

Title (en)

Axial flow fan and outdoor unit for air conditioner

Title (de)

Axialstromlüfter und Außeneinheit für Klimaanlage

Title (fr)

Ventilateur à flux axial et unité externe pour climatiseur

Publication

EP 2472125 A2 20120704 (EN)

Application

EP 11194822 A 20111221

Priority

KR 20100138007 A 20101229

Abstract (en)

Provided are an axial flow fan (20) and an air conditioner outdoor unit (100) including the axial flow fan (20). The axial flow fan (20) includes a hub (21) and blades (23) disposed on an outer surface of the hub (21). Each of the blades (23) satisfies that a shortest distance (R_{L2}) measured from an imaginary line (L2) passing through a center of the hub to a front end of an outer edge of the blade (23) is greater than a shortest distance (R_{T2}) measured from the imaginary line (L2) to a rear end of the outer edge of the blade (23). The front end of the outer edge of the blade (23) is a leading end (24) in a rotation direction of the blade (23), and the rear end of the outer edge of the blade is a trailing end (25) in the rotation direction of the blade. Owing to the shape of the blade (23), noise can be reduced while increasing the flowrate of air.

IPC 8 full level

F04D 29/38 (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP KR US)

F04D 19/002 (2013.01 - KR); **F04D 29/38** (2013.01 - KR); **F04D 29/384** (2013.01 - EP US); **F04D 29/666** (2013.01 - EP US);
F24F 1/0029 (2013.01 - KR); **F24F 1/38** (2013.01 - KR)

Cited by

EP3783229A4

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 2472125 A2 20120704; CN 102536899 A 20120704; CN 102536899 B 20150617; KR 20120076039 A 20120709;
US 2012167613 A1 20120705

DOCDB simple family (application)

EP 11194822 A 20111221; CN 201110456824 A 20111227; KR 20100138007 A 20101229; US 201113314325 A 20111208