

Title (en)

HEAT EXCHANGER, HEAT EXCHANGER UNIT, AND REFRIGERATION CYCLE DEVICE

Title (de)

WÄRMETAUSCHER, WÄRMETAUSCHEREINHEIT UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)

ÉCHANGEUR DE CHALEUR, UNITÉ D'ÉCHANGEUR DE CHALEUR ET DISPOSITIF À CYCLE FRIGORIFIQUE

Publication

EP 4130612 A4 20230426 (EN)

Application

EP 20927408 A 20200327

Priority

JP 2020013890 W 20200327

Abstract (en)

[origin: EP4130612A1] A heat exchanger, a heat exchanger unit, and a refrigeration cycle apparatus capable of reducing an imbalance in the amounts of liquid refrigerant and gas refrigerant that flow in heat transfer tubes even in a low-load operation of the refrigeration cycle apparatus are obtained. A heat exchanger, a heat exchanger unit, and a refrigeration cycle apparatus of the present disclosure include: heat transfer tubes arranged in a first direction and extending in a second direction perpendicular to the first direction; a refrigerant distributor connected to one end portion of each of the heat transfer tubes; and a refrigerant inflow pipe connected to the refrigerant distributor. The refrigerant distributor is formed to extend in the first direction, and includes: a gas-liquid separation chamber in which refrigerant that flows from the refrigerant inflow pipe into the gas-liquid separation chamber is separated into gas refrigerant and liquid refrigerant; a distribution chamber connected to the end portion of each of the heat transfer tubes; a liquid passage hole through which the liquid refrigerant flows, and through which the gas-liquid separation chamber and the distribution chamber communicate with each other; and a gas passage hole through which the gas refrigerant flows, and which is provided offset from the liquid passage hole in the first direction.

IPC 8 full level

F25B 39/02 (2006.01); **F28F 9/02** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)

F25B 39/02 (2013.01); **F25B 39/028** (2013.01); **F28F 9/0207** (2013.01); **F28F 9/0214** (2013.01); **F28F 9/0221** (2013.01); **F28F 9/0243** (2013.01); **F28F 9/027** (2013.01); **F28F 9/0278** (2013.01); **F25B 13/00** (2013.01); **F25B 49/02** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2400/23** (2013.01); **F25B 2600/2501** (2013.01); **F28D 1/05366** (2013.01); **F28D 2021/0068** (2013.01)

Citation (search report)

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- [A] DE 102012019512 A1 20140410 - HOCHSCHULE COBURG HOCHSCHULE FUER ANGEWANDTE WISSENSCHAFTEN [DE], et al
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- See also references of WO 2021192192A1

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 4130612 A1 20230208; **EP 4130612 A4 20230426**; JP 7493585 B2 20240531; JP WO2021192192 A1 20210930; WO 2021192192 A1 20210930

DOCDB simple family (application)

EP 20927408 A 20200327; JP 2020013890 W 20200327; JP 2022510301 A 20200327