

Title (en)

A GAS-LIQUID PLATE HEAT EXCHANGER AND METHOD OF ASSEMBLING SAME

Title (de)

GAS-FLÜSSIGKEITS-PLATTENWÄRMETAUSCHER UND VERFAHREN ZU DESSEN MONTAGE

Title (fr)

ECHANGEUR DE CHALEUR À PLAQUES GAZ-LIQUIDE ET SON PROCÉDÉ D'ASSEMBLAGE

Publication

**EP 4303519 A1 20240110 (EN)**

Application

**EP 23183753 A 20230706**

Priority

DK PA202270366 A 20220708

Abstract (en)

A gas-liquid plate heat exchanger (1) comprises a stack of alternating first heat transfer plates (2) and second heat transfer plates (3) interposed between opposite exterior panels (4,5). The first heat transfer plates (2) and the second heat transfer plates (3) have respective aligned first liquid inlet openings (17) and second liquid inlet openings (19) and aligned first liquid outlet openings (18) and second liquid outlet openings (20). The first heat transfer plate (2) has a first surface pattern (44) on a first face (6), and a first opposite face (7), and an adjacent second heat transfer plate (3) has a second surface pattern (45) on a second face (9), and a second opposite face (10). The second face (9) faces the first opposite face (7) and the second surface pattern (44) is different from the first surface pattern (45). A liquid flow space (12) is delimited between the first face (6) and the second opposite face (10) by the first surface pattern (44). A gas flow space (13) is delimited between the second face (9) and the first opposite face (7) by the second surface pattern (45). The liquid flow space (12) and the gas flow space (13) are kept sealed from each other by forcing the opposite exterior panels (4,5) towards each other by means of clamping means (46,47).

IPC 8 full level

**F28D 9/00** (2006.01)

CPC (source: EP)

**F28D 1/0325** (2013.01); **F28D 1/035** (2013.01); **F28D 9/0043** (2013.01); **F28D 9/0056** (2013.01); **F28D 9/0062** (2013.01); **F28F 3/044** (2013.01); **F28F 3/046** (2013.01); **F28F 3/083** (2013.01); **F28F 3/10** (2013.01); **F28F 2280/04** (2013.01)

Citation (applicant)

EP 1203193 A1 20020508 - APV NORTH AMERICA INC [US]

Citation (search report)

- [XI] EP 0136481 A2 19850410 - ROCKWELL INTERNATIONAL CORP [US]
- [X] WO 2008113740 A1 20080925 - GALVANIN LUIGINO S P A [IT], et al
- [X] DE 102012013755 A1 20140116 - KOBER AG [DE]
- [A] US 11359868 B2 20220614 - ELDRED MICHAEL [US], et al
- [A] EP 3926282 A1 20211222 - ALFA LAVAL CORP AB [SE]

Designated contracting state (EPC)

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