

Title (en)

REFRIGERANT-SENSING DEVICE AND INDOOR UNIT FOR AIR CONDITIONER

Title (de)

KÄLTEMITTELMESSVORRICHTUNG UND INNENRAUMEINHEIT FÜR KLIMAAANLAGE

Title (fr)

DISPOSITIF DE DÉTECTION DE RÉFRIGÉRANT ET UNITÉ D'INTÉRIEUR POUR CLIMATISEUR

Publication

**EP 3617602 A4 20200520 (EN)**

Application

**EP 17907606 A 20170424**

Priority

JP 2017016195 W 20170424

Abstract (en)

[origin: EP3617602A1] A refrigerant detection device that can be used in common in device models having different structures, and an indoor unit of an air-conditioning apparatus that uses the refrigerant detection device. The refrigerant detection device and the indoor unit of the air-conditioning apparatus include a refrigerant-detection air passage having both ends connected to a main air passage extending from a suction port of the indoor unit of the air-conditioning apparatus to an air outlet of the indoor unit, and a refrigerant detection sensor that detects refrigerant in the refrigerant-detection air passage.

IPC 8 full level

**F24F 1/00** (2019.01); **F24F 1/0007** (2019.01); **F24F 13/08** (2006.01); **F24F 13/20** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP US)

**F24F 1/0007** (2013.01 - EP); **F24F 1/00077** (2019.02 - US); **F24F 11/36** (2018.01 - US); **F24F 11/83** (2018.01 - US); **F24F 13/08** (2013.01 - EP); **F24F 13/20** (2013.01 - EP); **F25B 49/02** (2013.01 - EP); **F24F 1/0007** (2013.01 - US); **F24F 11/62** (2018.01 - US)

Citation (search report)

- [A] WO 2016103786 A1 20160630 - MITSUBISHI ELECTRIC CORP [JP]
- [A] WO 2013038599 A1 20130321 - PANASONIC CORP [JP], et al
- [A] EP 3150943 A1 20170405 - MITSUBISHI ELECTRIC CORP [JP]
- [A] US 2010271221 A1 20101028 - ASPROVSKI ZVONKO [US], et al
- See also references of WO 2018198165A1

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 3617602 A1 20200304**; **EP 3617602 A4 20200520**; **EP 3617602 B1 20240410**; JP 6727421 B2 20200722; JP WO2018198165 A1 20191212; US 2020056799 A1 20200220; WO 2018198165 A1 20181101

DOCDB simple family (application)

**EP 17907606 A 20170424**; JP 2017016195 W 20170424; JP 2019514896 A 20170424; US 201716486700 A 20170424