

Title (en)  
Centrifugal compressor

Title (de)  
Kreiselverdichter

Title (fr)  
Compresseur centrifuge

Publication  
**EP 1757814 A1 20070228 (DE)**

Application  
**EP 05405497 A 20050826**

Priority  
EP 05405497 A 20050826

Abstract (en)  
The radial compressor comprises a compressor housing (31) around an axially rotatable compressor wheel with a hub (10) and numerous blades (11, 12, 13). The blades are arranged in a flow channel (41, 42) within the housing and the hub. There is a diffuser with several vanes (21) that is arranged in the flow exit of the blades of the compressor wheel, with one of the blades being the main blade (11) and there being a first intermediate blade (12) next to the main blade which, in turn, has a second intermediate blade (13) located next to it. The vanes of the diffuser are built with their own meridional entry edges (23). The first and second intermediate blades may be built with entry edges (14) in the flow direction.

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

CPC (source: EP)  
**F04D 29/284** (2013.01); **F04D 29/444** (2013.01); **F05D 2240/121** (2013.01); **F05D 2250/52** (2013.01)

Citation (applicant)  
S. IBARAKI; H. HIGASHIMORI; T. MATSUO: "FLOW INVESTIGATION OF A TRANSONIC CENTRIFUGAL COMPRESSOR FOR TURBOCHARGER", MITSUBISHI HEAVY INDUSTRIES LTD

Citation (search report)  
• [Y] DE 29818179 U1 19990211 - MOTOREN VENTILATOREN GMBH [DE]  
• [Y] WO 2005052376 A1 20050609 - MITSUBISHI HEAVY IND LTD [JP], et al  
• [A] EP 0538753 A1 19930428 - HITACHI LTD [JP]  
• [A] EP 0648939 A2 19950419 - HITACHI LTD [JP]  
• [A] DE 2414110 A1 19751002 - GUTEHOFFNUNGSHUETTE STERKRADE

Cited by  
CN109519397A; DE102014217601A1; CN104373376A; US11131210B2

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 1757814 A1 20070228**; WO 2007022648 A1 20070301

DOCDB simple family (application)  
**EP 05405497 A 20050826**; CH 2006000358 W 20060706