

Title (en)

Axial fan with cylindrical casing.

Title (de)

Axiallüfter mit zylindrischem Aussengehäuse.

Title (fr)

Ventilateur hélicoïde avec boîtier cylindrique.

Publication

EP 0459497 B1 19940622 (DE)

Application

EP 91108890 A 19910531

Priority

DE 9006174 U 19900531

Abstract (en)

[origin: US5184938A] The invention relates to an axial fan with an essentially cylindrical outer housing and with a fan wheel which rotates therein and the hub of which is located on the rotor of an electric drive motor, the stator of the drive motor being held by webs extending on the delivery side relative to the outer housing. The vanes of the axial fan are radially twisted and possess a forward curvature with a camber varying from the hub cross-section to the outer cross-section. In order to achieve a pressure increase, at the same time with a reduction of the operating noise, the vanes have in the hub region a cross-section designed for a low flow per unit volume and small pressure increase, but in the outer region a cross-section designed for higher values of flow per unit volume and pressure increase.

IPC 1-7

F04D 29/66; F04D 19/00

IPC 8 full level

F04D 19/00 (2006.01); **F04D 25/06** (2006.01); **F04D 29/38** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP US)

F04D 25/0606 (2013.01 - EP US); **F04D 29/384** (2013.01 - EP US); **Y10S 416/02** (2013.01 - EP US); **Y10S 416/05** (2013.01 - EP US)

Cited by

EP0955467A3; EP0583091A3; EP3982518A1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

EP 0459497 A2 19911204; **EP 0459497 A3 19920226**; **EP 0459497 B1 19940622**; AT E107743 T1 19940715; DE 59101986 D1 19940728; DE 9006174 U1 19911010; US 5184938 A 19930209

DOCDB simple family (application)

EP 91108890 A 19910531; AT 91108890 T 19910531; DE 59101986 T 19910531; DE 9006174 U 19900531; US 70813291 A 19910530