

Title (en)
BLOWER AND AIR CONDITIONER WITH THE BLOWER

Title (de)
LÜFTER UND KLIMAANLAGE MIT DIESEM LÜFTER

Title (fr)
VENTILATEUR ET CONDITIONNEUR D'AIR AVEC VENTILATEUR

Publication
EP 1382856 A4 20050105 (EN)

Application
EP 01274219 A 20011225

Priority
• JP 0111317 W 20011225
• JP 2001129321 A 20010426

Abstract (en)
[origin: EP1382856A1] In a blower having an impeller (1) formed by radially attaching a plurality of blades (3, 3, ...) to an outer periphery of a hub (2), a specific region (Q) that extends in a predetermined width along a trailing edge (3b) of each blade (3) in a wingspan direction is bent towards a negative pressure surface (3f) side of the blade. On the negative pressure surface (3f) side of the blade, airflow separation hardly occurs and turbulence of a rear stream (A0) is suppressed. Meanwhile, on a pressure surface (3e) side of the blade, the airflow discharged rearwards from the trailing edge (3b) becomes smooth and less turbulent. The width of the rear stream (A0) is reduced and the aerodynamic characteristics of the blades are improved. <IMAGE>

IPC 1-7
F04D 29/30; **F24F 1/00**

IPC 8 full level
F04D 29/30 (2006.01); **F04D 29/38** (2006.01); **F24F 1/00** (2011.01)

CPC (source: EP US)
F04D 29/30 (2013.01 - EP); **F04D 29/384** (2013.01 - EP US); **F24F 1/0029** (2013.01 - EP); **F05D 2240/304** (2013.01 - EP)

Citation (search report)
• [X] JP H0285898 U 19900706
• [X] US 6164919 A 20001226 - VANMOOR ARTHUR [US]
• [X] EP 0955469 A2 19991110 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• [A] US 6116856 A 20000912 - KARADGY VIATCHESLAV G [RU], et al
• See references of WO 02090777A1

Cited by
US8197217B2; US8007243B2; EP1610068A4; EP1783376A4

Designated contracting state (EPC)
BE DE ES FR GB IT

DOCDB simple family (publication)
EP 1382856 A1 20040121; **EP 1382856 A4 20050105**; **EP 1382856 B1 20060322**; AU 2002217482 B2 20070405; CN 1201090 C 20050511; CN 1449472 A 20031015; DE 60118103 D1 20060511; DE 60118103 T2 20061102; ES 2263554 T3 20061216; HK 1061707 A1 20040930; TW 524928 B 20030321; WO 02090777 A1 20021114

DOCDB simple family (application)
EP 01274219 A 20011225; AU 2002217482 A 20011225; CN 01814668 A 20011225; DE 60118103 T 20011225; ES 01274219 T 20011225; HK 04104578 A 20040625; JP 0111317 W 20011225; TW 90130757 A 20011212