

Title (en)
HEAT PUMP APPARATUS

Title (de)
WÄRMEPUMPENVORRICHTUNG

Title (fr)
APPAREIL DE POMPE À CHALEUR

Publication
EP 4345386 A1 20240403 (EN)

Application
EP 23199422 A 20230925

Priority
JP 2022158749 A 20220930

Abstract (en)
The present disclosure provides a heat pump apparatus that prevents a refrigerant, which has leaked from a refrigerant circuit, from entering an electrical equipment box. A heat pump apparatus 1 includes a machine room 13 and a blower room 12 each in a housing 10, the machine room 13 being a room in which a compressor 22 and an expansion device 24 are included, the blower room 12 being a room in which a heat exchanger 20 and a blower are included, wherein an electrical equipment box 30 is disposed above the machine room 13 and the blower room 12 across the rooms, the electrical equipment box 30 includes an electrical equipment box body 32 and a cover member 33, and the electrical equipment box body 32 has a smaller ratio of a volume occupied by a machine-side portion 32B than a ratio of a volume occupied by a blower-side portion 32A, so that the machine-side portion 32B has a shorter sealing portion length of the electrical equipment box body 32 and the cover member 33.

IPC 8 full level
F24F 1/22 (2011.01); **F24F 1/029** (2019.01); **F24F 1/24** (2011.01); **F24F 1/46** (2011.01); **F24F 11/36** (2018.01); **F24F 11/89** (2018.01)

CPC (source: EP)
F24F 1/029 (2019.02); **F24F 1/22** (2013.01); **F24F 1/24** (2013.01); **F24F 1/46** (2013.01); **F24F 11/36** (2018.01); **F24F 11/89** (2018.01)

Citation (applicant)
EP 3312531 A1 20180425 - MITSUBISHI ELECTRIC CORP [JP]

Citation (search report)
• [X] EP 4050976 A1 20220831 - QINGDAO HISENSE HITACHI AIR CONDITIONING SYS CO LTD [CN]
• [X] EP 0887598 A1 19981230 - MITSUBISHI HEAVY IND LTD [JP]
• [Y] JP 5160998 B2 20130313
• [Y] JP 4660130 B2 20110330
• [Y] JP 6828701 B2 20210210
• [AD] EP 3312531 A1 20180425 - MITSUBISHI ELECTRIC CORP [JP]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4345386 A1 20240403; JP 2024052196 A 20240411

DOCDB simple family (application)
EP 23199422 A 20230925; JP 2022158749 A 20220930