

Title (en)
RADIAL FAN WHEEL, FAN UNIT, AND RADIAL FAN ARRANGEMENT

Title (de)
RADIALLÜFTERRAD, LÜFTEREINHEIT UND RADIALLÜFTERANORDNUNG

Title (fr)
ROUE DE SOUFFLANTE RADIALE, UNITE DE SOUFFLANTE, ET DISPOSITIF DE SOUFFLANTE RADIALE

Publication
EP 1608875 B1 20101222 (DE)

Application
EP 04717095 A 20040304

Priority
• EP 2004002215 W 20040304
• EP 03004821 A 20030304
• EP 04717095 A 20040304

Abstract (en)
[origin: EP1455094A1] The radial fan impeller comprises a cover plate (3) and bottom plate (1) interconnected by a vane ring which has guide vanes (2) inclined from the inside outwards against the direction of rotation. Outer edge sections (7) which protrude beyond the vane outlet diameter are formed on the cover plate and bottom plate and define an annular diffusion chamber with an outside diameter which exceeds the vane outlet diameter by up to 25 per cent, and the cross sectional profile of which is constructed rectangularly or trapezoidally, widening outwards. Independent claims are also included for the following: (a) a fan unit with the aforesaid radial fan impeller; (b) a radial fan arrangement including the aforesaid radial fan impeller; (c) a use for the fan unit which is in an air conditioning unit; and (d) a use for the radial fan impeller which is as a freewheeling impeller.

IPC 8 full level
F04D 29/28 (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP US)
F04D 29/282 (2013.01 - EP US); **F04D 29/288** (2013.01 - EP US); **F04D 29/442** (2013.01 - EP US)

Cited by
DE102011013677B4; DE202011003839U1; DE102011013677A1; WO2012123080A1; DE102011013841A1; DE102011013841B4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1455094 A1 20040908; AT E492729 T1 20110115; CA 2517994 A1 20040916; CA 2517994 C 20110809; CN 100458178 C 20090204; CN 1756908 A 20060405; DE 502004012024 D1 20110203; EP 1608875 A1 20051228; EP 1608875 B1 20101222; ES 2355822 T3 20110331; FI 7321 U1 20061130; FI U20060060 U0 20060207; JP 2006519336 A 20060824; PL 1608875 T3 20110531; RU 2321775 C1 20080410; SI 1608875 T1 20110429; US 2006228212 A1 20061012; US 9157452 B2 20151013; WO 2004079201 A1 20040916

DOCDB simple family (application)
EP 03004821 A 20030304; AT 04717095 T 20040304; CA 2517994 A 20040304; CN 200480005828 A 20040304; DE 502004012024 T 20040304; EP 04717095 A 20040304; EP 2004002215 W 20040304; ES 04717095 T 20040304; FI U20060060 U 20060207; JP 2006504541 A 20040304; PL 04717095 T 20040304; RU 2006132924 A 20040304; SI 200431629 T 20040304; US 54712104 A 20040304