

Title (en)  
A self-contained electro-hydraulic bidirectional rotary actuator unit

Title (de)  
Autonome bidirektionale elektrohydraulische Drehantriebseinheit

Title (fr)  
Unité d'actionneur rotatif bidirectionnel électro-hydraulique autonome

Publication  
**EP 2770218 A3 20170426 (EN)**

Application  
**EP 14156685 A 20140226**

Priority  
US 201361769363 P 20130226

Abstract (en)  
[origin: EP2770218A2] A self-contained electro-hydraulic bidirectional rotary actuator unit (1) adapted for limited arc actuation of an object, e.g. adapted for quarter turn actuation of a valve, e.g. a pipeline valve. The unit comprises a hydraulic rotary actuator with a rack and a pinion meshing with a rack and supported on a rotary shaft (9) in the cylinder housing (2). The unit further comprises a bidirectional hydraulic pump (15) and an electric motor (20) connected to the pump housing and driving the pump.

IPC 8 full level  
**F15B 15/18** (2006.01); **F15B 1/02** (2006.01)

CPC (source: EP)  
**F15B 15/18** (2013.01); **F15B 1/025** (2013.01); **F15B 15/065** (2013.01); **F15B 15/24** (2013.01); **F15B 2211/3051** (2013.01); **F15B 2211/3052** (2013.01); **F15B 2211/50518** (2013.01)

Citation (search report)  
• [Y] DE 9406760 U1 19940818 - PLEIGER MASCHF PAUL [DE]  
• [Y] US 2006168956 A1 20060803 - SAKAI YOSHITAKE [JP], et al  
• [Y] US 6519939 B1 20030218 - DUFF MICHAEL ALEXANDER [CA]  
• [Y] EP 1548289 A1 20050629 - YOUNG & FRANKLIN [US]  
• [Y] US 2002073837 A1 20020620 - NIESSEN LEOPOLD J [GB]  
• [YA] US 2008010984 A1 20080117 - ARBEL AVIRAM [IL], et al  
• [YA] US 4630441 A 19861223 - CHAMBERLAIN THERON R [US]

Cited by  
US2024052944A1; CN115853931A; CN104500492A; EP3425213A1; CN110753795A; KR20200055688A; RU2755853C2; US10935052B2; US10982743B2; WO2019007815A1; WO2021112750A1; US11384777B2; WO2022148668A1

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Designated extension state (EPC)  
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DOCDB simple family (publication)  
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