

Title (en)  
Impeller of radial compressor

Title (de)  
Radialverdichter-Laufrad

Title (fr)  
Roue de compresseur radial

Publication  
**EP 1788255 A1 20070523 (DE)**

Application  
**EP 05025048 A 20051116**

Priority  
EP 05025048 A 20051116

Abstract (en)  
The impeller has a wheel disc (12) and blades (14) with a leading edge (16) and a trailing edge (18) that are arranged in a circumferential direction. A partial area of a surface of the blades is a dual-curved partial area (26), whose generatrix (24a) is formed as curved lines, where the partial area is curved perpendicular to the generatrix. A transfer of the dual curved partial area is continuous to a standard surface partial area (28). The blades have a hub edge (20) and an outer edge (22), where the partial areas (26, 28) abut at the outer edge and the hub edge, respectively. An independent claim is also included for a method for manufacturing a radial compressor impeller.

IPC 8 full level  
**F04D 29/30** (2006.01); **F04D 29/28** (2006.01)

CPC (source: EP NO US)  
**F04D 29/284** (2013.01 - EP NO US); **F04D 29/30** (2013.01 - EP NO US); **Y10T 29/49321** (2015.01 - EP NO US)

Citation (applicant)  
DE 4214753 A1 19931111 - ASEA BROWN BOVERI [CH]

Citation (search report)  
• [XY] WO 2005090794 A1 20050929 - MITSUBISHI HEAVY IND LTD [JP]  
• [YA] DE 897470 C 19531214 - SULZER AG  
• [XA] US 6588485 B1 20030708 - DECKER DAVID MICHAEL [US] & US 2005260074 A1 20051124 - HIGASHIMORI HIROTAKA [JP]

Cited by  
EP2918849A4; WO2015189234A1

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1788255 A1 20070523**; AT E450712 T1 20091215; CN 101310112 A 20081119; CN 101310112 B 20110413; DE 502006005551 D1 20100114; EP 1948939 A1 20080730; EP 1948939 B1 20091202; ES 2336371 T3 20100412; NO 20082659 L 20080808; NO 338811 B1 20161024; US 2009220346 A1 20090903; US 8277187 B2 20121002; WO 2007057292 A1 20070524

DOCDB simple family (application)  
**EP 05025048 A 20051116**; AT 06807648 T 20061030; CN 200680042871 A 20061030; DE 502006005551 T 20061030; EP 06807648 A 20061030; EP 2006067919 W 20061030; ES 06807648 T 20061030; NO 20082659 A 20080613; US 8492006 A 20061030