

Title (en)
AXIAL FLOW FAN WITH BLADES TWISTED ACCORDING TO A BLADE PITCH RATIO THAT DECREASES (QUASI) LINEARLY WITH THE RADIAL POSITION

Title (de)
AXIALLÜFTER MIT GEMÄSS EINEM MIT EINER RADIALEN POSITION (QUASI) LINEAR SINKENDEN SCHAUFELSPITZENVERHÄLTNIS VERDRILLTEN SCHAUFELN

Title (fr)
SOUFFLANTE À ÉCOULEMENT AXIAL À PALES TOURNÉS SELON UN RAPPORT DE PAS DE PALE QUI DIMINUE DE FAÇON (QUASI)LINÉAIRE AVEC LA POSITION RADIALE

Publication
EP 3084230 A1 20161026 (EN)

Application
EP 13811779 A 20131217

Priority
DK 2013050432 W 20131217

Abstract (en)
[origin: WO2015090318A1] An axial flow fan (1) is disclosed comprising a hub (3), an annular shroud (6) extending concentric with the axis (4) of the hub (3), and a plurality of fan blades (2) connected at a root end (11) to said hub (3) and having a free tip end (7) extending radially towards said shroud (6), wherein the blades (2) are designed so that the fan (1) when in operation at nominal operating conditions generates a fluid flow in the immediate vicinity after the blades (2) which comprises a core flow that substantially is a forced vortex flow where the tangential flow speed component (c_2 , u) is proportional with the radial distance (r) from the axis (4). Equations to define the chord angle θ of the blades (2) are provided.

IPC 8 full level
F04D 29/38 (2006.01); **F04D 29/36** (2006.01)

CPC (source: EP US)
F04D 19/002 (2013.01 - US); **F04D 29/36** (2013.01 - EP US); **F04D 29/384** (2013.01 - EP US); **F04D 29/386** (2013.01 - US); **F04D 29/545** (2013.01 - US)

Citation (search report)
See references of WO 2015090318A1

Citation (examination)

- US 2004165986 A1 20040826 - PARKER DANNY S [US], et al
- WO 9513472 A1 19950518 - PENN VENTILATOR CO INC [US]

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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DK 2013050432 W 20131217; EP 13811779 A 20131217; US 201315105458 A 20131217