

Title (en)
PLATE HEAT EXCHANGER

Title (de)
PLATTENWÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR À PLAQUES

Publication
EP 4095478 A4 20240214 (EN)

Application
EP 20915546 A 20201113

Priority
• CN 202010073885 A 20200122
• CN 2020128673 W 20201113

Abstract (en)
[origin: EP4095478A1] Disclosed in the embodiments of the present application is a plate heat exchanger. The plate heat exchanger comprises heat exchange plates and a port, and the port communicates with a predetermined heat exchange space of a plurality of heat exchange spaces. The heat exchange plates of the plate heat exchanger comprise a plurality of first heat exchange plates and a plurality of second heat exchange plates. The first heat exchange plate comprises: a first heat exchange plate main body; a first opening formed in the first heat exchange plate main body for forming the port; and a first annular protrusion surrounding the first opening, adjoining the first opening and protruding from the first heat exchange plate main body toward a first side in a stacking direction. The second heat exchange plate comprises: a second heat exchange plate main body; a second opening formed in the second heat exchange plate main body for forming the port; and a second annular protrusion surrounding the second opening, adjoining the second opening and protruding from the second heat exchange plate main body toward a second side opposite the first side in the stacking direction. The plate heat exchanger according to the embodiments of the present invention can simplify the manufacturing process of the plate heat exchanger, for example.

IPC 8 full level
F28F 9/22 (2006.01)

CPC (source: CN EP US)
F28D 9/00 (2013.01 - CN); **F28D 9/0037** (2013.01 - EP); **F28D 9/005** (2013.01 - EP); **F28D 9/0075** (2013.01 - US); **F28F 3/08** (2013.01 - CN);
F28F 3/086 (2013.01 - EP US); **F28F 9/0246** (2013.01 - EP); **F28F 9/22** (2013.01 - CN)

Citation (search report)
• [A] EP 2730878 A1 20140514 - ALFA LAVAL CORP AB [SE]
• [A] EP 1869391 A1 20071226 - ALFA LAVAL CORP AB [SE]
• [A] EP 3465048 A1 20190410 - ALFA LAVAL CORP AB [SE]
• See also references of WO 2021147479A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 4095478 A1 20221130; EP 4095478 A4 20240214; CN 113154910 A 20210723; US 2023062508 A1 20230302;
WO 2021147479 A1 20210729

DOCDB simple family (application)
EP 20915546 A 20201113; CN 202010073885 A 20200122; CN 2020128673 W 20201113; US 202017793961 A 20201113