

Title (en)

COLD HEAT SOURCE UNIT, REFRIGERATION CYCLE DEVICE, AND REFRIGERATING MACHINE

Title (de)

KALTWÄRMEQUELLENEINHEIT, KÄLTEKREISLAUFVORRICHTUNG UND KÄLTEMASCHINE

Title (fr)

UNITÉ DE SOURCE DE CHALEUR FROIDE, DISPOSITIF À CYCLE DE RÉFRIGÉRATION, ET MACHINE FRIGORIFIQUE

Publication

EP 4160119 A4 20230719 (EN)

Application

EP 20938279 A 20200526

Priority

JP 2020020738 W 20200526

Abstract (en)

[origin: EP4160119A1] A cold source unit (2) includes a first flow path (F1) configured to receive refrigerant from an evaporator (60) and send out the refrigerant toward a first expansion device (50) via a compressor (10) and a condenser (20); a second flow path (F2) configured to send, to the compressor (10) not via the first expansion device (50) and the evaporator (60), the refrigerant that has passed through the condenser (20); a second expansion device (92) provided at the second flow path (F2); and a plurality of temperature sensors (121 to 123) disposed at the second flow path (F2). A controller (100) is configured to control a refrigeration cycle apparatus (1) such that temperatures detected by the plurality of temperature sensors become equal to each other, and calculate an average value of the temperatures detected by the plurality of temperature sensors, and perform correction on each of the plurality of temperature sensors based on a difference between the average value and a temperature detected by a corresponding one of the plurality of temperature sensors.

IPC 8 full level

F25B 49/02 (2006.01); **F25B 1/00** (2006.01); **F25B 41/30** (2021.01)

CPC (source: EP)

F25B 41/30 (2021.01); **F25B 49/02** (2013.01); **F25B 2400/01** (2013.01); **F25B 2400/0409** (2013.01); **F25B 2400/0411** (2013.01); **F25B 2400/16** (2013.01); **F25B 2400/23** (2013.01); **F25B 2500/19** (2013.01); **F25B 2500/24** (2013.01); **F25B 2600/0253** (2013.01); **F25B 2600/2523** (2013.01); **F25B 2700/1931** (2013.01); **F25B 2700/1933** (2013.01); **F25B 2700/2101** (2013.01)

Citation (search report)

- [A] WO 2020079771 A1 20200423 - MITSUBISHI ELECTRIC CORP [JP]
- [A] EP 2746699 A1 20140625 - MITSUBISHI ELECTRIC CORP [JP]
- [A] WO 2020066005 A1 20200402 - MITSUBISHI ELECTRIC CORP [JP]
- See references of WO 2021240645A1

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 4160119 A1 20230405; **EP 4160119 A4 20230719**; **EP 4160119 B1 20240619**; CN 115667820 A 20230131; JP 7341337 B2 20230908; JP WO2021240645 A1 20211202; WO 2021240645 A1 20211202

DOCDB simple family (application)

EP 20938279 A 20200526; CN 202080101071 A 20200526; JP 2020020738 W 20200526; JP 2022527318 A 20200526