

Title (en)
ROTOR ASSEMBLY FOR AN EXHAUST GAS TURBOCHARGER

Title (de)
LAUFZEUG FÜR EINEN ABGASTURBOLADER

Title (fr)
ENSEMBLE ROTORIQUE POUR UN TURBOCOMPRESSEUR DE GAZ D'ÉCHAPPEMENT

Publication
EP 2126284 A1 20091202 (DE)

Application
EP 08716496 A 20080313

Priority
• EP 2008001996 W 20080313
• DE 102007012641 A 20070316

Abstract (en)
[origin: WO2008113506A1] The invention relates to a rotor assembly for an exhaust gas turbocharger, wherein the rotor assembly (1) comprises a shaft (4) having a rotational axis (5), a turbine wheel (3) for the expansion of a first gaseous medium, and a compressor wheel (2) for the compression of a second gaseous medium, and wherein the turbine wheel (3) is rotationally fixed on the compressor wheel (2) by means of the shaft (4), wherein the turbine wheel (3) is made of a metal aluminide, or of a high-temperature resistant first titanium alloy, and the shaft (4) is configured particularly of an iron-carbon alloy corresponding to a material composition of a steel. According to the invention, the turbine wheel (3) has an opening (6) at least partially penetrating the turbine wheel (3) in the direction of the rotational axis (5), wherein the turbine wheel (3) is configured in a manner so as to receive the shaft (4) by means of the opening (6), and the rotationally fixed connection between the turbine wheel (3) and the shaft (4) can be brought about in a positive manner by means of the opening (6). The invention is mainly utilized in turbocharged internal combustion engines for increasing power.

IPC 8 full level
F01D 5/02 (2006.01); **F02C 6/12** (2006.01)

CPC (source: EP US)
F01D 5/025 (2013.01 - EP US); **F05D 2220/40** (2013.01 - EP US); **F05D 2260/37** (2013.01 - EP US); **F05D 2300/133** (2013.01 - EP US)

Citation (search report)
See references of WO 2008113506A1

Citation (examination)
• US 3850546 A 19741126 - MASON G
• EP 1507062 A2 20050216 - BORGWARNER INC [US]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102007012641 A1 20080918; EP 2126284 A1 20091202; JP 2010521608 A 20100624; JP 5192497 B2 20130508; US 2010054944 A1 20100304; WO 2008113506 A1 20080925

DOCDB simple family (application)
DE 102007012641 A 20070316; EP 08716496 A 20080313; EP 2008001996 W 20080313; JP 2009553075 A 20080313; US 58499409 A 20090915