

Title (en)

A radiator for motor vehicles with piping integrated on a manifold tank

Title (de)

Ein Kühler für Kraftfahrzeuge mit in einem Leitungstank integrierten Rohrleitungen

Title (fr)

Un radiateur pour véhicules automobiles avec tuyauterie intégrée dans un réservoir collecteur

Publication

**EP 1420223 A1 20040519 (EN)**

Application

**EP 02425704 A 20021115**

Priority

EP 02425704 A 20021115

Abstract (en)

A radiator for motor vehicles, comprising: a first manifold tank (12) and a second manifold tank (14), which are set parallel to one another and set vertically in the position in which the radiator (10) is mounted on a vehicle; a plurality of pipes (18) set parallel to one another connected at their ends to the manifold tanks (12, 14); and an inlet connector (24) and an outlet connector (26) of the heat-exchange liquid, connected, respectively, to the first manifold tank (12) and second manifold tank (14), in which the inlet connector (24) is set at the top end of the first manifold tank (12). <??>The radiator comprises an outlet channel (28) for the heat-exchange liquid, which extends parallel to the second manifold tank (14). The outlet channel (28) communicates with the manifold tank (14) by means of an opening (34) located at the bottom end of the second manifold tank (14) and carries the aforesaid outlet connector (26) at its top end. <IMAGE>

IPC 1-7

**F28F 9/26**

IPC 8 full level

**F28D 1/053** (2006.01); **F28F 9/02** (2006.01); **F28F 9/04** (2006.01)

CPC (source: EP)

**F28D 1/05316** (2013.01); **F28F 9/0231** (2013.01); **F28F 9/0246** (2013.01); **F28D 2021/0094** (2013.01)

Citation (search report)

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- [A] EP 0970833 A1 20000112 - MAGNETI MARELLI CLIMAT SRL [IT]

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Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 1420223 A1 20040519**; **EP 1420223 B1 20050112**; AR 041944 A1 20050601; AT E287074 T1 20050115; BR 0305137 A 20040831; BR 0305137 B1 20120626; DE 60202622 D1 20050217; DE 60202622 T2 20060112; ES 2235001 T3 20050701; PL 199496 B1 20080930; PL 363447 A1 20040517; PT 1420223 E 20050531

DOCDB simple family (application)

**EP 02425704 A 20021115**; AR P030104147 A 20031112; AT 02425704 T 20021115; BR 0305137 A 20031114; DE 60202622 T 20021115; ES 02425704 T 20021115; PL 36344703 A 20031113; PT 02425704 T 20021115