

Title (en)
PLATE TYPE HEAT EXCHANGER

Title (de)
PLATTENWÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR DE TYPE À PLAQUES

Publication
EP 3627087 B1 20230823 (EN)

Application
EP 17911106 A 20170525

Priority
JP 2017019550 W 20170525

Abstract (en)
[origin: EP3627087A1] Provided in the present invention is a plate heat exchanger capable of improving performance for transferring heat to heat transfer portions within a flow channel through which a second fluid medium that causes phase change as a result of its heat exchange with a first fluid medium is circulated. In the present invention, a first flow channel through which the first fluid medium is circulated is formed between first surfaces of each two adjacent heat transfer plates, and a second flow channel through which the second fluid medium is circulated is formed between second surface of each two adjacent heat transfer plates. Each of the first surfaces of the heat transfer portions includes a plurality of first ridges arranged at intervals from each other, and a plurality of first valleys each formed between each two adjacent first ridges. Each of the second surfaces of the heat transfer portions includes a plurality of second valleys being in a front-back relationship with the first ridges. The first surface of the heat transfer portion of at least one of the heat transfer plates includes a barrier ridge that is lower than the first ridges and extends in a direction intersecting with the first ridges. Each of the first ridges of each two adjacent heat transfer plates is positioned between each two adjacent first ridges of the opposed heat transfer plate. The barrier ridge crosses and abuts against the first ridges of the opposed heat transfer plate.

IPC 8 full level
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CPC (source: EP)
F28D 9/005 (2013.01); **F28D 9/02** (2013.01); **F28F 3/04** (2013.01); **F28F 3/046** (2013.01)

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