

Title (en)  
HEAT SOURCE UNIT AND REFRIGERATION DEVICE

Title (de)  
WÄRMEQUELLENEINHEIT UND KÜHLVORRICHTUNG

Title (fr)  
UNITÉ DE SOURCE DE CHALEUR ET DISPOSITIF DE RÉFRIGÉRATION

Publication  
**EP 4033178 A4 20221026 (EN)**

Application  
**EP 20871109 A 20200717**

Priority

- JP 2019180679 A 20190930
- JP 2019180683 A 20190930
- JP 2020027906 W 20200717

Abstract (en)

[origin: EP4033178A1] A heat source unit (10) including a heat source circuit (11) is connected to a utilization unit (50) to constitute a refrigerant circuit (2) that performs a refrigeration cycle. The heat source unit (10) includes a switching mechanism (24) that switches the refrigeration cycle between a first refrigeration cycle and a second refrigeration cycle, and a subcooling heat exchanger (40) having a first channel (40a) and a second channel (40b) through which a heating medium for cooling a refrigerant in the first channel (40a) flows. The heat source unit (10) further includes a regulation mechanism (80) configured to perform a first operation of reducing a capability of the second channel (40b) of cooling the refrigerant in the first channel (40a) before switching from the first refrigeration cycle to the second refrigeration cycle.

IPC 8 full level  
**F25B 13/00** (2006.01); **F25B 1/10** (2006.01); **F25B 41/22** (2021.01); **F25B 47/02** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)  
**F25B 1/10** (2013.01); **F25B 13/00** (2013.01); **F25B 41/22** (2021.01); **F25B 49/02** (2013.01); **F25B 41/20** (2021.01); **F25B 47/025** (2013.01); **F25B 2313/0234** (2013.01); **F25B 2400/075** (2013.01); **F25B 2600/2509** (2013.01); **F25B 2700/21152** (2013.01); **F25B 2700/21163** (2013.01)

Citation (search report)

- [X] JP 2010236712 A 20101021 - DAIKIN IND LTD
- [X] JP 2015068571 A 20150413 - DAIKIN IND LTD
- [X] JP 2009287800 A 20091210 - DAIKIN IND LTD
- See also references of WO 2021065156A1

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 4033178 A1 20220727**; **EP 4033178 A4 20221026**; **EP 4033178 B1 20240529**; CN 114341569 A 20220412; CN 114341569 B 20230428; WO 2021065156 A1 20210408

DOCDB simple family (application)  
**EP 20871109 A 20200717**; CN 202080061329 A 20200717; JP 2020027906 W 20200717