

Title (en)
HEAT SOURCE UNIT AND CONTROL METHOD THEREFOR

Title (de)
WÄRMEQUELLENEINHEIT UND STEUERUNGSVERFAHREN DAFÜR

Title (fr)
UNITÉ DE SOURCE DE CHALEUR ET SON PROCÉDÉ DE COMMANDE

Publication
EP 4177545 A4 20240228 (EN)

Application
EP 21877657 A 20211006

Priority

- JP 2020169141 A 20201006
- JP 2021036974 W 20211006

Abstract (en)
[origin: EP4177545A1] Provided is a heat source device that can reduce the diameter of a pipe used for supplying a cooling refrigerant to be guided to the intake side of a compressor. A chiller (1) includes: a compressor (3) that compresses a refrigerant; a water heat exchanger (5) configured to perform heat exchange between a refrigerant and water; a first expansion valve (6) that expands a refrigerant; an air heat exchanger (9) that performs heat exchange between a refrigerant and air; and a liquid bypass pipe (20) whose upstream end is connected between the water heat exchanger (5) and the first expansion valve (6) and that guides a liquid refrigerant to an intake side of the compressor (3). A second expansion valve (8) is provided on the air heat exchanger (9) side, and a receiver (7) is provided between the first expansion valve (6) and the second expansion valve (8).

IPC 8 full level
F25B 43/00 (2006.01); **F25B 1/00** (2006.01); **F25B 31/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F25B 13/00 (2013.01); **F25B 31/008** (2013.01); **F25B 41/385** (2021.01); **F25B 41/39** (2021.01); **F25B 49/02** (2013.01); **F25B 2313/003** (2013.01); **F25B 2400/0411** (2013.01); **F25B 2400/0415** (2013.01); **F25B 2500/31** (2013.01); **F25B 2600/2513** (2013.01); **F25B 2600/2519** (2013.01); **F25B 2700/2106** (2013.01); **F25B 2700/21152** (2013.01)

Citation (search report)

- [XY] EP 2312226 A2 20110420 - FUJITSU GENERAL LTD [JP]
- [Y] EP 3696473 A1 20200819 - MITSUBISHI ELECTRIC CORP [JP]
- See also references of WO 2022075358A1

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 4177545 A1 20230510; EP 4177545 A4 20240228; JP 2022061250 A 20220418; JP 7225178 B2 20230220; WO 2022075358 A1 20220414

DOCDB simple family (application)
EP 21877657 A 20211006; JP 2020169141 A 20201006; JP 2021036974 W 20211006