

Title (en)
OUTDOOR UNIT

Title (de)
AUSSENEINHEIT

Title (fr)
UNITÉ EXTÉRIEURE

Publication
EP 4421394 A1 20240828 (EN)

Application
EP 23158240 A 20230223

Priority
EP 23158240 A 20230223

Abstract (en)
It is impossible to detect a refrigerant leaking from a site other than a degassing valve in the machine chamber into a machine chamber. An outdoor unit 90 includes a refrigerant circuit, a water circuit, a refrigerant sensor 70, a gas-liquid separator 40, and a degassing valve 54. The refrigerant circuit connects, by means of a pipe, a compressor 12 and a second heat exchanger 20. The second heat exchanger 20 causes heat exchange between the refrigerant and water. The water circuit has a flow of water that exchanges heat with the refrigerant in the second heat exchanger 20. The refrigerant sensor 70 detects the refrigerant to find refrigerant leakage. The gas-liquid separator 40 is connected to the water circuit. The degassing valve 54 is attached to the gas-liquid separator 40. The degassing valve 54 degasses the gas-liquid separator 40. The machine chamber R2 accommodates the compressor 12 and the second heat exchanger 20. The machine chamber R2 accommodates the degassing port 54a of the degassing valve 54 and the refrigerant sensor 70.

IPC 8 full level
F24F 1/46 (2011.01); **F24F 11/36** (2018.01); **F25B 49/02** (2006.01)

CPC (source: EP)
F24F 1/46 (2013.01); **F24F 11/36** (2018.01); **F25B 13/00** (2013.01); **F25B 25/005** (2013.01); **F25B 2313/003** (2013.01)

Citation (applicant)
JP 2022044867 A 20220318 - PANASONIC IP MAN CORP

Citation (search report)

- [Y] CN 109357325 A 20190219 - HISENSE SHANDONG AIRCO CO LTD
- [Y] DE 202022100810 U1 20220228 - GLEN DIMPLEX DEUTSCHLAND GMBH [DE]
- [A] KR 20100032197 A 20100325 - LG ELECTRONICS INC [KR]
- [A] JP 2002115939 A 20020419 - HITACHI IND CO LTD

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)
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