

Title (en)  
REINFORCED SEAL FOR ROTARY SHAFTS

Title (de)  
VERSTÄRKTE DICHTUNG FÜR DREHENDE WELLEN

Title (fr)  
JOINT D'ÉTANCHÉITÉ RENFORCÉ DESTINÉ À DES ARBRES ROTATIFS

Publication  
**EP 2668422 A4 20160525 (EN)**

Application  
**EP 12738908 A 20120127**

Priority  
• US 201161437262 P 20110128  
• US 2012022956 W 20120127

Abstract (en)  
[origin: WO2012103467A1] A seal for sealing a space between a housing and a rotatable shaft disposed within the housing includes an annular, elastomeric seal body disposeable about the shaft. The body has a central axis, an outer portion disposeable within a housing recess, and an inner portion with a lip engageable with the shaft. At least a portion of the seal body is configured to bendingly deflect when fluid pressure exerted on the body exceeds a predetermined value such that at least a section of the body inner portion displaces radially outwardly to permit fluid flow between the shaft and the seal body. A rigid support member is disposed within the body outer portion so as to be located at least partially within the housing recess and is configured to reduce bending deflection of the body inner portion so as to prevent disengagement of the body from the recess.

IPC 8 full level  
**F16J 15/32** (2006.01); **F01D 25/24** (2006.01); **F16J 15/3248** (2016.01); **F16J 15/3268** (2016.01)

CPC (source: EP US)  
**F01D 25/24** (2013.01 - US); **F16J 15/3248** (2013.01 - EP US); **F16J 15/3268** (2013.01 - EP US)

Citation (search report)  
• [X] US 2009034585 A1 20090205 - HUA MENG [CN], et al  
• [X] US 2006279046 A1 20061214 - VOGT ROLF [DE], et al  
• [X] US 2005093246 A1 20050505 - DIETLE LANNIE L [US], et al  
• [X] US 5213343 A 19930525 - WHITE JR HOLLIS N [US]  
• See references of WO 2012103467A1

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

DOCDB simple family (publication)  
**WO 2012103467 A1 20120802**; CN 103502704 A 20140108; EP 2668422 A1 20131204; EP 2668422 A4 20160525;  
IN 6865CHN2013 A 20150904; US 2014064936 A1 20140306

DOCDB simple family (application)  
**US 2012022956 W 20120127**; CN 201280015973 A 20120127; EP 12738908 A 20120127; IN 6865CHN2013 A 20130826;  
US 201213982293 A 20120127