

Title (en)
FAN UNIT AND AIR CONDITIONER EQUIPPED WITH FAN UNIT

Title (de)
GEBLÄSEEINHEIT UND DAMIT AUSGESTATTETE KLIMAANLAGE

Title (fr)
UNITÉ DE VENTILATEUR ET CLIMATISEUR ÉQUIPÉ D'UNE UNITÉ DE VENTILATEUR

Publication
EP 2472190 A1 20120704 (EN)

Application
EP 09848667 A 20090825

Priority
JP 2009004088 W 20090825

Abstract (en)
An air-conditioning apparatus is disclosed that is provided with an air-sending device that includes: a housing (1); a fan (2) that is disposed in the housing (1); a casing (7) that guides an airflow, the casing (7) arranged adjacent to the back side of the fan (2); and a stabilizer (9) that stabilizes the circular vortex, the stabilizer (9) arranged adjacent to the front side of the fan (2). When $\gamma = A/D$ expressed by an air flow inlet port (4) width A and a fan diameter D is 2 or lower, an outer peripheral blade inflow angle $\theta = \gamma \times \pi$ radian is in the range of 0.4 to 0.3. The air-conditioning apparatus provided with an air-sending device is capable of suppressing noise as well as increasing fan performance even when the inlet port (4) is narrow.

IPC 8 full level
F04D 17/16 (2006.01); **F04D 29/28** (2006.01); **F04D 29/42** (2006.01); **F24F 1/00** (2011.01); **F24F 13/24** (2006.01)

CPC (source: EP US)
F04D 17/16 (2013.01 - EP US); **F04D 29/283** (2013.01 - EP US); **F04D 29/4226** (2013.01 - EP US); **F24F 1/0025** (2013.01 - EP US); **F24F 1/0057** (2019.01 - EP US); **F24F 13/24** (2013.01 - EP US)

Cited by
US10731881B2

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
US 2012134794 A1 20120531; CN 102575687 A 20120711; CN 102575687 B 20141105; EP 2472190 A1 20120704; EP 2472190 A4 20160316; EP 2472190 B1 20181205; JP 5230814 B2 20130710; JP WO2011024215 A1 20130124; WO 2011024215 A1 20110303

DOCDB simple family (application)
US 200913388322 A 20090825; CN 200980161121 A 20090825; EP 09848667 A 20090825; JP 2009004088 W 20090825; JP 2011528506 A 20090825