

Title (en)

Centrifugal fan and vacuum cleaner having the centrifugal fan

Title (de)

Zentrifugalgebläse und Staubsauger umfassend ein solches Zentrifugalgebläse

Title (fr)

Soufflante centrifuge et aspirateur comportant une telle soufflante centrifuge

Publication

**EP 1618821 A2 20060125 (EN)**

Application

**EP 05291532 A 20050718**

Priority

KR 20040056491 A 20040720

Abstract (en)

A centrifugal fan (12) includes a driving motor (58) for generating a rotational force; an impeller (62) connected with the driving motor by a rotational shaft (60) and generating an air blowing force; a partition plate (82) installed inside an impeller casing (52); a diffuser (80) formed at an edge portion of an upper surface of the partition plate and increasing a pressure of air which has passed through the impeller; a rear vane (84) formed at a lower surface of the partition plate and guiding air discharged from the diffuser so as to pass through the driving motor; and an air guiding member (90) formed at certain intervals at an outer surface of the diffuser and guiding air which has passed through the diffuser toward the rear vane. Air which has passed through the diffuser is forcibly introduced to the lower side of the partition plate, so a flow loss caused as air is re-circulated to the upper side of the partition plate after passing through the diffuser can be reduced, and thus, a suction force and efficiency of the centrifugal fan can be enhanced.

IPC 8 full level

**A47L 5/22** (2006.01)

CPC (source: EP KR)

**A47L 5/22** (2013.01 - EP); **A47L 9/22** (2013.01 - EP KR); **F04D 29/444** (2013.01 - EP KR); **F05D 2250/52** (2013.01 - EP)

Cited by

EP1878376A3; US9142804B2; US9324776B2; US8152488B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1618821 A2 20060125**; **EP 1618821 A3 20060607**; **EP 1618821 B1 20091028**; CN 100489316 C 20090520; CN 1724878 A 20060125; DE 602005017332 D1 20091210; KR 20060007637 A 20060126

DOCDB simple family (application)

**EP 05291532 A 20050718**; CN 200510084784 A 20050720; DE 602005017332 T 20050718; KR 20040056491 A 20040720