

Title (en)
WATER HEAT EXCHANGER

Title (de)
WASSERWÄRMETAUSCHER

Title (fr)
ÉCHANGEUR THERMIQUE À EAU

Publication
EP 3569962 A4 20200902 (EN)

Application
EP 18738883 A 20180110

Priority
• JP 2017004638 A 20170113
• JP 2018000309 W 20180110

Abstract (en)
[origin: EP3569962A1] When a first layer (10) is viewed in a stacking direction, each first flow path (11) extends from one end portion to another end portion of the first layer (10) in a direction crossing a direction of arrangement of the first flow paths (11). When a second layer (20) is viewed in the stacking direction, each second flow path (21) extends from one end portion to another end portion of the second layer (20) in a direction crossing a direction of arrangement of the second flow paths (21). Here, when the first layer (10) is viewed in the stacking direction, the first flow paths (11) have a meandering shape, and/or when the second layer (20) is viewed in the stacking direction, the second flow paths (21) have a meandering shape.

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

CPC (source: EP US)
F28D 9/00 (2013.01 - EP); **F28D 9/005** (2013.01 - US); **F28D 9/0093** (2013.01 - US); **F28F 3/04** (2013.01 - EP US); **F28F 3/048** (2013.01 - EP)

Citation (search report)
• [X] US 4744414 A 19880517 - SCHON STEVEN G [US]
• [X] EP 1136782 A1 20010926 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• [X] US 2016282064 A1 20160929 - YOON JUHYEON [KR], et al
• See references of WO 2018131596A1

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

DOCDB simple family (publication)
EP 3569962 A1 20191120; EP 3569962 A4 20200902; EP 3569962 B1 20211201; CN 110168300 A 20190823; CN 110168300 B 20210824; JP 2018112381 A 20180719; JP 6432613 B2 20181205; US 2019360758 A1 20191128; WO 2018131596 A1 20180719

DOCDB simple family (application)
EP 18738883 A 20180110; CN 201880006479 A 20180110; JP 2017004638 A 20170113; JP 2018000309 W 20180110; US 201816477705 A 20180110