

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication
EP 3098542 B1 20210505 (EN)

Application
EP 14877666 A 20140109

Priority
JP 2014050257 W 20140109

Abstract (en)
[origin: EP3098542A1] A refrigeration cycle apparatus includes a refrigerant circuit including a compressor (1), a condenser, an expander (3), and an evaporator, which are 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) includes: an inlet (41) configured for allowing the refrigerant to flow into the expander shell; and an outlet (42) configured for allowing the refrigerant flowing into the expander shell to flow into a suction-side pipe (21) of the compressor (1). The expander shell (34) is configured such that refrigerating machine oil (50) contained in the refrigerant is stored therein, and is supplied to at least one of the expansion unit (31) and the power generator (32).

IPC 8 full level
F25B 11/02 (2006.01); **F25B 1/00** (2006.01); **F25B 13/00** (2006.01); **F25B 31/00** (2006.01); **F25B 43/02** (2006.01)

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