). Fixing devices (5a) on the edge (6) of the ventilator hood interact with fixing devices (5b) on the collecting tanks or on a construction frame. At least one of the fixing devices is an elastic catch hook (7) with a catch lug and a stop for the catch lug. The catch hook is formed on the edge of the ventilator hood and engages in a recess (9) in the collecting tank or construction frame. An extension is formed above a connecting point of the catch hook. The catch hook can be released and the ventilator hood removed when a pressure force is exerted on the extension.

IPC 1-7
F28F 9/00; **F01P 3/18**

IPC 8 full level
F04D 29/58 (2006.01); **F04D 29/60** (2006.01); **F28F 9/00** (2006.01)

CPC (source: EP US)
F04D 29/582 (2013.01 - EP US); **F04D 29/601** (2013.01 - EP US); **F28F 9/002** (2013.01 - EP US); **F01P 2070/50** (2013.01 - EP US); **F28F 2275/085** (2013.01 - EP US); **Y10T 24/45529** (2015.01 - EP US)

Citation (search report)

- [A] US 6315034 B1 20011113 - MAHE CHRISTIAN [FR], et al
- [A] FR 2794170 A1 20001201 - RENAULT [FR]
- [DA] DE 4244037 A1 19940630 - BEHR GMBH & CO [DE]

Cited by
EP3739179A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1452820 A2 20040901; **EP 1452820 A3 20051109**; **EP 1452820 B1 20070307**; DE 10307488 A1 20040923; DE 502004003089 D1 20070419; US 2004250987 A1 20041216; US 7007744 B2 20060307

DOCDB simple family (application)
EP 04002114 A 20040131; DE 10307488 A 20030221; DE 502004003089 T 20040131; US 78456704 A 20040223