

Title (en)  
Asymmetric heat exchanger

Title (de)  
Asymmetrischer Wärmetauscher

Title (fr)  
Échangeur thermique asymétrique

Publication  
**EP 2267391 A2 20101229 (EN)**

Application  
**EP 10167552 A 20100628**

Priority  
SE 0950497 A 20090626

Abstract (en)  
A plate heat exchanger (100) comprises a start plate (110), an end plate (120), and at least two heat exchanger plates (130, 130') placed there between and being provided with a pressed pattern of ridges (R) and grooves (G) adapted to keep the plates on a distance from one another, such that flow channels (N,W) are formed between the plates. Either, or both, of the ridges (R) and grooves (G) are provided with indentations (I, I') adapted for housing a ridge (R) or groove (G) of a neighboring plate.

IPC 8 full level  
**F28D 9/00** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP)  
**F28D 9/005** (2013.01); **F28F 3/046** (2013.01)

Citation (applicant)  
US 4423772 A 19840103 - DAHLGREN JONS A [SE]

Cited by  
DE102018002201A1; US2016313071A1; RU2751676C1; CN109312994A; US2012227438A1; ITPD20130187A1; CN113154911A; DE102018002201B4; CN103528419A; CN106415183A; EP2988085A1; CN105705284A; US2016250703A1; US10035207B2; US10076812B2; US10234212B2; JP2014115048A; WO2014091850A1; WO2021170436A1; WO2015001506A1; WO2016026958A1; WO2015181255A1; US10903537B2; CN105793662A; JP2016540181A; US10837717B2; EP3872434A1; EP3543626A1; WO2022015217A1

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 SE SI SK SM TR

Designated extension state (EPC)  
BA ME RS

DOCDB simple family (publication)  
**EP 2267391 A2 20101229; EP 2267391 A3 20140226; EP 2267391 B1 20180411; PT 2267391 T 20180620; TR 201809058 T4 20180723**

DOCDB simple family (application)  
**EP 10167552 A 20100628; PT 10167552 T 20100628; TR 201809058 T 20100628**