

Title (en)

IMPELLER FOR CENTRIFUGAL FAN AND CENTRIFUGAL FAN EQUIPPED WITH THE SAME

Title (de)

LAUFRAD FÜR ZENTRIFUGALGEBLÄSE UND DAS LAUFRAD ENTHALTENDES ZENTRIFUGALGEBLÄSE

Title (fr)

IMPULSEUR POUR SOUFFLANTE CENTRIFUGE ET SOUFFLANTE CENTRIFUGE DOTÉE D'UN IMPULSEUR

Publication

**EP 1411248 A1 20040421 (EN)**

Application

**EP 02738677 A 20020612**

Priority

- JP 0205882 W 20020612
- JP 2001196177 A 20010628
- JP 2001196178 A 20010628

Abstract (en)

An impeller allowing noise to be reduced and a low noise centrifugal blower, the multi-vane centrifugal blower (40) comprising mainly an impeller (43), a casing (11) covering the impeller, and a motor (14) rotating the impeller, wherein the impeller is so formed that a number of blades (33) are fixed to the outer peripheral edge of a disk-like main plate (61) and the other ends of the plurality of blades are connected to each other through an annular side plate (62), the plurality of blades are formed on the outer peripheral edge of the main plate at equal intervals in rotating direction, an irregular waveform shape (64) is formed near the inner peripheral edge part of the number of blades along the periphery of the inner peripheral edge part, and an irregular waveform (66) is formed on the surface of the side plate on the main plate side.

IPC 1-7

**F04D 29/28**; **F04D 29/44**; **F04D 29/66**

IPC 8 full level

**F04D 29/28** (2006.01); **F04D 29/44** (2006.01); **F04D 29/66** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP)

**F04D 29/283** (2013.01); **F04D 29/667** (2013.01); **F04D 29/681** (2013.01)

Cited by

CN103216452A; US8870541B2; US8932019B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**EP 1411248 A1 20040421**; **EP 1411248 A4 20100331**; **EP 1411248 B1 20120502**; **EP 1411248 B8 20120620**; AT E556226 T1 20120515; CN 1212479 C 20050727; CN 1395045 A 20030205; CN 2575343 Y 20030924; ES 2387063 T3 20120912; WO 03002873 A1 20030109

DOCDB simple family (application)

**EP 02738677 A 20020612**; AT 02738677 T 20020612; CN 02141237 A 20020628; CN 02240970 U 20020628; ES 02738677 T 20020612; JP 0205882 W 20020612