

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication
EP 3104101 A4 20171025 (EN)

Application
EP 14877585 A 20140109

Priority
JP 2014050256 W 20140109

Abstract (en)
[origin: EP3104101A1] A refrigeration cycle apparatus (100) includes a refrigerant circuit including a compressor (1), a condenser, an expander (3), and an evaporator connected by pipes so that refrigerant is circulated therethrough. The expander (3) includes: an expander shell (34) defining an outer shell; an expansion unit (31) arranged in the expander shell (34) and configured to expand the refrigerant flowing out from the condenser to generate driving force, and configured for causing the expanded refrigerant to flow into the evaporator; and a power generator (32) arranged in the expander shell (34) and configured to rotate by the driving force generated by the expansion unit (31). The expander shell (34) is configured such that refrigerating machine oil (50) contained in the refrigerant discharged from the compressor (1) is stored therein, and is supplied to at least one of the expansion unit (31) and the power generator (32).

IPC 8 full level
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CPC (source: EP)
F25B 11/02 (2013.01); **F25B 13/00** (2013.01); **F25B 31/004** (2013.01); **F25B 41/39** (2021.01); **F25B 43/02** (2013.01); **F25B 2313/02742** (2013.01); **F25B 2400/141** (2013.01); **F25B 2500/18** (2013.01)

Citation (search report)
• [X1] EP 2012075 A1 20090107 - DAIKIN IND LTD [JP]
• [XDI] JP 2007285674 A 20071101 - DAIKIN IND LTD

Citation (examination)
• EP 2012075 A1 20090107 - DAIKIN IND LTD [JP]
• JP 2007285674 A 20071101 - DAIKIN IND LTD
• See also references of WO 2015104822A1

Cited by
IT201900014685A1

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