

Title (en)
EVAPORATOR AND REFRIGERANT CIRCUIT

Title (de)
VERDAMPFER UND KÜHLKREIS

Title (fr)
ÉVAPORATEUR ET CIRCUIT RÉFRIGÉRANT

Publication
EP 3306232 B1 20190522 (EN)

Application
EP 17194600 A 20171003

Priority
JP 2016197354 A 20161005

Abstract (en)
[origin: EP3306232A1] The accumulation of lubricating oil within a header is suppressed in a configuration including a plurality of heat transfer pipes. A heat exchanger 10A includes a plurality of heat transfer pipes 11 that are provided at intervals in a vertical direction and allow a refrigerant to flow therethrough toward first ends; and a header 20A that extends in the vertical direction, has the first ends of the plurality of heat transfer pipes 11 connected thereto, and allows the refrigerant to flow from a lower end 20s toward an upper end 20t to which a refrigerant pipe 4 is connected. A flow passage cross-sectional area of a portion of the header 20A to which a heat transfer pipe 11A located at a lowermost stage among the plurality of heat transfer pipes 11 is connected is smaller than a flow passage cross-sectional area at the upper end 20t of the header 20A.

IPC 8 full level
F25B 31/00 (2006.01); **F28F 9/02** (2006.01); **F25B 39/02** (2006.01); **F25B 41/00** (2006.01); **F25B 41/04** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP US)
F25B 39/028 (2013.01 - EP US); **F25B 41/22** (2021.01 - EP US); **F25B 41/40** (2021.01 - EP US); **F28F 9/0243** (2013.01 - EP);
F28F 9/0263 (2013.01 - EP); **F25B 31/004** (2013.01 - EP); **F25B 41/42** (2021.01 - EP US); **F25B 2339/02** (2013.01 - EP);
F25B 2400/0409 (2013.01 - EP); **F25B 2600/2501** (2013.01 - EP); **F28D 2021/0071** (2013.01 - EP); **F28F 2009/029** (2013.01 - EP);
F28F 2250/06 (2013.01 - EP)

Cited by
CN113171627A; US11156412B2

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 3306232 A1 20180411; EP 3306232 B1 20190522; JP 2018059664 A 20180412

DOCDB simple family (application)
EP 17194600 A 20171003; JP 2016197354 A 20161005