

Title (en)
OUTDOOR UNIT OF AIR CONDITIONER

Title (de)
AUSSENEINHEIT EINER KLIMAAANLAGE

Title (fr)
UNITÉ EXTÉRIEURE DE CLIMATISEUR

Publication
EP 4023948 A4 20230308 (EN)

Application
EP 20906407 A 20201130

Priority
• CN 201911369821 A 20191226
• CN 201911366885 A 20191226
• CN 2020132689 W 20201130

Abstract (en)
[origin: EP4023948A1] The present application provides an outdoor unit of an air conditioner, comprising: a motor, the motor being provided with a first output shaft and a second output shaft; a first stage of fan blade, the first stage of fan blade being connected to the first output shaft; and a second stage of fan blade, the second stage of fan blade being connected to the second output shaft; the motor is configured to be adapted to drive the first stage of fan blade and the second stage of fan blade to rotate, and the rotating direction of the first stage of fan blade is opposite to that of the second stage of fan blade; the motor is located in the middle of the first stage of fan blade and the second stage of fan blade; or the motor is located on the same side of the first stage of fan blade and the second stage of fan blade. According to the outdoor unit provided in the present application, by means of the arrangement of the motor, the first stage of fan blade and the second stage of fan blade, the motor drives, by means of the first output shaft, the first stage of fan blade to rotate, and drives, by means of the second output shaft, the second stage of fan blade to rotate in an opposite direction, achieving higher wind pressure by recovering rotational energy of an airflow.

IPC 8 full level
F24F 1/38 (2011.01); **F04D 25/16** (2006.01); **F04D 29/38** (2006.01); **F04D 29/66** (2006.01); **F24F 1/48** (2011.01)

CPC (source: EP US)
F04D 19/024 (2013.01 - EP US); **F04D 25/0606** (2013.01 - EP); **F04D 29/38** (2013.01 - EP); **F04D 29/526** (2013.01 - EP US); **F04D 29/646** (2013.01 - EP); **F24F 1/16** (2013.01 - US); **F24F 1/38** (2013.01 - EP US); **F24F 1/50** (2013.01 - EP US); **F24F 1/56** (2013.01 - US); **F04D 25/0606** (2013.01 - US)

Citation (search report)
• [X] CN 109958637 A 20190702 - GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO LTD, et al
• [X] JP 2008096020 A 20080424 - MATSUSHITA ELECTRIC IND CO LTD
• [X] WO 2010104360 A2 20100916 - LG ELECTRONICS INC [KR], et al
• [X] CN 110044008 A 20190723 - GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO LTD, et al
• [A] US 2005166630 A1 20050804 - COLLINS MICHAEL T [US], et al
• [A] CN 103835971 A 20140604 - HU XIAOQUAN, et al
• See references of WO 2021129318A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4023948 A1 20220706; EP 4023948 A4 20230308; US 2022252282 A1 20220811; WO 2021129318 A1 20210701

DOCDB simple family (application)
EP 20906407 A 20201130; CN 2020132689 W 20201130; US 202217732414 A 20220428