

Title (en)  
HEAT EXCHANGER

Title (de)  
WÄRMETAUSCHER

Title (fr)  
ÉCHANGEUR DE CHALEUR

Publication  
**EP 3916331 B1 20230927 (EN)**

Application  
**EP 21175003 A 20210520**

Priority  
JP 2020092550 A 20200527

Abstract (en)

[origin: EP3916331A1] The present disclosure provides a heat exchanger that can allow a refrigerant to uniformly flow to a plurality of flat tubes. A heat exchanger in the present disclosure includes a pair of header pipes connected to respective end parts of each flat tube. In the case where the heat exchanger functions as an evaporator, at least one or more first refrigerant pipes from which a refrigerant flows out and a plurality of second refrigerant pipes into which the refrigerant flows are provided in a header pipe of the header pipes; a refrigerant dividing section is provided in the header pipe to which the plurality of second refrigerant pipes are connected, wherein the refrigerant dividing section is formed by a plurality of refrigerant inflow spaces into which the refrigerant flows from the plurality of second refrigerant pipes, a refrigerant outflow space provided between the plurality of refrigerant inflow spaces, and a plurality of partition plates separating the plurality of refrigerant inflow spaces and the refrigerant outflow space, and the refrigerant outflow space allows the refrigerant to flow out to the flat tube; and the partition plates are provided with communication holes, respectively, allowing the refrigerant outflow space to communicate with a refrigerant inflow space of the refrigerant inflow spaces above the refrigerant outflow space and a refrigerant inflow space of the refrigerant inflow spaces below the refrigerant outflow space.

IPC 8 full level

**F28D 1/04** (2006.01); **F25B 39/00** (2006.01); **F25B 39/02** (2006.01); **F28D 1/053** (2006.01); **F28D 21/00** (2006.01); **F28F 1/32** (2006.01); **F28F 9/02** (2006.01)

CPC (source: CN EP)

**F25B 39/028** (2013.01 - CN EP); **F28D 1/0417** (2013.01 - EP); **F28D 1/0435** (2013.01 - EP); **F28D 1/05375** (2013.01 - EP); **F28F 9/0209** (2013.01 - EP); **F28F 9/028** (2013.01 - EP); **F28F 9/22** (2013.01 - CN); **F25B 2339/02** (2013.01 - CN); **F28D 2021/0068** (2013.01 - EP); **F28F 1/32** (2013.01 - EP); **F28F 9/0212** (2013.01 - EP); **F28F 2009/224** (2013.01 - CN)

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 3916331 A1 20211201**; **EP 3916331 B1 20230927**; **EP 3916331 C0 20230927**; CN 113739454 A 20211203; JP 2021188795 A 20211213

DOCDB simple family (application)

**EP 21175003 A 20210520**; CN 202110571545 A 20210525; JP 2020092550 A 20200527