Title (en)

REFRIGERATION CYCLE DEVICE

Title (de)

KÄLTEKREISLAUFVORRICHTUNG

Title (fr)

DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication

EP 4276387 A4 20240306 (EN)

Application

EP 21917416 A 20210105

Priority

JP 2021000100 W 20210105

Abstract (en)

[origin: EP4276387A1] In a refrigeration cycle apparatus (100), at start-up of heating, a controller (10) sets a first four-way valve (6) to an ON state and sets a second four-way valve (7) to an OFF state so as to form a flow path in which refrigerant flows through a compressor (1), a load-side heat exchanger (3), a first expansion valve (4), a heat-source-side heat exchanger (2), and an accumulator (8A) and returns to the compressor (1), and during a heating operation, the controller (10) sets the first four-way valve (6) to the ON state and sets the second four-way valve (7) to the ON state so as to form a flow path in which the refrigerant flows through the compressor (1), the load-side heat exchanger (3), the first expansion valve (4), the receiver (8B), and the heat-source-side heat exchanger (2) and returns to the compressor (1).

IPC 8 full level

F25B 13/00 (2006.01); **F25B 1/00** (2006.01); **F25B 43/00** (2006.01)

CPC (source: EP US)

F25B 13/00 (2013.01 - EP US); **F25B 41/20** (2021.01 - EP); **F25B 43/006** (2013.01 - US); **F25B 49/02** (2013.01 - EP US); F25B 2313/004 (2013.01 - EP); F25B 2313/02742 (2013.01 - EP US); F25B 2313/0292 (2013.01 - US); F25B 2400/23 (2013.01 - US); F25B 2500/26 (2013.01 - EP US); F25B 2600/2515 (2013.01 - US)

Citation (search report)

- [A] US 2004025526 A1 20040212 - AFLEKT KARE [NO], et al
- [A] US 2006010899 A1 20060119 - LIFSON ALEXANDER [US], et al
- See also references of WO 2022149188A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4276387 A1 20231115; **EP 4276387 A4 20240306**; CN 116783433 A 20230919; JP 7427116 B2 20240202; JP WO2022149188 A1 20220714; US 2024019186 A1 20240118; WO 2022149188 A1 20220714

DOCDB simple family (application)

EP 21917416 A 20210105; CN 202180087848 A 20210105; JP 2021000100 W 20210105; JP 2022573817 A 20210105; US 202118251746 A 20210105