

Title (en)

PLATE HEAT EXCHANGER, PLATE HEAT EXCHANGER PRODUCING METHOD, AND HEAT PUMP APPARATUS

Title (de)

PLATTENWÄRMETAUSCHER, PLATTENWÄRMETAUSCHERHERSTELLUNGSVERFAHREN UND WÄRMEPUMPENVORRICHTUNG

Title (fr)

ÉCHANGEUR THERMIQUE À PLAQUES, PROCÉDÉ DE FABRICATION D'UN ÉCHANGEUR THERMIQUE À PLAQUES, ET APPAREIL DE POMPE À CHALEUR

Publication

**EP 2551626 A4 20180221 (EN)**

Application

**EP 10848381 A 20100325**

Priority

JP 2010055166 W 20100325

Abstract (en)

[origin: EP2551626A1] A nozzle 114a is an inlet port for a refrigerant. A recessed portion 117 (recessed area) is formed in a side plate 110a. The recessed portion 117, in conjunction with the nozzle insertion portion 131 and a bottom surface 133 of a reinforcing plate 113a, defines an inner space 119 which substantially seals the periphery of a nozzle insertion portion 131. The inner space 119 is a so-called doughnut-shaped space which surrounds the periphery of the nozzle insertion portion 131. A brazing filler material is introduced into the inner space 117 through a gap 132, and fills the inner space. As a result of the filling of the brazing filler material, the nozzle 114a, the reinforcing plate 113a, and the inner space 119 constitute a "pillar". The pillar improves the strength of the plate heat exchanger.

IPC 8 full level

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Citation (search report)

- [YD] JP 2001099588 A 20010413 - HISAKA WORKS LTD
- [Y] WO 0000310 A1 20000106 - ALFA LAVAL AB [SE], et al
- [Y] JP 2001280888 A 20011010 - HISAKA WORKS LTD
- [Y] JP S63148081 U 19880929
- [Y] JP H0292481 U 19900723
- See references of WO 2011117988A1

Cited by

EP4006477A4; EP3203171A1; DE102016201712A1; FR3111976A1; US11353268B2; WO2021020749A1; WO2021259762A1

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