

Title (en)

SEAL OF A COMPRESSOR ROTOR

Title (de)

ABDICHTUNG EINES VERDICHTERROTORS

Title (fr)

ÉTANCHÉIFICATION D'UN ROTOR DE COMPRESSEUR

Publication

**EP 2906828 A1 20150819 (DE)**

Application

**EP 13811905 A 20131218**

Priority

- DE 102012223830 A 20121219
- EP 2013077143 W 20131218

Abstract (en)

[origin: WO2014096036A1] The invention relates to a compressor rotor (1) comprising a pinion shaft (2) which has multiple interconnected segments (3, 4, 5) that are arranged axially one behind the other and comprising a multipart seal (6) which seals the pinion shaft (2). The aim of the invention is to prevent imbalances in the compressor rotor (1) or to allow a centering of a multipart seal (6) sealing element (13) which rotates together with the compressor rotor (1) with as little play as possible. This is achieved in that the pinion shaft (2) has a rotor segment (5) which supports a rotor, a connection segment (5), and a toothed segment (3) arranged axially between the rotor segment (5) and the connection segment (4), said toothed segment (3) having a toothing (9) at each of the two ends (7, 8) of the toothed segment. The toothed segment (3) is held axially between the rotor segment (5) and the connection segment (4), in particular in a centered manner without any play, and a multipart seal (6) sealing element (13) which is connected to the toothed segment (3) in an at least force-fitting manner is arranged on said toothed segment (3).

IPC 8 full level

**F04D 17/12** (2006.01); **F04D 29/10** (2006.01); **F04D 29/12** (2006.01); **F04D 29/62** (2006.01); **F04D 29/64** (2006.01)

CPC (source: EP RU US)

**F04D 17/12** (2013.01 - US); **F04D 17/122** (2013.01 - EP US); **F04D 29/102** (2013.01 - EP US); **F04D 29/12** (2013.01 - US); **F04D 29/122** (2013.01 - EP US); **F04D 29/62** (2013.01 - US); **F04D 29/624** (2013.01 - EP US); **F04D 29/644** (2013.01 - EP US); **F04D 17/12** (2013.01 - RU)

Citation (search report)

See references of WO 2014096036A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102012223830 A1 20140626**; CN 104870824 A 20150826; CN 104870824 B 20170524; EP 2906828 A1 20150819; EP 2906828 B1 20170201; RU 2015129079 A 20170126; RU 2643269 C2 20180131; US 2015330395 A1 20151119; US 9863426 B2 20180109; WO 2014096036 A1 20140626

DOCDB simple family (application)

**DE 102012223830 A 20121219**; CN 201380066953 A 20131218; EP 13811905 A 20131218; EP 2013077143 W 20131218; RU 2015129079 A 20131218; US 201314652255 A 20131218