

Title (en)
HEAT PUMP APPARATUS

Title (de)
WÄRMEPUMPENVORRICHTUNG

Title (fr)
APPAREIL DE POMPE À CHALEUR

Publication
EP 3598038 A4 20200325 (EN)

Application
EP 17900795 A 20170316

Priority
JP 2017010754 W 20170316

Abstract (en)
[origin: EP3598038A1] A heat pump apparatus includes an electrical unit (17) including an electrical part for driving at least one of a blower configured to blow air to an air-to-refrigerant heat exchanger and a compressor configured to compress a refrigerant. The electrical unit (17) includes an electrical circuit board (24) including an upper surface, a lower surface, and the electrical part mounted on the lower surface, a receiving tray (23) including a receiving portion (23a) that covers at least a part of the electrical circuit board (24) from below, a framework that holds the electrical circuit board (24) and the receiving tray (23), and an opening (30), which is formed between the framework and the receiving portion (23a) of the receiving tray (23) and through which air is capable of passing. A space between the electrical circuit board (24) and the receiving portion (23a) of the receiving tray (23) is an inner space (31) of the electrical unit (17). The inner space (31) of the electrical unit (17) communicates with outside of the electrical unit (17) via the opening (30).

IPC 8 full level
F25B 49/02 (2006.01); **F24F 1/22** (2011.01); **F24F 1/24** (2011.01); **F24H 4/02** (2006.01); **F24H 9/20** (2006.01)

CPC (source: EP)
F24F 1/22 (2013.01); **F24F 1/24** (2013.01)

Citation (search report)

- [XAI] JP 2005127691 A 20050519 - SANYO ELECTRIC CO, et al
- [XI] EP 2244024 A1 20101027 - MITSUBISHI HEAVY IND LTD [JP]
- [A] WO 2016136351 A1 20160901 - SHARP KK [JP]
- [A] JP 2011007363 A 20110113 - SANYO ELECTRIC CO
- [A] JP 2006183883 A 20060713 - TOSHIBA CARRIER KK
- See references of WO 2018167928A1

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 3598038 A1 20200122; EP 3598038 A4 20200325; EP 3598038 B1 20231129; JP 6787477 B2 20201118; JP WO2018167928 A1 20190704; WO 2018167928 A1 20180920

DOCDB simple family (application)
EP 17900795 A 20170316; JP 2017010754 W 20170316; JP 2019505632 A 20170316