

Title (en)  
Hydraulic actuator

Title (de)  
Hydraulische Zylindereinheit

Title (fr)  
Vérin hydraulique

Publication  
**EP 1715194 B1 20140604 (DE)**

Application  
**EP 05027904 A 20051220**

Priority  
DE 102005018442 A 20050420

Abstract (en)  
[origin: EP1715194A2] The hydraulic cylinder unit has a tubular cylinder (6) with an inner mantle (7) and a piston (8) with an outer mantle (9). The piston rod seal and/or the piston seal (161) have an outer mantle (163) shape which deviates from a vertical circular cylinder, to form convergent gaps (165) against the piston rod surface or the cylinder inner mantle. The seal is of a plastics with shape stability, and contains a metal or graphite filler material.

IPC 8 full level  
**F15B 15/14** (2006.01); **F16J 15/32** (2006.01)

CPC (source: EP US)  
**F15B 15/1452** (2013.01 - EP US); **F15B 15/1461** (2013.01 - EP US)

Citation (examination)  

- DE 2325000 A1 19741205 - BUSAK & LUYKEN KG
- "Mechanics of sealing", 1 January 1986, SEALS AND SEALING (2ND EDITION), MORDEN, TRADE & TECHNICAL PRESS LTD, PAGE(S) 6 - 10, XP007910925

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EP2253846A3; EP1975402A4; CN113494610A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
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US 2006272498 A1 20061207; US 7762177 B2 20100727

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**EP 05027904 A 20051220**; DE 102005018442 A 20050420; US 40868106 A 20060420