

Title (en)

AXIAL IMPELLER AND FAN HAVING SUCH AN AXIAL IMPELLER

Title (de)

AXIALLAUFRAD UND VENTILATOR MIT EINEM SOLCHEN AXIALLAUFRAD

Title (fr)

ROUE À AUBES ET VENTILATEUR AYANT UNE TELLE ROUE À AUBES

Publication

EP 3268613 A1 20180117 (DE)

Application

EP 16707469 A 20160303

Priority

- DE 102015204304 A 20150311
- EP 2016054505 W 20160303

Abstract (en)

[origin: WO2016142255A1] The invention relates to an axial impeller, comprising a hub and blades, for a fan or blower, wherein the geometry of the blades is determined by a course of a blade leading angle and of a blade trailing angle of blade sections from a blade root at the hub to a blade tip opposite the blade root, i.e., according to the hub ratio. According to the invention, the blade leading angle is curved to the left according to the hub ratio and/or the blade trailing angle is curved to the right according to the hub ratio and the blade leading angle is $29^\circ \pm 3^\circ$ near the blade root and $14^\circ \pm 3^\circ$ near the blade tip and/or the blade trailing angle is $69^\circ \pm 3^\circ$ near the blade root and $27^\circ \pm 3^\circ$ near the blade tip.

IPC 8 full level

F04D 19/00 (2006.01); **F04D 29/38** (2006.01)

CPC (source: EP US)

F04D 19/002 (2013.01 - EP US); **F04D 29/384** (2013.01 - EP US); **F01P 5/06** (2013.01 - US); **F05D 2240/303** (2013.01 - EP US); **F05D 2240/304** (2013.01 - EP US)

Citation (search report)

See references of WO 2016142255A1

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)

DE 102015204304 A1 20160915; EP 3268613 A1 20180117; EP 3268613 B1 20220511; US 10670044 B2 20200602; US 2018087527 A1 20180329; WO 2016142255 A1 20160915

DOCDB simple family (application)

DE 102015204304 A 20150311; EP 16707469 A 20160303; EP 2016054505 W 20160303; US 201615556178 A 20160303