

Title (en)
Heat exchanger, more particularly for automotive vehicle

Title (de)
Wärmeaustauscher, insbesondere für Kraftfahrzeuge

Title (fr)
Echangeur de chaleur, en particulier pour véhicule automobile

Publication
EP 1522814 A3 20121212 (DE)

Application
EP 04021988 A 20040916

Priority
DE 10347180 A 20031010

Abstract (en)
[origin: EP1522814A2] Heat exchanger, especially for a motor vehicle, comprises a collecting tank having longitudinal walls with edges that are arranged between the longitudinal connecting edges (5) of tube bottoms (3). Protrusions (20) on the edges of the longitudinal walls are inserted into corresponding openings in the tube bottoms. The transverse connecting edges of the tube bottoms have a contour cutout to form a tight and fixed solder connection with closing caps. Preferred Features: The contour cut-out of the transverse connecting edges is provided between the longitudinal connecting edges.

IPC 8 full level
F28F 9/00 (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP US)
F28D 1/0535 (2013.01 - EP US); **F28F 9/001** (2013.01 - EP US); **F28F 2275/14** (2013.01 - EP US)

Citation (search report)

- [XY] JP 2002257493 A 20020911 - TOYO RADIATOR CO LTD
- [XY] DE 19515530 A1 19961031 - THERMAL WERKE BETEILIGUNGEN GM [DE]
- [YA] DE 19722098 A1 19980917 - BEHR GMBH & CO [DE]
- [Y] JP H11142086 A 19990528 - DENSO CORP

Cited by
FR3056724A1; FR2902506A1; EP1923654A1; EP1923653A1; EP3916338A1; WO2018060623A3; WO2021239330A1

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 PL PT RO SE SI SK TR

Designated extension state (EPC)
AL HR LT LV MK

DOCDB simple family (publication)
EP 1522814 A2 20050413; EP 1522814 A3 20121212; DE 10347180 A1 20050512; US 2005077035 A1 20050414; US 7032656 B2 20060425

DOCDB simple family (application)
EP 04021988 A 20040916; DE 10347180 A 20031010; US 96037604 A 20041007