

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF DE CIRCUIT DE RÉFRIGÉRATION

Publication
EP 3457049 A1 20190320 (EN)

Application
EP 18198946 A 20150618

Priority
• EP 18198946 A 20150618
• EP 15895644 A 20150618
• JP 2015067652 W 20150618

Abstract (en)
A refrigeration cycle device is provided with a heat source-side unit (100), a load-side unit (200) connected to the heat source-side unit via a first connection pipe (300) and a second connection pipe (400), and a control device (50). A first compressor (2), a first heat source-side heat exchanger (3), a first heat source-side decompressor (4), a sub-cooling heat exchanger (10), and a load-side heat exchanger (6) constitute part of a first refrigeration cycle that is connected via a refrigerant pipeline and that circulates a first refrigerant. During a cooling operation in which the load-side heat exchanger functions as an evaporator, control is carried out which causes the first refrigerant to flow into the first connection pipeline (300) as a liquid refrigerant having a pressure smaller than the design pressure of the first connection pipe.

IPC 8 full level
F25B 1/00 (2006.01); **F24F 11/89** (2018.01); **F25B 1/10** (2006.01); **F25B 7/00** (2006.01); **F25B 9/00** (2006.01); **F25B 40/00** (2006.01); **F25B 40/02** (2006.01); **F25B 41/04** (2006.01)

CPC (source: EP US)
F24F 11/89 (2017.12 - EP US); **F25B 1/10** (2013.01 - EP); **F25B 7/00** (2013.01 - EP); **F25B 9/008** (2013.01 - EP); **F25B 40/00** (2013.01 - EP); **F25B 41/39** (2021.01 - EP US); **F25B 41/24** (2021.01 - EP US); **F25B 2400/13** (2013.01 - EP); **F25B 2500/12** (2013.01 - EP); **F25B 2600/2509** (2013.01 - EP); **F25B 2600/2513** (2013.01 - EP); **F25B 2700/191** (2013.01 - EP); **F25B 2700/1933** (2013.01 - EP); **F25B 2700/197** (2013.01 - EP); **F25B 2700/21151** (2013.01 - EP); **F25B 2700/21174** (2013.01 - EP)

Citation (applicant)
JP 2012112622 A 20120614 - MITSUBISHI ELECTRIC CORP

Citation (search report)
• [A] EP 2787305 A1 20141008 - MITSUBISHI ELECTRIC CORP [JP]
• [A] WO 2011070954 A1 20110616 - MITSUBISHI HEAVY IND LTD [JP], et al
• [A] EP 2765370 A1 20140813 - PANASONIC CORP [JP]

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 3312524 A1 20180425; **EP 3312524 A4 20180704**; **EP 3312524 B1 20200603**; EP 3457049 A1 20190320; EP 3457049 B1 20220413; JP 6735744 B2 20200805; JP WO2016203624 A1 20180118; WO 2016203624 A1 20161222

DOCDB simple family (application)
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