

Title (en)

Air conditioner outdoor unit and air conditioner

Title (de)

Klimaanlagenaußeneinheit und Klimaanlage

Title (fr)

Unité extérieure de conditionneur d'air et conditionneur d'air

Publication

**EP 2770279 A1 20140827 (EN)**

Application

**EP 14154768 A 20140212**

Priority

JP 2013032900 A 20130222

Abstract (en)

An air conditioner outdoor unit includes: a compressor; a heat source-side heat exchanger connected to the compressor; an oil separator disposed between a refrigerant discharge opening of the compressor and the heat source-side heat exchanger configured to separate a refrigerant oil from a refrigerant discharged from the compressor; and a first three-way valve fitted to a refrigerant pipe between the oil separator and the heat source-side heat exchange.

IPC 8 full level

**F25B 41/04** (2006.01); **F25B 13/00** (2006.01); **F25B 43/02** (2006.01); **F25B 45/00** (2006.01)

CPC (source: EP US)

**F25B 13/00** (2013.01 - EP US); **F25B 41/20** (2021.01 - EP US); **F25B 43/02** (2013.01 - EP US); **F25B 45/00** (2013.01 - EP US); **F25D 23/003** (2013.01 - US); **F25B 2313/005** (2013.01 - EP US); **F25B 2313/006** (2013.01 - EP US); **F25B 2313/0233** (2013.01 - EP US); **F25B 2313/02741** (2013.01 - EP US); **F25B 2345/006** (2013.01 - EP US)

Citation (applicant)

JP H07332784 A 19951222 - MATSUSHITA REFRIGERATION

Citation (search report)

- [XYI] EP 1956320 A1 20080813 - DAIKIN IND LTD [JP]
- [Y] WO 2012063289 A1 20120518 - MITSUBISHI ELECTRIC CORP [JP], et al
- [A] US 2008289353 A1 20081127 - MARUYA RICHARD H [US], et al
- [A] EP 2051029 A1 20090422 - DAIKIN IND LTD [JP]

Citation (examination)

- JP 2001241814 A 20010907 - SHARP KK
- WO 2012120868 A1 20120913 - MITSUBISHI ELECTRIC CORP [JP], et al
- JP H08210736 A 19960820 - SANYO ELECTRIC CO
- JP H05133633 A 19930528 - HINO MOTORS LTD

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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 2770279 A1 20140827**; AU 2014200687 A1 20140911; AU 2014200687 B2 20170928; CN 104006461 A 20140827; JP 2014163548 A 20140908; US 2014238069 A1 20140828

DOCDB simple family (application)

**EP 14154768 A 20140212**; AU 2014200687 A 20140210; CN 201410060230 A 20140221; JP 2013032900 A 20130222; US 201414184882 A 20140220