

Title (en)

ROTATING CONTROL DEVICE HAVING SEAL RESPONSIVE TO OUTER DIAMETER CHANGES

Title (de)

ROTATIONSSTEUERUNGSVORRICHTUNG MIT AUF AUSSENDURCHMESSERVERÄNDERUNGEN REAGIERENDER DICHTUNG

Title (fr)

DISPOSITIF TOURNANT DE COMMANDE DOTÉ D'UN JOINT D'ÉTANCHÉITÉ SENSIBLE À DES CHANGEMENTS DE DIAMÈTRE EXTÉRIEUR

Publication

EP 2872732 A1 20150520 (EN)

Application

EP 12884551 A 20120912

Priority

US 2012054899 W 20120912

Abstract (en)

[origin: WO2014042631A1] A rotating control device for sealing about a drill string having a change in outer diameter can include a seal which rotates with the drill string, the seal including at least two chambers connected by a passage, and a fluid which flows between the chambers via the passage in response to displacement of the outer diameter change through the seal. A method of sealing can include forming at least two chambers in a resilient material of a seal, displacing the outer diameter change into the seal, thereby transferring fluid from a first chamber to a second chamber, and displacing the outer diameter change out of the seal, thereby transferring the fluid from the first chamber to the second chamber. One of the chambers can increase in volume while the other of the chambers decreases in volume.

IPC 8 full level

E21B 33/126 (2006.01); **E21B 33/122** (2006.01); **E21B 33/128** (2006.01); **E21B 43/10** (2006.01); **F16J 15/40** (2006.01); **F16J 15/46** (2006.01)

CPC (source: EP US)

E21B 33/085 (2013.01 - EP US); **E21B 33/128** (2013.01 - US); **F16J 15/46** (2013.01 - EP US)

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 2014042631 A1 20140320; AU 2012389806 A1 20150319; AU 2012389806 B2 20160721; BR 112015005487 A2 20170704; CA 2884701 A1 20140320; EP 2872732 A1 20150520; EP 2872732 A4 20151223; MX 2015001107 A 20150605; RU 2015107981 A 20161110; US 2014339772 A1 20141120

DOCDB simple family (application)

US 2012054899 W 20120912; AU 2012389806 A 20120912; BR 112015005487 A 20120912; CA 2884701 A 20120912; EP 12884551 A 20120912; MX 2015001107 A 20120912; RU 2015107981 A 20120912; US 201214367210 A 20120912