

Title (en)

PLATE HEAT EXCHANGER AND HEAT PUMP APPARATUS

Title (de)

PLATTENWÄRMETAUSCHER UND WÄRMEPUMPENVORRICHTUNG

Title (fr)

ÉCHANGEUR DE CHALEUR DE TYPE À PLAQUES ET DISPOSITIF DE POMPE À CHALEUR

Publication

EP 3865802 B1 20230816 (EN)

Application

EP 19872006 A 20191004

Priority

- JP 2018037720 W 20181010
- JP 2019039230 W 20191004

Abstract (en)

[origin: EP3865802A1] A plate heat exchanger includes: a plurality of heat transfer plates in each of which first to fourth through-holes are provided to extend through the heat transfer plate in a single direction, and which are stacked together in the single direction and provided to isolate first and second water flow passages; and a pair of end plates in which first and second inlet ports, first and second outlet ports, and a connection port are provided, and which are provided such that the heat transfer plates are sandwiched between the end plates in the single direction. The first inlet port is continuous with the first through-holes and allows a first fluid to flow into the first flow passage. The first outlet port is continuous with the second through-holes and allow the first fluid to flow out from the first flow passage. The second inlet port is continuous with the third through-holes and allows a second fluid to flow into the second flow passage. The second outlet port is continuous with the fourth through-holes and allows the second fluid to flow out from the second flow passage. The connection port is connected to a pressure relief valve provided separately from the plate heat exchanger.

IPC 8 full level

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CPC (source: EP US)

F25B 39/00 (2013.01 - US); **F25B 47/006** (2013.01 - US); **F25B 49/02** (2013.01 - EP); **F25B 49/022** (2013.01 - US); **F28D 9/005** (2013.01 - EP US); **F28F 27/00** (2013.01 - EP); **F25B 13/00** (2013.01 - EP); **F25B 30/02** (2013.01 - US); **F25B 39/02** (2013.01 - EP); **F25B 39/022** (2013.01 - US); **F25B 39/04** (2013.01 - EP); **F25B 41/20** (2021.01 - EP US); **F25B 2600/0251** (2013.01 - US); **F25B 2700/2103** (2013.01 - US); **F28D 2021/0068** (2013.01 - EP)

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EP 3865802 A1 20210818; **EP 3865802 A4 20211201**; **EP 3865802 B1 20230816**; CN 112771343 A 20210507; JP 7019068 B2 20220214; JP WO2020075630 A1 20210603; US 2021231355 A1 20210729; WO 2020075238 A1 20200416; WO 2020075630 A1 20200416

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