

Title (en)
HEAT EXCHANGER AND REFRIGERATION CYCLE APPARATUS

Title (de)
WÄRMETAUSCHER UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
ÉCHANGEUR DE CHALEUR ET APPAREIL À CYCLE FRIGORIFIQUE

Publication
EP 4095476 A4 20230111 (EN)

Application
EP 20915558 A 20200123

Priority
JP 2020002321 W 20200123

Abstract (en)
[origin: EP4095476A1] A heat exchanger includes a plurality of heat transfer tubes arranged at intervals in a first direction, and configured to circulate refrigerant in a second direction intersecting the first direction, and a refrigerant distributor connected to one end of each of the plurality of heat transfer tubes and configured to distribute the refrigerant to the plurality of heat transfer tubes. The refrigerant distributor includes, in its inside, a first flow path and a second flow path through which the refrigerant flows. The first flow path is formed so as to extend in the first direction, communicates with the plurality of heat transfer tubes, and is connected with an inflow tube configured to cause the refrigerant to flow into the refrigerant distributor. The second flow path is formed so as to extend in the first direction, with opposite ends thereof being connected with the first flow path, and is formed so as to be positioned in a third direction relative to the first flow path, when a direction intersecting a plane parallel to the first direction and to the second direction is defined as the third direction.

IPC 8 full level
F28F 9/02 (2006.01)

CPC (source: EP)
F28F 9/0204 (2013.01); **F28F 9/0221** (2013.01); **F28F 9/0278** (2013.01); **F28D 1/05383** (2013.01); **F28D 2021/0068** (2013.01)

Citation (search report)

- [E] EP 3875878 A1 20210908 - MITSUBISHI ELECTRIC CORP [JP]
- [A] US 2016076824 A1 20160317 - MATSUDA TAKUYA [JP], et al
- [A] US 10077953 B2 20180918 - MATSUDA TAKUYA [JP], et al
- [A] WO 2019087235 A1 20190509 - MITSUBISHI ELECTRIC CORP [JP]
- [A] JP 2006010262 A 20060112 - DENSO CORP
- [A] US 2008314076 A1 20081225 - ICHIYANAGI SHIGE HARU [JP], et al
- See also references of WO 2021149223A1

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)
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DOCDB simple family (application)
EP 20915558 A 20200123; JP 2020002321 W 20200123; JP 2021572221 A 20200123; TW 109115172 A 20200507