

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 A1 20130130 (EN)**

Application

**EP 10848381 A 20100325**

Priority

JP 2010055166 W 20100325

Abstract (en)

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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**F28D 9/005** (2013.01); **F28F 9/001** (2013.01); **F28F 9/0219** (2013.01); **F28F 9/0246** (2013.01); **F28F 2275/04** (2013.01)

Cited by

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