

Title (en)

Plate-type heat exchanger, method of manufacturing the same, and heat pump device

Title (de)

Platten-Wärmetauscher, Herstellungsverfahren dafür und Wärmepumpenvorrichtung

Title (fr)

Échangeur de chaleur à plaques, procédé de fabrication de celui-ci et dispositif de pompe à chaleur

Publication

**EP 2650633 B1 20190522 (EN)**

Application

**EP 13160236 A 20130320**

Priority

JP 2012091375 A 20120412

Abstract (en)

[origin: EP2650633A2] To guide lubricating oil flowing into a plate-type heat exchanger to an oil-recovery port, while minimizing the amount of lubricating oil trapped therein. A plate-type heat exchanger includes: a plate assembly 120 that is a plate stacked body including a stack of a plurality of heat-transfer plates 100; an inlet port and an outlet port for refrigerant 7 provided in the plate assembly 120; an inlet port and an outlet port for water 10 provided in the plate assembly 120; and an oil-recovery port 103e from which lubricating oil 8 contained in the refrigerant 7 is extracted, the oil-recovery port 103e being provided below the outlet port for the refrigerant 7 provided in the lower part of the plate assembly 120. Oil recovery holes 200 communicating with the oil-recovery port 103e are provided at the lower part inside the plate assembly 120, and a flow-smoothing embossed portion 201 is provided on each heat-transfer plate 100 so that the lubricating oil 8 smoothly flows toward the oil recovery hole 200.

IPC 8 full level

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CPC (source: EP)

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Cited by

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DOCDB simple family (publication)

**EP 2650633 A2 20131016**; **EP 2650633 A3 20180411**; **EP 2650633 B1 20190522**; CN 103376004 A 20131030; CN 103376004 B 20150812; CN 203405106 U 20140122; JP 2013221629 A 20131028; JP 5881515 B2 20160309

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