

Title (en)

Heat exchanger, more particularly cooler for cooling liquid

Title (de)

Wärmeübertrager, insbesondere Kühlmittelkühler

Title (fr)

Echangeur de chaleur, en particulier refroidisseur de liquide de refroidissement

Publication

**EP 1431696 A3 20121205 (DE)**

Application

**EP 03024712 A 20031028**

Priority

DE 10259026 A 20021216

Abstract (en)

[origin: EP1431696A2] The heat exchanger has a heat exchange network provided by flat tubes with external ribs and at least one collection casing (15) provided at one or both ends of the latter, assembled from a sheet metal strip (16), with lugs (23) of a first collection casing section (17) fitting into openings (25) provided in a second section of the collection casing.

IPC 8 full level

**F28F 9/02** (2006.01); **F28F 9/00** (2006.01)

CPC (source: EP)

**F28F 9/002** (2013.01); **F28F 9/02** (2013.01); **F28F 9/0204** (2013.01); **F28F 9/0219** (2013.01)

Citation (search report)

- [XDYI] DE 19826881 A1 19991223 - BEHR GMBH & CO [DE]
- [XD] DE 19515530 A1 19961031 - THERMAL WERKE BETEILIGUNGEN GM [DE]
- [X] JP 2002357395 A 20021213 - SHOWA DENKO KK
- [XI] DE 19515526 C1 19960523 - THERMAL WERKE BETEILIGUNGEN GM [DE]
- [X] JP H0579790 A 19930330 - ZEXEL CORP
- [XI] DE 19819247 A1 19991111 - VALEO KLIMATECH GMBH & CO KG [DE]
- [YD] DE 19601276 A1 19970717 - BEHR GMBH & CO [DE]
- [Y] EP 0780655 A1 19970625 - VALEO CLIMATISATION [FR]
- [Y] DE 10056074 A1 20020508 - BEHR GMBH & CO [DE]

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

Designated extension state (EPC)

AL LT LV MK

DOCDB simple family (publication)

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DOCDB simple family (application)

**EP 03024712 A 20031028; DE 10259026 A 20021216**