

Title (en)
Helicoidal fan with a guiding envelope.

Title (de)
Propellergebläse mit Leitmantel.

Title (fr)
Ventilateur hélicoïde à gaine de guidage.

Publication
EP 0263000 A1 19880406 (FR)

Application
EP 87401940 A 19870828

Priority
FR 8612327 A 19860902

Abstract (en)
[origin: US4780052A] A blower has a tubular air flow guiding sleeve. An electric motor is located coaxially within the sleeve in a casing connected to the sleeve by flow-straightening blades and a propeller is fixed to a rotary shaft of the motor and placed in front of the blades. A central unit comprises the tubular casing constituting a single casting with the blades and a part of said sleeve surrounding the propeller. A length of that part around the propeller is machined concentrically to an inner surface of said casing slidably receiving the stator of the motor. A PTFE ring may be located in a recess of the sleeve in radial alignment with the propeller blade tips.

Abstract (fr)
Le ventilateur comporte une gaine tubulaire (10) de guidage de flux d'air munie d'aubes (22) de redressement d'écoulement portant un ensemble central constitué d'un moteur électrique muni d'un carénage aérodynamique et d'une hélice (32) fixée sur l'arbre (30) du moteur et placée à l'avant des aubes. La gaine (10) est constituée d'une enveloppe externe (14) et d'une enveloppe interne (12) solidaires, séparées par un matériau d'insonorisation (16). L'enveloppe interne porte, au droit des bouts de pale de l'hélice, un segment cylindrique (34) en matériau synthétique, tel que du polytétrafluoréthylène, rapporté et usiné.

IPC 1-7
F04D 29/54; F04D 19/00

IPC 8 full level
F04D 19/00 (2006.01); **F04D 29/54** (2006.01)

CPC (source: EP US)
F04D 29/545 (2013.01 - EP US)

Citation (search report)

- [Y] US 2488945 A 19491122 - TROLLER THEODOR H, et al
- [Y] US 4478552 A 19841023 - THOMPSON STANLEY E [US]
- [YD] FR 998558 A 19520121 - FOURNIER ET MOUILLON ETS
- [Y] FR 1068395 A 19540624 - POWER JETS RES & DEV LTD
- [Y] GB 879740 A 19611011 - AXIA FANS LTD
- [Y] FR 2393960 A1 19790105 - BERRY SA [FR]
- [Y] FR 2332443 A1 19770617 - HOELTER H [DE]
- [A] FR 2347539 A1 19771104 - ROLLS ROYCE [GB]
- [A] GB 1013096 A 19651215 - SVENSKA AEROPLAN AB
- [A] GB 938123 A 19631002 - STUDEBAKER PACKARD CORP
- [A] US 2040452 A 19360512 - THEODOR TROLLER

Cited by
CN105402165A; GB2294092A; GB2294092B

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
US 4780052 A 19881025; AT E59887 T1 19910115; AU 611860 B2 19910627; AU 7774487 A 19880310; CA 1312318 C 19930105; DE 3767263 D1 19910214; EP 0263000 A1 19880406; EP 0263000 B1 19910109; ES 2019651 B3 19910701; FI 873797 A0 19870901; FI 873797 A 19880303; FR 2603350 A1 19880304; FR 2603350 B1 19910329; GR 3001296 T3 19920826; IE 872322 L 19880302; IN 166551 B 19900609; NO 166421 B 19910408; NO 166421 C 19910717; NO 873645 D0 19870828; NO 873645 L 19880303; PT 85634 A 19881014; PT 85634 B 19930730; ZA 876554 B 19881130

DOCDB simple family (application)
US 9187587 A 19870901; AT 87401940 T 19870828; AU 7774487 A 19870901; CA 545873 A 19870901; DE 3767263 T 19870828; EP 87401940 A 19870828; ES 87401940 T 19870828; FI 873797 A 19870901; FR 8612327 A 19860902; GR 900400822 T 19910110; IE 232287 A 19870828; IN 696CA1987 A 19870902; NO 873645 A 19870828; PT 8563487 A 19870901; ZA 876554 A 19870902