

Title (en)

VOLUTE FAN ASSEMBLY STRUCTURE AND FLOOR-STANDING AIR CONDITIONER

Title (de)

SPIRALFÖRMIGE VENTILATORANORDNUNGSSTRUKTUR UND BODENSTEHENDE KLIMAANLAGE

Title (fr)

STRUCTURE D'ENSEMBLE VENTILATEUR À VOLUTE ET CLIMATISEUR POSÉ SUR LE SOL

Publication

**EP 3348840 A1 20180718 (EN)**

Application

**EP 16843633 A 20160906**

Priority

- CN 201510579262 A 20150911
- CN 2016098203 W 20160906

Abstract (en)

A volute fan combination structure, comprises a mounting plate (4) and at least two adjacent volute fans mounted on the mounting plate (4), one volute fan of the two adjacent volute fans has an intermediate inclined air outlet that located between the two adjacent volute fans, the intermediate inclined air outlet extending such as to be inclined towards a direction away from said mounting plate (4). The volute fan combination structure is capable of allowing that the air outlet of a second volute fan (2) is staggered from a first volute fan (1) and a third volute fan (3), so as to reduce disturbance. There is further provided with a vertical air conditioner having the aforementioned volute fan combination structure.

IPC 8 full level

**F04D 25/08** (2006.01); **F04D 25/16** (2006.01); **F04D 29/42** (2006.01); **F04D 29/44** (2006.01); **F04D 29/66** (2006.01); **F24F 1/00** (2011.01)

CPC (source: EP KR)

**F04D 25/08** (2013.01 - EP KR); **F04D 25/16** (2013.01 - KR); **F04D 25/166** (2013.01 - EP); **F04D 29/42** (2013.01 - KR);  
**F04D 29/4226** (2013.01 - EP); **F04D 29/4246** (2013.01 - EP); **F04D 29/44** (2013.01 - KR); **F04D 29/66** (2013.01 - KR); **F24F 1/00** (2013.01 - EP);  
**F24F 1/0025** (2013.01 - KR)

Cited by

EP3879118A1; US11767852B2; WO2024015994A1

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 3348840 A1 20180718**; **EP 3348840 A4 20190612**; **EP 3348840 B1 20220316**; CN 105156344 A 20151216; CN 105156344 B 20180622;  
ES 2914227 T3 20220608; JP 2018532059 A 20181101; JP 3225968 U 20200416; KR 20180008722 A 20180124; WO 2017041695 A1 20170316

DOCDB simple family (application)

**EP 16843633 A 20160906**; CN 201510579262 A 20150911; CN 2016098203 W 20160906; ES 16843633 T 20160906;  
JP 2017566146 A 20160906; JP 2019004940 U 20191226; KR 20177036311 A 20160906