

Title (en)

HEAT SOURCE UNIT FOR REFRIGERATION APPARATUS

Title (de)

WÄRMEQUELLENEINHEIT FÜR KÜHLVORRICHTUNG

Title (fr)

UNITÉ DE SOURCE DE CHALEUR POUR APPAREIL DE RÉFRIGÉRATION

Publication

EP 3599433 A1 20200129 (EN)

Application

EP 19186987 A 20190718

Priority

JP 2018139666 A 20180725

Abstract (en)

A heat source unit (10) for a refrigeration apparatus (1) includes a compressor (2) that performs multi-stage compression; a main heat exchanger (4, 45) that exchanges heat between a refrigerant and a fluid; and a sub-heat exchanger (7, 46, 47). The sub-heat exchanger (7, 46, 47) is disposed, independently from the main heat exchanger (4, 45), on an upstream side or a downstream side of the main heat exchanger (4, 45) in a flow of the fluid.

IPC 8 full level

F25B 1/10 (2006.01); **F25B 9/00** (2006.01); **F25B 13/00** (2006.01)

CPC (source: EP)

F25B 1/10 (2013.01); **F25B 9/008** (2013.01); **F25B 13/00** (2013.01); **F25B 2400/072** (2013.01)

Citation (applicant)

JP 2009150641 A 20090709 - DAIKIN IND LTD

Citation (search report)

- [X] US 2010300141 A1 20101202 - FUJIMOTO SHUJI [JP], et al
- [X] US 2015052927 A1 20150226 - YANG GUOZHONG [JP], et al
- [X] US 2010032133 A1 20100211 - LIFSON ALEXANDER [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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3599433 A1 20200129; **EP 3599433 B1 20220831**; ES 2928916 T3 20221123; JP 2020016391 A 20200130; JP 2024057108 A 20240423; JP 7496193 B2 20240606

DOCDB simple family (application)

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