

Title (en)
A HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER

Title (fr)
ÉCHANGEUR DE CHALEUR

Publication
EP 3857158 A1 20210804 (EN)

Application
EP 19769831 A 20190923

Priority
• EP 18197083 A 20180927
• EP 2019075527 W 20190923

Abstract (en)
[origin: WO2020064634A1] The present invention concerns a heat exchanger of the welded plate type for heat transfer between air and liquid, said heat exchanger comprising a plurality of plates with each with an internal volume inside a peripheral flange having a flange thickness, and which are in parallel fluid communication with an inlet and an outlet, said plates being mounted in a frame with a mutual predetermined distance, such that air can flow between the plates, and wherein the plates are mounted between at least two plate holding frame members on opposite sides of said plates, wherein said plate holding frame members are provided with an exterior edge and with a plurality of slits in a comb-like shape extending from said exterior edge, wherein first type slits and second type of slits are provided in an alternating configuration, wherein the first type slits are formed with a narrow entry passage section having a width corresponding to the flange thickness and a widened opening section there behind, and wherein the first type slits are adapted to receiving the peripheral flanges of the plates in the narrow passage section; and wherein the second type slits are substantially straight and left vacant. By a heat exchanger according to the invention the plates are held stationary so that wear is reduced during operation of the heat exchanger.

IPC 8 full level
F28F 9/007 (2006.01)

CPC (source: EP US)
F28D 9/0031 (2013.01 - US); **F28F 9/0075** (2013.01 - EP US); **F28F 21/083** (2013.01 - US); **F28F 2265/26** (2013.01 - EP US); **F28F 2275/06** (2013.01 - US); **F28F 2275/08** (2013.01 - EP US)

Citation (search report)
See references of WO 2020064634A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2020064634 A1 20200402; CN 113167552 A 20210723; EP 3857158 A1 20210804; EP 3857158 B1 20230607; EP 3857158 C0 20230607; US 2022034603 A1 20220203

DOCDB simple family (application)
EP 2019075527 W 20190923; CN 201980076989 A 20190923; EP 19769831 A 20190923; US 201917279696 A 20190923