

Title (en)  
HEAT PUMP APPARATUS

Title (de)  
WÄRMEPUMPENVORRICHTUNG

Title (fr)  
APPAREIL DE POMPE À CHALEUR

Publication  
**EP 4345388 A1 20240403 (EN)**

Application  
**EP 23199807 A 20230926**

Priority  
JP 2022158738 A 20220930

Abstract (en)  
The present disclosure provides a heat pump apparatus capable of preventing a refrigerant from entering an electrical equipment box when the refrigerant leaks from a refrigerant circuit. A heat pump apparatus including a machine room and a blower room each in a housing, the machine room being a room in which a compressor and an expansion device are disposed, the blower room being a room in which a heat exchanger and a blower device are disposed, the heat pump apparatus including an electrical equipment box, wherein the electrical equipment box includes an electrical equipment box body and a cover member, the electrical equipment box body having a through opening, the through opening is provided with a lead wire relay module that draws in a plurality of lead wires, and the lead wire relay module includes a fixing frame and sleeves for insertion, the fixing frame having a plurality of insertion openings, the sleeves for insertion being inserted into the respective insertion openings, the sleeves for insertion thereby coming into close contact with the fixing frame so as to seal and hold the lead wires to be drawn into the electrical equipment box body.

IPC 8 full level  
**F24F 1/22** (2011.01); **F24F 1/46** (2011.01); **F24F 11/88** (2018.01); **F24F 11/89** (2018.01)

CPC (source: EP)  
**F24F 1/22** (2013.01); **F24F 1/46** (2013.01); **F24F 11/88** (2018.01); **F24F 11/89** (2018.01)

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

Citation (search report)  
• [A] WO 2022179161 A1 20220901 - QINGDAO HAIER AIR CONDITIONER GENERAL CORP LTD [CN], et al  
• [A] CN 1782643 A 20060607 - LG ELECTRONICS TIANJIN [CN]  
• [A] CN 113280408 A 20210820 - WUHAN REFRIGERATION EQUIPMENT CO LTD OF MIDEA GROUP, et al  
• [A] CN 107110555 A 20170829 - DAIKIN IND LTD  
• [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

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KH MA MD TN

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**EP 4345388 A1 20240403**; JP 2024052185 A 20240411

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