

Title (en)

Plate heat exchanger and heat pump device

Title (de)

Plattenwärmetauscher und Wärmepumpenvorrichtung

Title (fr)

Échangeur thermique à plaque et dispositif de pompe à chaleur

Publication

EP 2487444 B1 20180822 (EN)

Application

EP 12000962 A 20120214

Priority

JP 2011028106 A 20110214

Abstract (en)

[origin: EP2487444A2] One of the purpose is to improve a yield ratio of members to be used for a plate heat exchanger and a yield ratio of the plate heat exchanger itself, and to improve a strength of the plate heat exchanger. Each heat transfer plate 101 in the plate heat exchanger has a rectangular shape with a long side and a short side, in which two flow channel holes that are openings through which any of the first fluid and the second fluid passes are formed respectively on one side of the short sides and another side of the short sides. Each heat transfer plate 101 includes a structure 102 which protrudes from a part of a periphery of any flow channel hole of four flow channel holes, and bends and extends in a direction to be distanced from an opening. The structure 102 is attached firmly to a vicinity of a periphery of a corresponding flow channel hole in a lamination direction of the heat transfer plate that is adjacent on the other side.

IPC 8 full level

F28D 9/00 (2006.01); **F24D 3/18** (2006.01); **F25B 30/02** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP)

F24D 3/18 (2013.01); **F28D 9/005** (2013.01); **F28F 3/046** (2013.01); **F25B 30/02** (2013.01)

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DOCDB simple family (publication)

EP 2487444 A2 20120815; **EP 2487444 A3 20140319**; **EP 2487444 B1 20180822**; CN 102635982 A 20120815; CN 102635982 B 20141217; JP 2012167847 A 20120906; JP 5754969 B2 20150729

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