

Title (en)  
IMPELLER FOR MULTI-BLADE FAN

Title (de)  
LAUFRAD FÜR GEBLÄSE MIT MEHREREN SCHAUFELN

Title (fr)  
TURBINE POUR VENTILATEUR À MULTIPLES PALES

Publication  
**EP 2096318 A1 20090902 (EN)**

Application  
**EP 07831608 A 20071112**

Priority  
• JP 2007071878 W 20071112  
• JP 2006308292 A 20061114

Abstract (en)  
An impeller of a multi-blade fan, wherein any gasflow resistance increase is minimized when gas is blown from inside the impeller through an outer peripheral side thereof; and it is possible to integrally mold the impeller from a plastic material, allowing the impeller to rotate at high speed. The impeller (1) of a multi-blade fan is an impeller of a multi-blade fan for sucking in gas along a direction of a rotational shaft (3), and blowing out gas toward a direction intersecting the rotational shaft (3); and comprises a substantially circular endplate (11) that rotates about the rotational shaft (3), a plurality of blades (12), and one or more intermediate rings (14). The plurality of blades (12) is annularly disposed around the rotational shaft (3) on one or both sides of the endplate (11), one end of each of the blades being provided to an outer peripheral portion of the endplate (11). The intermediate ring (14) is formed in a position other than an end of the plurality of blades (12) on a side opposite to the endplate (11), the intermediate ring being formed so as not to overlap the plurality of blades (12) as seen from the direction of the rotational shaft, and so as to link together outer peripheral edges of each of the blades (12).

IPC 8 full level  
**F04D 29/02** (2006.01); **F04D 29/28** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP)  
**F04D 29/023** (2013.01); **F04D 29/283** (2013.01); **F04D 29/666** (2013.01); **F05D 2230/53** (2013.01); **F05D 2300/43** (2013.01)

Cited by  
CN104603465A; EP2894344A4

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

DOCDB simple family (publication)  
**EP 2096318 A1 20090902**; **EP 2096318 A4 20130206**; **EP 2096318 B1 20200101**; JP 2008121611 A 20080529; WO 2008059775 A1 20080522

DOCDB simple family (application)  
**EP 07831608 A 20071112**; JP 2006308292 A 20061114; JP 2007071878 W 20071112