

Title (en)
REFRIGERATION CYCLE APPARATUS

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
APPAREIL DE CYCLE DE RÉFRIGÉRATION

Publication
EP 3913299 A1 20211124 (EN)

Application
EP 21185466 A 20161221

Priority

- EP 21185466 A 20161221
- EP 16924560 A 20161221
- JP 2016088114 W 20161221

Abstract (en)
A refrigeration cycle apparatus (1) includes a compressor group (3), a four-way valve (5), a first heat exchanger (7), an expansion valve (9), a second heat exchanger (11), an accumulator (13), and an oil storage (15). The oil storage (15) is connected to the discharge side of the compressor group (3) via a discharge gas bypass pipe (17) provided with a first solenoid valve (19). The oil storage (15) is connected to the accumulator (13) via a first oil bypass piping (21) provided with a second solenoid valve (23). The oil storage (15) is connected to the compressor group (3) via a second oil bypass pipe (25) provided with a third solenoid valve (27).

IPC 8 full level
F25B 1/00 (2006.01); **F25B 31/00** (2006.01)

CPC (source: EP US)
F25B 1/00 (2013.01 - US); **F25B 31/00** (2013.01 - US); **F25B 31/004** (2013.01 - EP US); **F25B 41/20** (2021.01 - EP US); **F25B 2400/06** (2013.01 - US); **F25B 2400/075** (2013.01 - EP); **F25B 2500/16** (2013.01 - US); **F25B 2700/03** (2013.01 - US)

Citation (applicant)

- JP 2007139215 A 20070607 - SAMSUNG ELECTRONICS CO LTD
- JP 4130676 B2 20080806

Citation (search report)
[A] EP 2336681 A1 20110622 - JOHNSON CONTROLS TECH CO [US], et al

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

DOCDB simple family (publication)
EP 3561410 A1 20191030; EP 3561410 A4 20200212; CN 110088540 A 20190802; CN 110088540 B 20210817; EP 3913299 A1 20211124; JP 6745909 B2 20200826; JP WO2018116407 A1 20191024; US 2019301778 A1 20191003; WO 2018116407 A1 20180628

DOCDB simple family (application)
EP 16924560 A 20161221; CN 201680091524 A 20161221; EP 21185466 A 20161221; JP 2016088114 W 20161221; JP 2018557454 A 20161221; US 201616342323 A 20161221