

Title (en)  
SHAFT SEAL ARRANGEMENT

Title (de)  
WELLENDICHTUNGSANORDNUNG

Title (fr)  
STRUCTURE D'ÉTANCHÉITÉ D'ARBRE

Publication  
**EP 2850346 A1 20150325 (DE)**

Application  
**EP 13745024 A 20130725**

Priority  
• DE 102012214276 A 20120810  
• EP 2013065735 W 20130725

Abstract (en)  
[origin: WO2014023581A1] The invention relates to a shaft seal arrangement (SSM) with a shaft (SH) extending along an axis (X) and with a stator (ST), wherein a rotating sealing ring (RSR) is arranged on the shaft (SH) and a static sealing ring (SSR) is arranged on the stator (ST), wherein the rotating sealing ring (RSR) has a rotating sealing surface (RSS) and the stationary sealing ring (SSR) has a stationary sealing surface (SSS), wherein these sealing surfaces (2SS) are arranged in such a way that they are located opposite one another in a sealing manner in a substantially radial sealing plane (SPL), wherein the shaft seal arrangement (SSM) is designed as a contactless gas seal, wherein at least one of the sealing surfaces (2SS) has a non-rotationally symmetrical surface contouring (SC). The object of the invention is to provide a shaft seal arrangement of a gas seal which requires comparatively little preparation effort with respect to the sealing gas. For this purpose, it is proposed that the surface contouring (SC) comprises depressions (DP) in the sealing surface (2SS), wherein the depressions (DP) in each case have a boundary line (LL) with respect to the other sealing surface (O2SS), and a bottom surface (FS) of the depression (DP) defined by means of the boundary line (LL) has a constant radial profile, wherein the depression (DP) at the boundary line (LL) adjoins the other sealing surface (O2SS) with a depth of 0.

IPC 8 full level  
**F16J 15/34** (2006.01)

CPC (source: CN EP US)  
**F01D 11/02** (2013.01 - US); **F16J 15/164** (2013.01 - US); **F16J 15/3412** (2013.01 - CN EP US); **F16J 15/40** (2013.01 - US);  
**F16J 15/44** (2013.01 - US)

Citation (search report)  
See references of WO 2014023581A1

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)  
**WO 2014023581 A1 20140213**; CN 104520618 A 20150415; CN 104520618 B 20170929; DE 102012214276 A1 20140213;  
EP 2850346 A1 20150325; US 2015226336 A1 20150813; US 9657842 B2 20170523

DOCDB simple family (application)  
**EP 2013065735 W 20130725**; CN 201380042519 A 20130725; DE 102012214276 A 20120810; EP 13745024 A 20130725;  
US 201314419263 A 20130725