

Title (en)  
PLATE HEAT EXCHANGER

Title (de)  
PLATTENWÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR THERMIQUE À PLAQUES

Publication  
**EP 2420791 A4 20140305 (EN)**

Application  
**EP 10764664 A 20100415**

Priority  
• KR 2010002323 W 20100415  
• KR 20090033219 A 20090416

Abstract (en)  
[origin: EP2420791A2] A plate heat exchanger capable of increasing the fluidity of a fluid and realizing improved heat exchange efficiency, wherein each of stacked heat exchange elements are formed by assembling upper and lower plates, with first and second flow channels for first and second fluids respectively defined in each element and between the elements, inlet and outlet ports formed in opposite ends of the element, upper and lower flanges formed on the respective upper and lower plates, and upper and lower flow grooves diagonally extending on the lower surface of the upper plate and on the upper surface of the lower plate and intersecting with each other to define the first flow channel, wherein a flow guide structure for guiding the first fluid in at least two flow directions is provided on each of the areas around the inlet and outlet ports of the upper and lower plates.

IPC 8 full level  
**F28D 9/00** (2006.01); **F28F 3/02** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP KR US)  
**F28D 1/0333** (2013.01 - EP US); **F28D 9/00** (2013.01 - KR); **F28D 9/0043** (2013.01 - EP US); **F28F 3/02** (2013.01 - KR); **F28F 3/042** (2013.01 - EP US); **F28F 3/044** (2013.01 - EP US); **F28F 3/046** (2013.01 - EP US); **F28F 9/026** (2013.01 - EP US)

Citation (search report)  
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Designated contracting state (EPC)  
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

DOCDB simple family (publication)  
**EP 2420791 A2 20120222; EP 2420791 A4 20140305**; CN 102395853 A 20120328; CN 102395853 B 20140402; KR 100950689 B1 20100331; US 2012031598 A1 20120209; WO 2010120125 A2 20101021; WO 2010120125 A3 20110310

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**EP 10764664 A 20100415**; CN 201080016708 A 20100415; KR 20090033219 A 20090416; KR 2010002323 W 20100415; US 201013264450 A 20100415