

Title (en)
OUTDOOR UNIT AND REFRIGERATION CYCLE DEVICE

Title (de)
AUSSENEINHEIT UND KÜHLZYKLUSVORRICHTUNG

Title (fr)
UNITÉ EXTÉRIEURE ET DISPOSITIF À CYCLE FRIGORIFIQUE

Publication
EP 3862638 A4 20211006 (EN)

Application
EP 18936127 A 20181003

Priority
JP 2018037027 W 20181003

Abstract (en)
[origin: EP3862638A1] An outdoor unit including fans at two locations reduces noise caused by suction air. The outdoor unit includes: a housing; a bottom plate forming a lower surface of the housing, a top plate forming an upper surface of the housing, and a side wall provided between the bottom plate and the top plate to partition an internal space of the housing; a heat exchanger provided in the housing and on an inlet-port side; and fans provided in the housing and on an outlet port side. In the housing, an air flow passage is provided to extend from the heat exchanger to the fans. The fans are first and second fans that are respectively provided in upper and lower regions on the outlet port side in the housing. The air flow passage is defined by the bottom plate, the top plate, and the side wall located beside the fans. Cross sections of regions of the air flow passage that are located between central axes of the fans and the side wall have respective cross-sectional areas A, B, and C such that the cross-sectional area B < the cross-sectional area A < the cross-sectional area C is satisfied, where the cross-sectional area A is a cross-sectional area of a first cross section that is located between the central axis of the first fan and the top plate and is parallel to the bottom plate, the cross-sectional area B is a cross-sectional area of a second cross section that is located between the central axis of the second fan and the bottom plate and is parallel to the bottom plate, and the cross-sectional area C is a cross-sectional area of a third cross section that is located between the first cross section and the second cross section and is parallel to the bottom plate.

IPC 8 full level
F24F 1/54 (2011.01); **F24F 1/38** (2011.01); **F24F 1/40** (2011.01); **F24F 1/48** (2011.01); **F24F 1/56** (2011.01)

CPC (source: EP)
F24F 1/40 (2013.01); **F24F 1/48** (2013.01); **F24F 1/54** (2013.01); **F24F 1/56** (2013.01); **F24F 1/38** (2013.01); **F24F 13/24** (2013.01)

Citation (search report)

- [XA] WO 2013094082 A1 20130627 - MITSUBISHI ELECTRIC CORP [JP], et al
- [A] JP 2018084232 A 20180531 - SAMSUNG ELECTRONICS CO LTD
- [A] GB 2557130 A 20180613 - MITSUBISHI ELECTRIC CORP [JP]
- See references of WO 2020070825A1

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 3862638 A1 20210811; **EP 3862638 A4 20211006**; **EP 3862638 B1 20231018**; JP 7023380 B2 20220221; JP WO2020070825 A1 20210924; WO 2020070825 A1 20200409

DOCDB simple family (application)
EP 18936127 A 20181003; JP 2018037027 W 20181003; JP 2020551005 A 20181003