

Title (en)

TURBOCHARGER WITH VARIABLE GEOMETRY TURBINE

Title (de)

TURBOLADER MIT VARIABLER TURBINENGEOMETRIE

Title (fr)

TURBOCOMPRESSEUR AVEC TURBINE A GEOMETRIE VARIABLE

Publication

EP 1734231 A1 20061220 (DE)

Application

EP 05013040 A 20050616

Priority

EP 05013040 A 20050616

Abstract (en)

The turbo charger has a turbine casing (2) with supply duct for the waste gases and a rotatable turbine rotor. A fixing device which fixes the blade bearing ring on the turbine casing is formed in one piece with at least one of the spacers (16) which maintain the clearance (13) for the blades of the guide grid which surrounds the rotor on the outside. The fixing device preferably has a groove in which a web (21) of the casing can be inserted when the ring is in the assembled state. For low temperature areas an insert disc of temperature-resistant material can be inserted between the ring and housing to protect the guide blades.

IPC 8 full level

F01D 17/16 (2006.01); **F01D 25/24** (2006.01)

CPC (source: EP)

F01D 17/165 (2013.01); **F01D 25/246** (2013.01); **F05D 2220/40** (2013.01); **F05D 2230/64** (2013.01); **F05D 2260/33** (2013.01)

Citation (search report)

- [XA] EP 0204033 A1 19861210 - MTU FRIEDRICHSHAFEN GMBH [DE]
- [XA] EP 1528225 A1 20050504 - BORGWARNER INC [US]
- [A] DE 10337491 A1 20050317 - VOLKSWAGEN AG [DE]
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09 31 July 1998 (1998-07-31)

Cited by

DE102011005151A1; US2015198164A1; US9909589B2; DE102008020932A1; DE102008020932B4; CN101896692A; CN102177312A; CN112292511A; US7918023B2; EP2336495A1; WO2013072732A1; WO2008098024A3; WO2011069571A1; DE102008014680A1; US8662833B2; DE102009058411A1; KR20110068847A; US11174868B2; DE102008029080B4; US8480358B2; US8764389B2; US11220957B2; WO2009076062A2; WO2010040643A1; WO2009076062A3; WO2020001805A1

Designated contracting state (EPC)

DE FR GB IT NL

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1734231 A1 20061220; EP 1734231 B1 20180502

DOCDB simple family (application)

EP 05013040 A 20050616