

Title (en)

INTERMEDIATE UNIT FOR REFRIGERATION DEVICE, AND REFRIGERATION DEVICE

Title (de)

ZWISCHENEINHEIT FÜR EINE KÜHLVORRICHTUNG UND KÜHLVORRICHTUNG

Title (fr)

UNITÉ INTERMÉDIAIRE POUR DISPOSITIF DE RÉFRIGÉRATION, ET DISPOSITIF DE RÉFRIGÉRATION

Publication

EP 4047289 A4 20221221 (EN)

Application

EP 20889034 A 20200626

Priority

- JP 2019207898 A 20191118
- JP 2020025138 W 20200626

Abstract (en)

[origin: EP4047289A1] An intermediate unit (80) includes a liquid-side pipe (81), a first valve (18), and a refrigerant pressure sensor (48). The liquid-side pipe (81) is connected to a liquid connection pipe (4) connecting a heat source unit (10) and a utilization unit (60) together. A controller (85) of the intermediate unit (80) adjusts the opening degree of the first valve (18) based on a value measured by the refrigerant pressure sensor (48). The pressure of a refrigerant to be sent through the liquid connection pipe (4) from the intermediate unit (80) to the utilization unit (60) is adjusted by the first valve (18).

IPC 8 full level

F25B 41/20 (2021.01); **F24F 1/32** (2011.01); **F25B 13/00** (2006.01); **F25B 40/00** (2006.01); **F25B 41/00** (2021.01); **F25B 41/26** (2021.01); **F25B 41/40** (2021.01); **F25B 49/02** (2006.01); **F24F 140/12** (2018.01)

CPC (source: EP US)

F25B 13/00 (2013.01 - EP); **F25B 40/00** (2013.01 - EP); **F25B 41/20** (2021.01 - EP US); **F25B 41/26** (2021.01 - EP); **F25B 41/40** (2021.01 - EP); **F25B 49/02** (2013.01 - EP); **F24F 11/84** (2018.01 - EP); **F24F 2140/12** (2018.01 - EP); **F25B 2309/06** (2013.01 - EP); **F25B 2313/0233** (2013.01 - EP); **F25B 2313/02732** (2013.01 - EP); **F25B 2313/0293** (2013.01 - EP); **F25B 2313/0314** (2013.01 - EP); **F25B 2400/061** (2013.01 - EP); **F25B 2400/072** (2013.01 - EP); **F25B 2400/23** (2013.01 - EP); **F25B 2600/2513** (2013.01 - EP); **F25B 2600/2519** (2013.01 - EP); **F25B 2600/2525** (2013.01 - EP); **F25B 2700/1931** (2013.01 - EP); **F25B 2700/2104** (2013.01 - EP)

Citation (search report)

- [X1] WO 2017179166 A1 20171019 - MITSUBISHI ELECTRIC CORP [JP]
- [XA] GB 2567332 A 20190410 - MITSUBISHI ELECTRIC CORP [JP]
- [A] EP 1304532 A1 20030423 - DAIKIN IND LTD [JP]
- See also references of WO 2021100234A1

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 4047289 A1 20220824; **EP 4047289 A4 20221221**; CN 114729767 A 20220708; JP 2021081114 A 20210527; JP 6835184 B1 20210224; US 2022268498 A1 20220825; WO 2021100234 A1 20210527

DOCDB simple family (application)

EP 20889034 A 20200626; CN 202080080052 A 20200626; JP 2019207898 A 20191118; JP 2020025138 W 20200626; US 202217743161 A 20220512