

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 3312524 A4 20180704 (EN)**

Application  
**EP 15895644 A 20150618**

Priority  
JP 2015067652 W 20150618

Abstract (en)  
[origin: EP3312524A1] Provided is a refrigeration cycle apparatus, including: a heat source-side unit; a load-side unit which is connected to the heat source-side unit by a first connection pipe arranged and a second connection pipe; and a controller, in which the first compressor, the first heat source-side heat exchanger, the first heat source-side pressure reducing device, the load-side pressure reducing device, and the load side heat exchanger are connected by a refrigerant pipe and form a first refrigeration cycle through which first refrigerant circulates, and in which, during cooling operation in which the load side heat exchanger functions as an evaporator, the controller regulates an opening degree of the first heat source-side pressure reducing device to cause the first refrigerant to flow into the first connection pipe as liquid refrigerant having a pressure less than a design pressure of the first connection pipe.

IPC 8 full level  
**F25B 1/00** (2006.01); **F24F 11/89** (2018.01); **F25B 7/00** (2006.01); **F25B 9/00** (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 (search report)

- [XA] WO 2014181399 A1 20141113 - MITSUBISHI ELECTRIC CORP [JP]
- [A] WO 2011070954 A1 20110616 - MITSUBISHI HEAVY IND LTD [JP], et al
- [A] EP 2765370 A1 20140813 - PANASONIC CORP [JP]
- [A] JP 2005106315 A 20050421 - MITSUBISHI ELECTRIC CORP
- [A] EP 2787305 A1 20141008 - MITSUBISHI ELECTRIC CORP [JP]
- [A] WO 2014203354 A1 20141224 - MITSUBISHI ELECTRIC CORP [JP]
- See references of WO 2016203624A1

Cited by  
CN112033040A

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 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)  
**EP 15895644 A 20150618**; EP 18198946 A 20150618; JP 2015067652 W 20150618; JP 2017524243 A 20150618