

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE FRIGORIFIQUE

Publication  
**EP 4151926 A4 20230614 (EN)**

Application  
**EP 20935247 A 20200511**

Priority  
JP 2020018843 W 20200511

Abstract (en)  
[origin: EP4151926A1] A refrigeration cycle apparatus (100) comprises a refrigerant circuit (C1) and a refrigerant storage circuit (C2). In the refrigerant circuit (C1), a compressor (1), an outdoor heat exchanger (2), an expansion valve (3), and an indoor heat exchanger (4) are connected together by a pipe (P). The pipe (P) has a first pipe portion (P1) and a second pipe portion (P2). The first pipe portion (P1) connects the outdoor heat exchanger (2) to the expansion valve (3). The second pipe portion (P2) connects the indoor heat exchanger (4) to the compressor (1). The refrigerant storage circuit (C2) has a storage container (12), an expander (13), and a valve device (11). The storage container (12) stores refrigerant. The expander (13) is located between the storage container (12) and the second pipe (P2). The valve device (11) is located between the first pipe (P1) and the expander (13). The valve device (11) is configured to open and close the refrigerant storage circuit (C2).

IPC 8 full level  
**F25B 13/00** (2006.01); **F25B 1/00** (2006.01)

CPC (source: EP US)  
**F25B 13/00** (2013.01 - EP US); **F25B 41/20** (2021.01 - EP); **F25B 41/26** (2021.01 - US); **F25B 49/02** (2013.01 - EP);  
**F25B 2313/0314** (2013.01 - EP); **F25B 2313/0315** (2013.01 - EP); **F25B 2400/13** (2013.01 - EP); **F25B 2400/16** (2013.01 - EP);  
**F25B 2700/2116** (2013.01 - EP); **F25B 2700/2117** (2013.01 - EP)

Citation (search report)  
• [YA] JP 2012207823 A 20121025 - FUJITSU GENERAL LTD  
• [Y] JP 2010127531 A 20100610 - MITSUBISHI ELECTRIC CORP  
• [Y] CN 104949402 B 20190305  
• See references of WO 2021229647A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
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US 2023131781 A1 20230427; WO 2021229647 A1 20211118

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