

Title (en)
REFRIGERATION DEVICE

Title (de)
KÜHLVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉFRIGÉRATION

Publication
EP 4354050 A1 20240417 (EN)

Application
EP 21944968 A 20210607

Priority
JP 2021021476 W 20210607

Abstract (en)
A refrigeration apparatus includes: a main circuit serving as a refrigerant circuit in which a compressor, a condenser, a receiver, a first open-close valve, an expansion mechanism, an evaporator, and an accumulator are sequentially connected by refrigerant pipes, and in which refrigerant is circulated; an evaporation mechanism configured to evaporate, after a precooling operation is performed to cool the evaporator, liquid refrigerant stored in the accumulator, or configured to evaporate, during the precooling operation which is performed to cool the evaporator, liquid refrigerant that flows through one of the refrigerant pipes that is located on a suction side of the accumulator; and a controller configured to control the main circuit and the evaporation mechanism.

IPC 8 full level
F25B 43/00 (2006.01); **F25B 1/00** (2006.01); **F25B 47/02** (2006.01)

CPC (source: EP)
F25B 41/20 (2021.01); **F25B 41/42** (2021.01); **F25B 43/00** (2013.01); **F25B 43/006** (2013.01); **F25B 47/02** (2013.01); **F25B 49/02** (2013.01); **F25B 2400/0415** (2013.01); **F25B 2400/051** (2013.01); **F25B 2400/053** (2013.01); **F25B 2400/13** (2013.01); **F25B 2400/16** (2013.01); **F25B 2400/23** (2013.01); **F25B 2600/02** (2013.01); **F25B 2600/111** (2013.01); **F25B 2600/112** (2013.01); **F25B 2600/23** (2013.01); **F25B 2600/2501** (2013.01); **F25B 2600/2509** (2013.01); **F25B 2700/2113** (2013.01); **F25B 2700/21151** (2013.01); **F25B 2700/2117** (2013.01)

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 4354050 A1 20240417; CN 117321358 A 20231229; JP WO2022259287 A1 20221215; WO 2022259287 A1 20221215

DOCDB simple family (application)
EP 21944968 A 20210607; CN 202180098345 A 20210607; JP 2021021476 W 20210607; JP 2023527132 A 20210607