

Title (en)  
PLATE HEAT EXCHANGER

Title (de)  
PLATTENWÄRMETAUSCHER

Title (fr)  
ECHANGEUR DE CHALEUR À PLAQUES

Publication  
**EP 4269925 A1 20231101 (EN)**

Application  
**EP 23170746 A 20230428**

Priority  
CN 202210456457 A 20220428

Abstract (en)  
A plate heat exchanger includes a number of first heat exchange plates and a number of second heat exchange plates. The first heat exchange plate includes a first wave crest and a first wave trough. The second heat exchange plate includes a second wave crest and a second wave trough. Along a thickness direction, a maximum distance between the first wave crest and the first wave trough is h. In a direction of a shortest line connecting tops of adjacent first wave crests, a minimum connecting width of the first wave trough and the second wave crest is  $W_{<sub>1</sub>}$ , and a minimum connecting width of the first wave crest and the second wave trough is  $W_{<sub>2</sub>}$ . At least one of a ratio of  $W_{<sub>1</sub>}/h$  and a ratio of  $W_{<sub>2</sub>}/h$  is within a range of 0.25 to 2.5 to ensure the connection strength between adjacent heat exchange plates.

IPC 8 full level  
**F28D 9/00** (2006.01)

CPC (source: CN EP US)  
**F28D 9/0031** (2013.01 - CN); **F28D 9/005** (2013.01 - EP); **F28F 3/025** (2013.01 - US); **F28F 3/046** (2013.01 - CN EP US);  
**F28F 3/08** (2013.01 - CN US)

Citation (search report)  
• [XY] US 2021063091 A1 20210304 - LEE SUKYOUNG [KR], et al  
• [YA] WO 2021154152 A1 20210805 - SWEP INT AB [SE]  
• [A] EP 3828489 A1 20210602 - ALFA LAVAL CORP AB [SE]  
• [A] EP 2585783 A1 20130501 - ALFA LAVAL CORP AB [SE]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4269925 A1 20231101**; CN 116817640 A 20230929; US 2023349645 A1 20231102

DOCDB simple family (application)  
**EP 23170746 A 20230428**; CN 202210456457 A 20220428; US 202318141356 A 20230428