

Title (en)

COLD HEAT SOURCE UNIT AND REFRIGERATION CYCLE DEVICE

Title (de)

KALTWÄRMEQUELLENEINHEIT UND KÄLTEKREISLAUFVORRICHTUNG

Title (fr)

ENSEMBLE SOURCE DE CHALEUR FROIDE ET DISPOSITIF À CYCLE FRIGORIFIQUE

Publication

EP 4265980 A4 20240508 (EN)

Application

EP 20966023 A 20201218

Priority

JP 2020047521 W 20201218

Abstract (en)

[origin: WO2022130637A1] This cold heat source unit (2) comprises: a refrigerant flow path (F1) that, by being connected to a load device (3), forms a circulation flow path in which a refrigerant circulates; a compressor (10) that is positioned on the flow path (F1); an oil separator (20) that is positioned on the flow path (F1), on a discharge port side of the compressor (10); an oil return flow path (F2) that returns a refrigerator oil from the oil separator (20) to the compressor (10); a flow rate adjustment device (LEV2) that is positioned on the oil return flow path (F2), and is configured so as to be able to adjust the flow rate of a fluid flowing through the oil return flow path (F2); a first pressure sensor (131) that detects the pressure on an intake side of the compressor (10); a second pressure sensor (132) that detects the pressure on the discharge side of the compressor; and a control device (100), wherein the control device (100) controls the opening degree of the flow rate adjustment device (LEV2) on the basis of the pressure (PL) that was detected by the first pressure sensor (131) and the pressure (PH) that was detected by the second pressure sensor.

IPC 8 full level

F25B 31/00 (2006.01)

CPC (source: EP)

F25B 31/004 (2013.01); **F25B 41/20** (2021.01); **F25B 49/02** (2013.01); **F25B 2700/03** (2013.01); **F25B 2700/1931** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/21152** (2013.01)

Citation (search report)

- [XY] EP 3306231 A1 20180411 - MITSUBISHI HEAVY IND THERMAL SYSTEMS LTD [JP]
- [XY] CN 110953754 A 20200403 - JOHNSON CONTROLS HITACHI AIR CONDITIONING LTD
- [Y] CN 105928251 A 20160907 - UNIV NINGBO TECHNOLOGY
- [Y] JP 2001082815 A 20010330 - MITSUBISHI ELECTRIC CORP
- See also references of WO 2022130637A1

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

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 20966023 A 20201218; JP 2020047521 W 20201218; JP 2022569678 A 20201218