

Title (en)
AIR-CONDITIONING DEVICE

Title (de)
KLIMATISIERUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CLIMATISATION

Publication
EP 4296593 A4 20240327 (EN)

Application
EP 21926490 A 20210217

Priority
JP 2021005858 W 20210217

Abstract (en)
[origin: EP4296593A1] An air conditioning apparatus (1) includes a refrigerant circuit (150) and a controller (200). The refrigerant circuit (150) is configured to allow refrigerant to circulate through a compressor (10), a condenser (40, 20), an LEV (111), and an evaporator (20, 40). The LEV (111) has an opening degree variable from a lower limit opening degree to an upper limit opening degree. The controller (200) is configured to control the LEV (111) to alternately repeat a first opening degree (CvA) and a second opening degree (CvB) in a range of less than or equal to a quarter of the upper limit opening degree, the second opening degree (CvB) being smaller than the first opening degree (CvA).

IPC 8 full level
F25B 1/00 (2006.01); **F25B 41/345** (2021.01)

CPC (source: EP US)
F24F 11/63 (2018.01 - US); **F24F 11/84** (2018.01 - US); **F25B 13/00** (2013.01 - EP); **F25B 41/347** (2021.01 - EP); **F25B 49/02** (2013.01 - EP); **F24F 2140/20** (2018.01 - US); **F25B 41/35** (2021.01 - EP); **F25B 2600/2513** (2013.01 - EP); **F25B 2700/2104** (2013.01 - EP); **F25B 2700/2106** (2013.01 - EP); **F25B 2700/21152** (2013.01 - EP); **F25B 2700/2116** (2013.01 - EP); **F25B 2700/2117** (2013.01 - EP)

Citation (search report)
• [A] EP 2801771 A1 20141112 - DAIKIN IND LTD [JP]
• [A] EP 3267127 A1 20180110 - MITSUBISHI ELECTRIC CORP [JP]
• See also references of WO 2022176050A1

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 4296593 A1 20231227; **EP 4296593 A4 20240327**; JP 7466754 B2 20240412; JP WO2022176050 A1 20220825; US 2024068699 A1 20240229; WO 2022176050 A1 20220825

DOCDB simple family (application)
EP 21926490 A 20210217; JP 2021005858 W 20210217; JP 2023500176 A 20210217; US 202118261406 A 20210217