

Title (en)

AIR CONDITIONING DEVICE AND INDOOR UNIT

Title (de)

KLIMATISIERUNGSVORRICHTUNG UND INNENRAUMEINHEIT

Title (fr)

DISPOSITIF DE CLIMATISATION ET UNITÉ INTÉRIEURE

Publication

**EP 3569944 A1 20191120 (EN)**

Application

**EP 17891222 A 20171222**

Priority

- JP 2017002780 A 20170111
- JP 2017046182 W 20171222

Abstract (en)

An air conditioner (1) includes an outdoor unit (2), a liquid-refrigerant connection pipe (5), a gas-refrigerant connection pipe (6), and indoor units (3a to 3d) arranged in air-conditioning target spaces. The indoor units (3a to 3d) include indoor expansion valves (51a to 51d), and connection-side indoor liquid-refrigerant pipes (72a to 72d). Brazing portions (82a to 82d) connecting the indoor expansion valves (51a to 51d) and the connection-side indoor liquid-refrigerant pipes (72a to 72d) by brazing are provided with coating materials (11a to 11d).

IPC 8 full level

**F24F 11/84** (2018.01); **F24F 11/46** (2018.01); **F24F 11/49** (2018.01); **F24F 11/88** (2018.01); **F24F 11/89** (2018.01); **F25B 41/00** (2006.01); **F25B 41/04** (2006.01); **F25B 49/02** (2006.01); **F24F 110/00** (2018.01)

CPC (source: EP US)

**F24F 11/30** (2017.12 - EP); **F24F 11/46** (2017.12 - EP); **F24F 11/49** (2017.12 - EP); **F24F 11/62** (2017.12 - EP); **F24F 11/84** (2017.12 - EP); **F24F 11/88** (2017.12 - EP); **F24F 11/89** (2017.12 - EP); **F25B 13/00** (2013.01 - EP US); **F25B 40/02** (2013.01 - EP); **F25B 41/20** (2021.01 - EP US); **F25B 41/24** (2021.01 - EP US); **F25B 43/00** (2013.01 - EP); **F25B 49/02** (2013.01 - EP US); **F24F 11/88** (2017.12 - US); **F24F 11/89** (2017.12 - US); **F25B 2313/006** (2013.01 - EP); **F25B 2313/023** (2013.01 - EP); **F25B 2313/0233** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2313/029** (2013.01 - EP); **F25B 2500/221** (2013.01 - EP); **F25B 2500/222** (2013.01 - EP US); **F25B 2600/2513** (2013.01 - EP US); **F25B 2600/2519** (2013.01 - EP US)

Cited by

EP3961126A1; US11892209B2; US11940188B2; US11125457B1; US11536502B2; US11598560B2; US11732916B2; US11754324B2

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 3569944 A1 20191120**; **EP 3569944 A4 20200909**; **EP 3569944 B1 20220803**; CN 110168288 A 20190823; ES 2928874 T3 20221123; JP 2018112350 A 20180719; JP 7215819 B2 20230131; US 2021131706 A1 20210506; WO 2018131432 A1 20180719

DOCDB simple family (application)

**EP 17891222 A 20171222**; CN 201780083000 A 20171222; ES 17891222 T 20171222; JP 2017002780 A 20170111; JP 2017046182 W 20171222; US 201716477239 A 20171222