

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFGVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE FRIGORIFIQUE

Publication
EP 3809064 A4 20210922 (EN)

Application
EP 18922598 A 20180615

Priority
JP 2018022956 W 20180615

Abstract (en)

[origin: EP3809064A1] In a refrigeration cycle apparatus (100), refrigerant circulates through a compressor (1), a first heat exchanger (2), a first expansion valve (3), a refrigerant container (4), a second expansion valve (5) and a second heat exchanger (6) in this order. The refrigeration cycle apparatus (100) includes: a third expansion valve (8); and a specific flow path (71). The specific flow path (71) allows the third expansion valve (8) to communicate with the refrigerant container (4). The third expansion valve (8) communicates with a suction port of the compressor (1) through the refrigerant container (4). An amount per unit time of the refrigerant passing through the specific flow path (71) when a specific condition is satisfied is larger than the amount per unit time of the refrigerant passing through the specific flow path (71) when the specific condition is not satisfied. The specific condition is a condition that an amount of the refrigerant in the refrigerant container (4) is smaller than a reference amount.

IPC 8 full level

F25B 43/00 (2006.01); **F25B 1/00** (2006.01); **F25B 41/39** (2021.01)

CPC (source: EP)

F25B 41/30 (2021.01); **F25B 41/39** (2021.01); **F25B 49/02** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2400/0411** (2013.01);
F25B 2400/053 (2013.01); **F25B 2400/16** (2013.01); **F25B 2400/23** (2013.01); **F25B 2500/23** (2013.01); **F25B 2500/24** (2013.01);
F25B 2600/05 (2013.01); **F25B 2600/2509** (2013.01); **F25B 2600/2513** (2013.01); **F25B 2600/2519** (2013.01); **F25B 2700/04** (2013.01);
F25B 2700/195 (2013.01)

Citation (search report)

- [X] EP 3163217 A1 20170503 - MITSUBISHI ELECTRIC CORP [JP]
- [X] US 2015267930 A1 20150924 - RYU BYOUNGJIN [KR], et al
- [A] US 2016216015 A1 20160728 - SAKAI MIZUO [JP], et al
- See also references of WO 2019239587A1

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CN112611121A

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 3809064 A1 20210421; EP 3809064 A4 20210922; CN 112219074 A 20210112; CN 112219074 B 20221206; CN 112219074 B9 20230120;
JP 6925528 B2 20210825; JP WO2019239587 A1 20210311; WO 2019239587 A1 20191219

DOCDB simple family (application)

EP 18922598 A 20180615; CN 201880094106 A 20180615; JP 2018022956 W 20180615; JP 2020525064 A 20180615