

Title (en)

Turbomachine and rotor for a turbomachine

Title (de)

Strömungsmaschine und Rotor für eine Strömungsmaschine

Title (fr)

Turbomachine et rotor pour une turbomachine

Publication

EP 2787168 A3 20150415 (DE)

Application

EP 14002196 A 20050310

Priority

- EP 04006393 A 20040317
- EP 05715935 A 20050310
- EP 14002196 A 20050310

Abstract (en)

[origin: EP1577493A1] The rotor (3) for a turbo machine has a hollow shaft (13) supported at the ends of two axially opposite sections of the rotor and enclosing an inner cavity (51). The hollow shaft in the axial direction of the rotor is formed from several adjacent rings (43), whereby the rings lying next to one another and lying on the sections of the rotor externally define the cavity. The rotor has at least one tie bolt (7) which serves to tension compressor and turbine discs (26,39) and the rings. An independent claim is included for a turbo machine such as a gas turbine equipped with the rotor as specified in the invention.

IPC 8 full level

F01D 5/02 (2006.01); **F01D 5/04** (2006.01); **F01D 5/08** (2006.01); **F01D 25/12** (2006.01)

CPC (source: EP US)

F01D 5/026 (2013.01 - EP US); **F01D 5/048** (2013.01 - EP US); **F01D 5/088** (2013.01 - EP US); **F01D 25/12** (2013.01 - EP US); **F05D 2260/4031** (2013.01 - EP US)

Citation (search report)

- [AD] GB 836920 A 19600609 - NAPIER & SON LTD
- [AD] GB 661078 A 19511114 - WESTINGHOUSE ELECTRIC INT CO
- [A] DE 1023933 B 19580206 - CANADIAN PATENTS DEV

Designated contracting state (EPC)

CH DE FR GB IT LI SE

DOCDB simple family (publication)

EP 1577493 A1 20050921; CN 101010486 A 20070801; CN 101010486 B 20110601; EP 1725741 A1 20061129; EP 1725741 B1 20140924; EP 2787168 A2 20141008; EP 2787168 A3 20150415; EP 2787168 B1 20160106; JP 2007529668 A 20071025; JP 4722120 B2 20110713; RU 2006136413 A 20080427; RU 2347912 C2 20090227; US 2008159864 A1 20080703; US 7585148 B2 20090908; WO 2005093219 A1 20051006

DOCDB simple family (application)

EP 04006393 A 20040317; CN 200580008502 A 20050310; EP 05715935 A 20050310; EP 14002196 A 20050310; EP 2005002559 W 20050310; JP 2007503243 A 20050310; RU 2006136413 A 20050310; US 59303005 A 20050310