

Title (en)

Axial electric fan unit using a centrifugal regulator device for opening and closing a shutter

Title (de)

Axiale elektrische Lüftereinheit mit einer zentrifugalen Reguliervorrichtung zum Öffnen und Schließen einer Verschlussvorrichtung

Title (fr)

Unité de ventilateur électrique axial utilisant un dispositif régulateur centrifuge pour ouvrir et fermer un obturateur

Publication

EP 2693058 A1 20140205 (EN)

Application

EP 12425133 A 20120802

Priority

EP 12425133 A 20120802

Abstract (en)

Electric fan unit including a casing (2) defining a passage for an air flow and comprising a central support (10); a fan (26) mounted rotatably on the central support; a shutter comprising a system of slats (12) movable between a configuration in which the passage is completely open and a configuration in which it is completely closed, and a centrifugal regulator (44) having a base element (46) connected in rotation to the fan (26); an axially movable actuating member (56) connected for operation to the system of slats in order to move them towards their maximum opening configuration when the fan is activated; at least two articulated arms connecting the actuator member (56) to the base element (46) and movable by centrifugal force in such a way as to cause the axial advance of the actuating member; and a slidable coupling (84, 86) for guiding the axial translational movement of the actuating member relative to the base element. The fan is mounted rotatably on axle (20) connected fixedly to the central support; the axle defines the axis of rotation (z) of the fan (26) and has a through cavity (91) within which a rotating shaft (93) is coaxially housed, a front end of this shaft being connected fixedly to said fan, while a rear end of the shaft is connected integrally to the base element of the centrifugal regulator. The base element is mounted rotatably on the axle (20), on the opposite side of the central support (10) from the fan.

IPC 8 full level

F04D 25/14 (2006.01); **F04D 27/00** (2006.01)

CPC (source: EP)

F04D 25/14 (2013.01); **F04D 27/003** (2013.01)

Citation (applicant)

EP 0563875 A1 19931006 - EUROEMME SPA [IT]

Citation (search report)

- [A] WO 03042544 A1 20030522 - PERICOLI ROBERTO [IT]
- [AD] EP 0563875 A1 19931006 - EUROEMME SPA [IT]
- [A] US 2006286924 A1 20061221 - MILANA ANGELO [CA]

Cited by

CN107882765A

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)

EP 2693058 A1 20140205; **EP 2693058 B1 20160420**; BR 102013019286 A2 20160412; CN 103573662 A 20140212; CN 103573662 B 20171027; DK 2693058 T3 20160801; ES 2582905 T3 20160915; PL 2693058 T3 20161031

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EP 12425133 A 20120802; BR 102013019286 A 20130730; CN 201310334988 A 20130802; DK 12425133 T 20120802; ES 12425133 T 20120802; PL 12425133 T 20120802