

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF A CYCLE DE RÉFRIGÉRATION

Publication
EP 3415841 A4 20190313 (EN)

Application
EP 16889756 A 20161201

Priority
• JP 2016024271 A 20160212
• JP 2016005038 W 20161201

Abstract (en)
[origin: EP3415841A1] A refrigeration cycle device of the present invention includes a refrigerant circuit configured by annularly connecting a compressor, a heat source-side heat exchanger, a pressure reducing device, and a using-side heat exchanger, and through which a refrigerant circulates. The refrigerant is R32. The using-side heat exchanger is a plate-type heat exchanger in which the refrigerant and a liquid exchange heat. The plate-type heat exchanger includes a first channel through which the R32 flows, and a second channel through which the liquid flows. A ratio of a sectional area of the first channel relative to a sectional area of the second channel when R410A is used as the refrigerant is not lower than 0.5. Thus, a highly environment-friendly refrigeration cycle device can be provided.

IPC 8 full level
F25B 39/00 (2006.01); **F25B 1/00** (2006.01); **F25B 13/00** (2006.01); **F25B 25/00** (2006.01); **F28D 9/00** (2006.01)

CPC (source: EP)
F25B 13/00 (2013.01); **F25B 25/005** (2013.01); **F28D 9/00** (2013.01); **F25B 2313/003** (2013.01); **F25B 2500/01** (2013.01)

Citation (search report)
• [XY] JP 2000274789 A 20001006 - MITSUBISHI ELECTRIC CORP
• [YA] US 2014090409 A1 20140403 - YAMASHITA KOJI [JP], et al
• [A] EP 1243877 A1 20020925 - DAIKIN IND LTD [JP]
• [A] US 2014373569 A1 20141225 - TSUBOE HIROAKI [JP], et al
• See references of WO 2017138052A1

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 3415841 A1 20181219; **EP 3415841 A4 20190313**; CN 108291754 A 20180717; JP WO2017138052 A1 20181206;
WO 2017138052 A1 20170817

DOCDB simple family (application)
EP 16889756 A 20161201; CN 201680068617 A 20161201; JP 2016005038 W 20161201; JP 2017566241 A 20161201