

Title (en)
REFRIGERATING APPARATUS

Title (de)
KÜHLSCHRANK

Title (fr)
APPAREIL DE RÉFRIGÉRATION

Publication
EP 4145061 A1 20230308 (EN)

Application
EP 22191721 A 20220823

Priority
JP 2021144671 A 20210906

Abstract (en)
There is provided a refrigerating apparatus (100) that can be operated more stably. The refrigerating apparatus (100) includes a first compressor (1) and a second compressor (2) that are arranged in series on the main circuit (90), an intermediate heat exchanger (3), a condenser (4), a first expansion valve (5), a receiver (6), a second expansion valve (7), an evaporator (8), a three-way valve (9) provided between the intermediate heat exchanger (3) and the second compressor (2), a first bypass passage (10) that couples the three-way valve (9) and the receiver (6), a second bypass passage (11) that couples the receiver (6), the three-way valve (9), and the second compressor (2), a first solenoid valve (13) that switches over to an open state of the second bypass passage (10), and a second solenoid valve (11) that is provided between the receiver (6) and the second expansion valve (7) and switches over to an open state of the main circuit (90).

IPC 8 full level
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CPC (source: EP)
F25B 1/10 (2013.01); **F25B 41/20** (2021.01); **F25B 41/22** (2021.01); **F25B 41/39** (2021.01); **F25B 41/40** (2021.01); **F25B 2400/0401** (2013.01); **F25B 2400/0403** (2013.01); **F25B 2400/0415** (2013.01); **F25B 2400/072** (2013.01); **F25B 2400/13** (2013.01); **F25B 2400/16** (2013.01); **F25B 2600/0261** (2013.01); **F25B 2600/2501** (2013.01); **F25B 2600/2519** (2013.01)

Citation (applicant)
WO 2017081781 A1 20170518 - FUJI ELECTRIC CO LTD [JP]

Citation (search report)
• [XA] JP 2021032512 A 20210301 - DAIKIN IND LTD
• [A] US 2010251741 A1 20101007 - YOSHIMI ATSUSHI [JP], et al
• [A] US 2014151015 A1 20140605 - SUN JIAN [US], et al
• [A] US 2016272047 A1 20160922 - GAN MINGFEI [US]
• [A] WO 2017081782 A1 20170518 - FUJI ELECTRIC CO LTD [JP]

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)
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DOCDB simple family (publication)
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DOCDB simple family (application)
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