Title (en)

OUTDOOR UNIT AND REFRIGERATION CYCLE DEVICE

Title (de)

AUSSENEINHEIT UND KÜHLZYKLUSVORRICHTUNG

Title (fr)

UNITÉ EXTÉRIEURE ET DISPOSITIF DE CYCLE RÉFRIGÉRANT

Publication

EP 4030117 A1 20220720 (EN)

Application

EP 19944984 A 20190909

Priority

JP 2019035372 W 20190909

Abstract (en)

An outdoor unit (2) includes a first flow path (F1), a second flow path (F2), a third flow path (F3), and an on-off valve (78). The first flow path (F1), which is a flow path from a refrigerant inlet port (PI2) to a refrigerant outlet port (PO2), is configured to form, together with a load device (3), a circulation flow path through which refrigerant circulates. A compressor (10), a condenser (20), and a second expansion device (40) are disposed on the first flow path (F1). A second flow path (F2) is configured to branch from the first flow path (F1), and to return, to the compressor (10), the refrigerant that has passed through the condenser (20). A third expansion device (71) and a receiver (73) are disposed on the second flow path (F2) in order from a branch point where the second flow path (F2) is branched from the first flow path (F1). A third flow path (F3) is configured to connect a portion of the first flow path (F1) between the second expansion device (40) and the refrigerant outlet port (PO2), to a refrigerant inlet of the receiver (73). The on-off valve (78) is disposed on the third flow path (F3).

IPC 8 full level

F25B 1/00 (2006.01); **F25B 41/30** (2021.01)

CPC (source: EP)

F25B 40/00 (2013.01); **F25B 41/39** (2021.01); **F25B 49/02** (2013.01); F25B 2400/0411 (2013.01); F25B 2400/13 (2013.01); F25B 2400/23 (2013.01); F25B 2600/2501 (2013.01); F25B 2600/2513 (2013.01); F25B 2600/2515 (2013.01); F25B 2600/2519 (2013.01); F25B 2700/1931 (2013.01); F25B 2700/1933 (2013.01); F25B 2700/21152 (2013.01)

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

DOCDB simple family (publication)

EP 4030117 A1 20220720; **EP 4030117 A4 20220907**; **EP 4030117 B1 20231122**; CN 114364929 A 20220415; CN 114364929 B 20240102; DK 4030117 T3 20231218; ES 2967450 T3 20240430; FI 4030117 T3 20231214; JP 7195449 B2 20221223; JP WO2021048900 A1 20210318; WO 2021048900 A1 20210318

DOCDB simple family (application)

EP 19944984 A 20190909; CN 201980099963 A 20190909; DK 19944984 T 20190909; ES 19944984 T 20190909; FI 19944984 T 20190909; JP 2019035372 W 20190909; JP 2021544989 A 20190909