

Title (en)  
REFRIGERATION CYCLE APPARATUS

Title (de)  
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)  
APPAREIL À CYCLE DE RÉFRIGÉRATION

Publication  
**EP 4242551 A4 20231206 (EN)**

Application  
**EP 20960755 A 20201104**

Priority  
JP 2020041211 W 20201104

Abstract (en)  
[origin: EP4242551A1] A refrigeration cycle apparatus (100) comprises: a compressor (1); a first heat exchanger (2); a second heat exchanger (5); a first decompressing apparatus (4); an oil separator (3); a first circulation pathway in which a refrigerant circulates in an order of the compressor (1), the first heat exchanger (2), the oil separator (3), the first decompressing apparatus (4), and the second heat exchanger (5); an oil-returned pathway connecting between the oil separator (3) and a suction side of the compressor (1); a second decompressing apparatus (7) provided in the oil-returned pathway; and a controller (80) configured to control the first decompressing apparatus (4) and the second decompressing apparatus (7). The controller (80) is configured to set an operation mode to an oil collection mode (S106 in Fig. 6 and S202 in Fig. 7) in which the oil-returned pathway (61) is opened by adjusting a degree of decompression of the first decompressing apparatus (4) and a degree of decompression of the second decompressing apparatus (7) when the refrigerant and a refrigerating machine oil flowing in the first circulation pathway are separated in the oil separator (3).

IPC 8 full level  
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**F25B 2700/2109** (2013.01 - US); **F25B 2700/21151** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP US); **F25B 2700/2117** (2013.01 - EP)

Citation (search report)  
• [X] EP 1862749 A2 20071205 - SANDEN CORP [JP]  
• [XD] JP H0886519 A 19960402 - MITSUBISHI ELECTRIC CORP  
• See references of WO 2022097201A1

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BA ME

Designated validation state (EPC)  
KH MA MD TN

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