

Title (en)

AXIAL FAN BLADE, AXIAL FAN BLADE ASSEMBLY, AND AXIAL FAN DUCT ASSEMBLY

Title (de)

AXIALLÜFTERSCHAUFEL, AXIALLÜFTERSCHAUFELANORDNUNG UND AXIALLÜFTERKANALANORDNUNG

Title (fr)

PALE DE VENTILATEUR AXIAL, ENSEMBLE PALE DE VENTILATEUR AXIAL ET ENSEMBLE CONDUIT DE VENTILATEUR AXIAL

Publication

EP 3739218 A4 20210317 (EN)

Application

EP 18900229 A 20180628

Priority

- CN 201820054204 U 20180113
- CN 2018093266 W 20180628

Abstract (en)

[origin: EP3739218A1] An axial flow fan blade, a blade assembly for axial flow fan, and an air duct assembly for axial flow fan. Wherein, an air guide section is formed on an end of a windward edge of the axial flow fan blade (1) proximal to a blade tip, a plurality of air guide grooves (2) are disposed on the air guide section; the air guide section satisfies that the condition of $(r_{2₂-r_{2₁}})^{1/3} = 1/3 - 1/2$, and a depth of the air guide grooves (2) is gradually reduced along a direction running toward the rotation center. The air guide section of the axial flow fan blade can divide an airflow into small airflows so as to achieve the noise reduction effect. Moreover, the air guide groove has gradually reduced depth, thereby ensuring uniform air speed.

IPC 8 full level

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

CPC (source: EP US)

F04D 29/384 (2013.01 - EP US); **F04D 29/667** (2013.01 - EP US)

Citation (search report)

- [Y] WO 2017095029 A1 20170608 - SAMSUNG ELECTRONICS CO LTD [KR]
- [Y] CN 102588338 A 20120718 - TCL AIR CONDITIONER ZHONGSHAN
- [Y] CN 201679745 U 20101222 - XINCHANG KEMAO IND CO LTD
- See references of WO 2019136939A1

Cited by

CN114526252A

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)

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