

Title (en)

LAMINATED HEADER, HEAT EXCHANGER AND REFRIGERATION CYCLE DEVICE

Title (de)

LAMINIERTES KOPFTEIL, WÄRMETAUSCHER UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)

COLLECTEUR STRATIFIÉ, ÉCHANGEUR THERMIQUE ET DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication

**EP 3499169 A4 20190626 (EN)**

Application

**EP 17902575 A 20171013**

Priority

JP 2017037256 W 20171013

Abstract (en)

[origin: EP3499169A1] In a laminated header, second flow passages and fourth flow passages are configured in such a manner that refrigerant flowing through each of the second flow passages and the fourth flow passages flows in a direction opposite to a direction in which the refrigerant flows through each of a first flow passage, third flow passages, fifth flow passages, and sixth flow passages.

IPC 8 full level

**F28F 9/02** (2006.01); **F25B 39/00** (2006.01); **F25B 41/00** (2006.01)

CPC (source: EP)

**F25B 39/00** (2013.01); **F25B 39/028** (2013.01); **F25B 39/04** (2013.01); **F25B 41/00** (2013.01); **F28F 9/02** (2013.01); **F28F 9/0221** (2013.01); **F28F 9/0278** (2013.01)

Citation (search report)

- [A] EP 2998683 A1 20160323 - MITSUBISHI ELECTRIC CORP [JP]
- [A] EP 2998682 A1 20160323 - MITSUBISHI ELECTRIC CORP [JP]
- [AD] WO 2016071946 A1 20160512 - MITSUBISHI ELECTRIC CORP [JP]

Cited by

EP4235059A4; EP4317898A1; US11740026B2; WO2024028069A1; US11913689B2

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

DOCDB simple family (publication)

**EP 3499169 A1 20190619**; **EP 3499169 A4 20190626**; **EP 3499169 B1 20200527**; CN 111201415 A 20200526; CN 111201415 B 20210514; JP 6840262 B2 20210310; JP WO2019073610 A1 20200402; WO 2019073610 A1 20190418

DOCDB simple family (application)

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