

Title (en)
PROPELLER FAN AND AIR CONDITIONER EQUIPPED WITH SAME

Title (de)
PROPELLERLÜFTER UND KLIMAANLAGE DAMIT

Title (fr)
VENTILATEUR À HÉLICE ET CLIMATISEUR LE COMPORTANT

Publication
EP 2960525 A4 20161012 (EN)

Application
EP 13875684 A 20130222

Priority
JP 2013054451 W 20130222

Abstract (en)
[origin: EP2960525A1] In order to suppress that a velocity in the vicinity of a bell mouth is lowered to induce non-uniformity in velocity at an outlet of a blade and an outlet of the bell mouth caused by adoption of a forward-swept blade which makes a tip vortex small as means for noise reduction, in a blade of a propeller fan, a trailing edge portion which has been rotationally projected on a plane passing through a rotational axis is formed from the rotational axis toward a blade tip portion so as to bend from the suction side to the discharge side with a first curvature, and is further formed so as to bend with a second curvature which is smaller than the aforementioned first curvature with an inflection point interposed.

IPC 8 full level
F04D 29/38 (2006.01); **F04D 29/54** (2006.01); **F04D 29/66** (2006.01); **F24F 1/00** (2011.01); **F04D 19/00** (2006.01); **F04D 29/32** (2006.01); **F04D 29/70** (2006.01)

CPC (source: EP US)
F04D 29/384 (2013.01 - US); **F04D 29/386** (2013.01 - EP US); **F04D 29/545** (2013.01 - EP US); **F04D 29/666** (2013.01 - US); **F24F 1/0029** (2013.01 - US); **F04D 19/002** (2013.01 - US); **F04D 29/325** (2013.01 - US); **F04D 29/703** (2013.01 - EP US); **F05D 2240/304** (2013.01 - EP US); **F05D 2250/713** (2013.01 - EP US)

Citation (search report)

- [X] EP 1610068 A1 20051228 - TOSHIBA CARRIER CORP [JP]
- [X] JP 2006152988 A 20060615 - TOSHIBA CARRIER KK
- [A] JP 2004197694 A 20040715 - DAIKIN IND LTD
- See references of WO 2014128908A1

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

DOCDB simple family (publication)
EP 2960525 A1 20151230; **EP 2960525 A4 20161012**; **EP 2960525 B1 20221019**; CN 105008723 A 20151028; CN 105008723 B 20170815; JP 6215296 B2 20171018; JP WO2014128908 A1 20170202; US 2016003487 A1 20160107; WO 2014128908 A1 20140828

DOCDB simple family (application)
EP 13875684 A 20130222; CN 201380073430 A 20130222; JP 2013054451 W 20130222; JP 2015501179 A 20130222; US 201314768927 A 20130222