

Title (en)

SIDE PLATE FOR HEAT EXCHANGER, HEAT EXCHANGER AND PROCESS FOR FABRICATING THE HEAT EXCHANGER

Title (de)

SEITENPLATTE FÜR WÄRMETAUSCHER, WÄRMETAUSCHER UND VERFAHREN ZUR HERSTELLUNG DES WÄRMETAUSCHERS

Title (fr)

PLAQUE LATERALE POUR ECHANGEUR DE CHALEUR, ECHANGEUR DE CHALEUR ET PROCEDE DE FABRICATION DE CET ECHANGEUR DE CHALEUR

Publication

EP 1623178 A4 20120425 (EN)

Application

EP 04728440 A 20040420

Priority

- JP 2004005638 W 20040420
- JP 2003123163 A 20030428
- US 47777503 P 20030612

Abstract (en)

[origin: WO2004097324A1] A side plate 5 is designed for use in a condenser 1 comprising a pair of headers 2, 3 arranged as spaced apart from each other, a plurality of flat refrigerant tubes 4 arranged in parallel as spaced apart from one another between the headers 2, 3 and each having opposite ends joined to the respective headers 2, 3, and corrugated fins 6 arranged between adjacent refrigerant tubes 4. The side plate 5 is disposed externally of and at a distance from the refrigerant tube 4 at each of opposite ends of the tube arrangement. A corrugated fin 6 is disposed between the side plate 5 and the end refrigerant tube 4 adjacent thereto. The side plate 5 is provided with a projection 13 at each of opposite end portions of a surface thereof opposite to the other surface in contact with the corrugated fin 6. The side plate 5 functions to prevent the fin 6 from slipping off from between the tube 4 and the side plate 5 in fabricating the condenser 1.

IPC 8 full level

F28F 9/00 (2006.01); **F28D 1/053** (2006.01)

CPC (source: EP US)

B23K 1/0012 (2013.01 - EP US); **F28D 1/05366** (2013.01 - EP US); **F28D 1/05375** (2013.01 - EP US); **F28F 1/126** (2013.01 - EP US);
F28F 9/001 (2013.01 - EP US); **B23K 2101/14** (2018.07 - EP US)

Citation (search report)

- [X] GB 2188137 A 19870923 - ROEHM GMBH
- [X] JP S63121282 U 19880805
- [XY] EP 0882940 A2 19981209 - MITSUBISHI HEAVY IND LTD [JP]
- [Y] EP 0855567 A2 19980729 - MODINE MFG CO [US]
- See references of WO 2004097324A1

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

DOCDB simple family (publication)

WO 2004097324 A1 20041111; EP 1623178 A1 20060208; EP 1623178 A4 20120425; US 2006272801 A1 20061207

DOCDB simple family (application)

JP 2004005638 W 20040420; EP 04728440 A 20040420; US 55424905 A 20051025