

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 4047298 A4 20221123 (EN)**

Application  
**EP 20876390 A 20201008**

Priority  
• JP 2019190167 A 20191017  
• JP 2020038071 W 20201008

Abstract (en)  
[origin: EP4047298A1] In a heat exchanger that causes second fluid B to flow between layers of plate fin layered body (2) and carries out heat exchange between first fluid A flowing through plate fin flow path (13) and second fluid B, plate fin (2a) includes header opening (11a) to which first fluid A from a supply pipe is supplied, header flow path (11) formed around header opening (11a), header flow path port (8) that causes header opening (11a) and header flow path (11) to communicate with each other, and plate fin flow path (13) through which the first fluid from header flow path (11) flows, and which carries out heat exchange with the second fluid, and in plate fin layered body (2), inner peripheral sides of header flow paths (11) are continuously joined in a layering direction.

IPC 8 full level  
**F28F 9/02** (2006.01); **F28F 3/08** (2006.01); **F28F 3/12** (2006.01)

CPC (source: CN EP)  
**F28D 1/0333** (2013.01 - EP); **F28D 9/0043** (2013.01 - EP); **F28D 9/005** (2013.01 - CN); **F28F 3/048** (2013.01 - CN); **F28F 3/086** (2013.01 - CN); **F28F 3/12** (2013.01 - EP); **F28F 9/0221** (2013.01 - EP); **F28F 9/0273** (2013.01 - EP); **F28F 2225/04** (2013.01 - EP); **F28F 2240/00** (2013.01 - EP); **F28F 2280/04** (2013.01 - EP)

Citation (search report)  
• [XY] US 2015292803 A1 20151015 - NYANDER ANDERS [SE], et al  
• [XI] EP 0622600 A1 19941102 - KNECHT FILTERWERKE GMBH [DE]  
• [Y] CN 104364600 B 20170322  
• [A] US 2012118548 A1 20120517 - HAN SANG CHUL [KR], et al  
• [A] US 7568520 B2 20090804 - OZAWA TATSUHIRO [JP], et al  
• See references of WO 2021075334A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4047298 A1 20220824**; **EP 4047298 A4 20221123**; CN 113424009 A 20210921; CN 113424009 B 20221220; JP 2021063637 A 20210422; JP 7365634 B2 20231020; WO 2021075334 A1 20210422

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**EP 20876390 A 20201008**; CN 202080015154 A 20201008; JP 2019190167 A 20191017; JP 2020038071 W 20201008