

Title (en)  
REFRIGERATING DEVICE

Title (de)  
KÜHLVORRICHTUNG

Title (fr)  
DISPOSITIF DE RÉFRIGÉRATION

Publication  
**EP 3358278 A1 20180808 (EN)**

Application  
**EP 16850965 A 20160823**

Priority  
• JP 2015195330 A 20150930  
• JP 2016074519 W 20160823

Abstract (en)  
The purpose is to improve the security of a refrigeration apparatus including plural utilization units. A refrigeration apparatus (100) comprises: a refrigerant circuit (RC) that includes a heat source unit (10) which has a compressor (11), and plural utilization units (30), each of which has a utilization-side heat exchanger (32) and which are disposed in parallel to each other; plural on/off valves (36) that cut off a flow of supplied refrigerant in a closed state; and a controller (60) that controls the operation of the compressor (11) and each of the on/off valves (36) in accordance with a control mode. Each of the on/off valves (36) is disposed on a refrigerant inlet side of any of the utilization-side heat exchangers (32). The controller (60) is electrically connected to refrigerant leakage sensors (40) and, in a case where the refrigerant leakage sensors (40) have detected refrigerant leakage in any of the utilization units (30), transitions to a refrigerant leakage control mode, controls to the closed state the on/off valve (36) disposed on the inlet side of the utilization-side heat exchanger (32) of the refrigerant-leaking utilization unit (30), and causes the compressor (11) to operate at a predetermined rotational speed.

IPC 8 full level  
**F25B 49/02** (2006.01); **F25B 1/00** (2006.01); **F25B 5/02** (2006.01)

CPC (source: EP US)  
**F24F 3/065** (2013.01 - EP); **F24F 11/36** (2017.12 - EP); **F24F 11/65** (2017.12 - EP); **F24F 11/89** (2017.12 - EP US); **F25B 5/02** (2013.01 - EP); **F25B 41/20** (2021.01 - EP US); **F25B 41/24** (2021.01 - EP US); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - EP); **F24F 11/84** (2017.12 - EP); **F24F 11/86** (2017.12 - EP); **F24F 2140/00** (2017.12 - EP); **F25B 2400/13** (2013.01 - EP); **F25B 2500/221** (2013.01 - EP); **F25B 2600/2519** (2013.01 - EP)

Cited by  
CN110895021A; US11506425B2; US11359846B2; US11441802B2; US11549695B2; US11492527B2; US11493244B2; US11365335B2; US11820933B2; US11098916B2; US11260728B2; US11435118B2; US11906207B2; US11549041B2; US11609032B2; WO2020051314A1; US11885516B2; US11940188B2; US11441819B2; US11441820B2; US11535781B2; US11131471B1; US11713893B2; US11732916B2; US11754324B2

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Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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**EP 16850965 A 20160823**; JP 2016074519 W 20160823; JP 2016158800 A 20160812