

Title (en)

Box-shaped cooling system for a motor car

Title (de)

Kastenförmige Kühlanlage für Kraftfahrzeuge

Title (fr)

Système de refroidissement en forme de caisson pour véhicule automobile

Publication

EP 1146210 A3 20030305 (DE)

Application

EP 01106769 A 20010317

Priority

DE 10018089 A 20000412

Abstract (en)

[origin: EP1146210A2] The cooling unit (1) has a cooling network (8) with flat pipes (7) and ribs (6), a refrigerant cooler (3) with collecting tanks (10,11), a charge cooler (2) and other coolers or heat exchangers. A radial ventilator rotates inside the cooling unit. The unit has front (16) and rear (17) walls and at least one compensation container (4) for refrigerant. The compensation container is arranged so that its projection faces covers at least part of the surface of the cooling network and conducts cooling air from the compensation container.

IPC 1-7

F01P 11/02; F28F 9/00; F28F 9/02

IPC 8 full level

F01P 11/02 (2006.01); **F28D 1/04** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

F01P 11/029 (2013.01 - EP US); **F28D 1/0426** (2013.01 - EP US); **F28F 9/0231** (2013.01 - EP US)

Citation (search report)

- [A] US 5234051 A 19930810 - WEIZENBURGER HANS [DE], et al
- [A] EP 0585775 B1 19950913 - BEHR GMBH & CO [DE], et al
- [A] GB 728347 A 19550420 - LIST HANS
- [A] US 4441463 A 19840410 - REST HEINZ [DE], et al
- [DA] DE 3912734 A1 19901025 - KLOECKNER HUMBOLDT DEUTZ AG [DE]

Cited by

EP1253392A1; DE202004000733U1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1146210 A2 20011017; **EP 1146210 A3 20030305**; **EP 1146210 B1 20060906**; AT E338884 T1 20060915; DE 10018089 A1 20011129; DE 50110914 D1 20061019; US 2001035283 A1 20011101; US 6427766 B2 20020806

DOCDB simple family (application)

EP 01106769 A 20010317; AT 01106769 T 20010317; DE 10018089 A 20000412; DE 50110914 T 20010317; US 83331301 A 20010410