

Title (en)  
Asymmetric heat exchanger

Title (de)  
Asymmetrischer Wärmetauscher

Title (fr)  
Échangeur thermique asymétrique

Publication  
**EP 2267391 B1 20180411 (EN)**

Application  
**EP 10167552 A 20100628**

Priority  
SE 0950497 A 20090626

Abstract (en)  
[origin: EP2267391A2] 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 (examination)  
• US 6478081 B1 20021112 - SHAW JONATHAN GRAHAM [US]  
• EP 1630510 A1 20060301 - SWEP INT AB [SE]

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

Designated contracting state (EPC)  
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**EP 2267391 A2 20101229; EP 2267391 A3 20140226; EP 2267391 B1 20180411;** PT 2267391 T 20180620; TR 201809058 T4 20180723

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**EP 10167552 A 20100628;** PT 10167552 T 20100628; TR 201809058 T 20100628