

Title (en)  
REFRIGERATION CYCLE DEVICE

Title (de)  
KÄLTEKREISLAUFGVORRICHTUNG

Title (fr)  
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 2716999 A4 20151209 (EN)**

Application  
**EP 12788873 A 20120525**

Priority  

- JP 2011117778 A 20110526
- JP 2012003430 W 20120525

Abstract (en)  
[origin: EP2716999A1] A refrigeration cycle apparatus 100 includes a volume control compressor 101, a volume control path 111, a four-way valve 112 (flow path switching unit), a high-pressure introduction path 114, a low-pressure introduction path 116, and a check valve 120. When the load is small, the four-way valve 112 is controlled so as to connect the volume control path 111 to the low-pressure introduction path 116. When the load is large, the four-way valve 112 is controlled so as to connect the volume control path 111 to the high-pressure introduction path 114. The high-pressure introduction path 114 is provided with the check valve 120 that permits a flow of a refrigerant in a direction from the flow path 10a to the four-way valve 112 and that precludes a flow in the opposite direction.

IPC 8 full level  
**F04C 18/356** (2006.01); **F04C 23/00** (2006.01); **F04C 28/00** (2006.01); **F04C 28/26** (2006.01); **F04C 29/12** (2006.01); **F25B 1/00** (2006.01);  
**F25B 1/10** (2006.01); **F25B 13/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)  
**F04C 23/008** (2013.01); **F04C 28/26** (2013.01); **F04C 29/12** (2013.01); **F25B 1/10** (2013.01); **F25B 13/00** (2013.01); **F25B 49/022** (2013.01);  
**F04C 18/3564** (2013.01); **F25B 2600/0261** (2013.01)

Citation (search report)  

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- [I] US 2008314057 A1 20081225 - LIFSON ALEXANDER [US], et al
- [A] US 2008092586 A1 20080424 - KITAICHI SHOICHIRO [JP], et al
- See references of WO 2012160832A1

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Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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JP WO2012160832 A1 20140731; WO 2012160832 A1 20121129

DOCDB simple family (application)  
**EP 12788873 A 20120525**; CN 201280019703 A 20120525; JP 2012003430 W 20120525; JP 2013516222 A 20120525