

Title (en)

Fan and fan blade

Title (de)

Ventilator und Ventilatorflügel

Title (fr)

Ventilateur et aube de ventilateur

Publication

EP 1801422 A2 20070627 (DE)

Application

EP 06003819 A 20060224

Priority

- EP 05028264 A 20051222
- EP 06003819 A 20060224

Abstract (en)

The fan blade (1) has a leading edge (2) which is curved in an S shape in the plane of the fan blade, and an outside edge (4) which is shorter than the leading edge. The center point (M) of the outside edge is located near to the radial line (x) of the fan blade. The leading edge may be at least partially fringed. An independent claim is included for a fan.

Abstract (de)

Die Erfindung stellt einen Ventilatorflügel (1) mit einer in der Flügelblattebene S-förmig gekrümmten Anströmkante (2) und einer Außenkante (4), die kürzer als die Anströmkante ist, bereit, bei dem der Mittelpunkt der Außenkante (4) in der Nähe des Radialstrahls (x) des Ventilatorflügels (1) liegt, sowie einen Ventilator (9), der wenigstens einen erfindungsgemäßen Ventilatorflügel (1) verwendet.

IPC 8 full level

F04D 29/32 (2006.01); **F04D 29/38** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP US)

F04D 29/325 (2013.01 - US); **F04D 29/384** (2013.01 - EP US); **F04D 29/681** (2013.01 - EP US); **F05D 2240/304** (2013.01 - EP)

Citation (applicant)

- FR 2728028 A1 19960614 - SARDOU MAX [FR]
- US 5533865 A 19960709 - DASSEN ANTONIUS G M [NL], et al

Citation (third parties)

Third party :

- DE 19948075 A1 20000525 - GATE SPA [IT]
- US 2382535 A 19450814 - BAUER NORMAN T
- US 4089618 A 19780516 - PATEL JAY
- FR 2277257 A1 19760130 - ROTRON INC [US]
- DE 2529541 A1 19760122 - ROTRON INC
- US 5533865 A 19960709 - DASSEN ANTONIUS G M [NL], et al
- EP 0887558 A1 19981230 - SIEMENS CANADA LTD [CA]
- BR 6200404 U 19831108 - ARNO ROTRON EQUIPAMENTOS ELETR [BR]
- HOWE M.S.: "Aerodynamic noise of a serrated trailing edge", JOURNAL OF FLUIDS AND STRUCTURES, vol. 5, 1991, pages 33 - 45, XP003024861

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DE102009035689A1; EP3450717A1; CN109424582A; US11746796B1; EP4283135A1; US10697467B2; DE102022113141A1; WO2009054815A1; WO2013131641A3; DE102022113142A1; DE102021105225A1; DE102021105226A1; WO2021180559A1; WO2021180560A1; EP4083433A1; EP4083432A1

Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR MK YU

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EP 1801422 A2 20070627; **EP 1801422 A3 20091014**; **EP 1801422 B1 20130612**; US 2007201982 A1 20070830

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EP 06003819 A 20060224; US 61459806 A 20061221