

Title (en)
Industrial axial-flow fan having offset airfoil-to-hub mounting system for improved aerodynamic performance.

Title (de)
Industrie-Axialventilator mit verstellbarem Flügel-Naben-Montagesystem zur Verbesserung der Aerodynamik.

Title (fr)
Ventilateur axial industriel avec système d'installation d'aile-moyeu variable pour perfectionner l'aérodynamique.

Publication
EP 0413663 A2 19910220 (EN)

Application
EP 90810598 A 19900808

Priority
AR 31465889 A 19890814

Abstract (en)
An industrial fan (1) having a plurality of blades (2) attached to a common hub (21), wherein each blade (2) has a substantially uniform aerodynamic shape the length thereof including its root, by virtue of novel attachment means which do not require added strengthening of the root deforming its aerodynamic shape, thereby improving overall performance. The attachment means include an intermediate member (13) of each blade (2) coupled to the hub (9) and clamped against one of the faces of the associated blade (2). Radial pivot means are provided between each intermediate member (13) and the hub (9) according to feathering axes offset from the blade longitudinal axes, for manually adjusting the pitch (angle of incidence) of the blades according to a required flow. The invention also includes a pneumatic system (30) for varying the position (pitch) of the fan blades in motion.

IPC 1-7
F04D 19/00; F04D 29/36

IPC 8 full level
F04D 19/00 (2006.01); F04D 29/36 (2006.01)

CPC (source: EP)
F04D 19/002 (2013.01); F04D 29/36 (2013.01)

Cited by
EP0945626A3; AU769503B2; EP2397784A1; ITBS20100110A1; WO9409277A1; US6439850B1; US6644922B2; US9388825B1

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

DOCDB simple family (publication)
EP 0413663 A2 19910220; EP 0413663 A3 19920115; AR 240846 A1 19910228; AR 240846 A2 19910228; BR 9004017 A 19910903

DOCDB simple family (application)
EP 90810598 A 19900808; AR 31465889 A 19890814; BR 9004017 A 19900814