

Title (en)
AIR-CONDITIONING DEVICE

Title (de)
KLIMATISIERUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CLIMATISATION

Publication
EP 4283171 A4 20240306 (EN)

Application
EP 21920938 A 20210119

Priority
JP 2021001626 W 20210119

Abstract (en)
[origin: EP4283171A1] An air-conditioning apparatus includes a refrigerant circuit including: a compressor; a high-pressure pipe for high-pressure refrigerant discharged from the compressor; a low-pressure pipe for low-pressure refrigerant to be sucked into the compressor; a first flow switching valve; an indoor heat exchanger; an expansion valve, a first outdoor heat exchanger; a second outdoor heat exchanger; and a second flow switching valve. The second flow switching valve switches flow passages for refrigerant flowing to the first outdoor heat exchanger and the second outdoor heat exchanger. The second flow switching valve includes a first chamber, a second chamber, and a slide valve that is moved by a differential pressure between the first and second chambers. At least one of the first and second chambers is connected with the high-pressure pipe or the low-pressure pipe.

IPC 8 full level
F16K 31/34 (2006.01); **F16K 11/00** (2006.01); **F16K 11/02** (2006.01); **F16K 11/06** (2006.01); **F16K 11/065** (2006.01); **F24F 11/41** (2018.01); **F24F 11/42** (2018.01); **F25B 5/02** (2006.01); **F25B 6/02** (2006.01); **F25B 13/00** (2006.01); **F25B 41/20** (2021.01); **F25B 41/26** (2021.01); **F25B 47/02** (2006.01)

CPC (source: EP US)
F24F 11/42 (2018.01 - EP US); **F24F 11/84** (2018.01 - EP US); **F25B 5/02** (2013.01 - EP); **F25B 6/02** (2013.01 - EP); **F25B 13/00** (2013.01 - EP); **F25B 41/20** (2021.01 - EP); **F25B 41/26** (2021.01 - EP); **F25B 47/02** (2013.01 - EP); **F25B 2313/0251** (2013.01 - EP); **F25B 2313/02742** (2013.01 - EP); **F25B 2313/0292** (2013.01 - EP)

Citation (search report)
• [X] EP 3647672 A1 20200506 - MITSUBISHI ELECTRIC CORP [JP]
• [Y] US 10712061 B2 20200714 - TASHIRO YUSUKE [JP], et al
• [Y] JP 6478585 B2 20190306
• See also references of WO 2022157821A1

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 4283171 A1 20231129; EP 4283171 A4 20240306; JP 7442689 B2 20240304; JP WO2022157821 A1 20220728;
US 2023408123 A1 20231221; WO 2022157821 A1 20220728

DOCDB simple family (application)
EP 21920938 A 20210119; JP 2021001626 W 20210119; JP 2022576247 A 20210119; US 202118253258 A 20210119