

Title (en)  
Hydraulic force-multiplying actuator

Title (de)  
Hydraulischer Druckverstärker

Title (fr)  
Multiplicateur de pression hydraulique

Publication  
**EP 1273805 A3 20030409 (EN)**

Application  
**EP 01124741 A 20011017**

Priority  
IT TO20010648 A 20010705

Abstract (en)  
[origin: EP1273805A2] An hydraulic force-multiplying actuator is disclosed comprising adjustable pneumatic reaction means (60) adapted to exert a constant reaction pressure and to perform a constant-force stroke, and supplied by compressed-air supplying ducts (52); the actuator further comprises a shoulder (50) for the oil in the working area, and at least one element (11) adapted to prevent the pad of the reaction means (60) from rotating. <IMAGE>

IPC 1-7  
**F15B 11/032**

IPC 8 full level  
**F15B 11/032** (2006.01); **F15B 15/14** (2006.01); **F15B 15/20** (2006.01)

CPC (source: EP)  
**F15B 11/0325** (2013.01); **F15B 15/088** (2013.01); **F15B 2015/1495** (2013.01); **F15B 2211/216** (2013.01); **F15B 2211/76** (2013.01)

Citation (search report)

- [XY] US 4288987 A 19810915 - GRUELLMEIER ARTUR
- [X] DE 4236057 A1 19940428 - TOX PRESSOTECHNIK GMBH [DE]
- [AY] GB 2119682 A 19831123 - CAM GEARS LTD
- [A] DE 1777270 A1 19710408 - DEMAG DRUCKLUFTECH
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08 6 October 2000 (2000-10-06)

Cited by  
WO2007116421A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1273805 A2 20030108; EP 1273805 A3 20030409; EP 1273805 B1 20040929**; AT E278111 T1 20041015; DE 60106001 D1 20041104; DE 60106001 T2 20051103; ES 2228725 T3 20050416; IT TO20010648 A1 20011005

DOCDB simple family (application)  
**EP 01124741 A 20011017**; AT 01124741 T 20011017; DE 60106001 T 20011017; ES 01124741 T 20011017; IT TO20010648 A 20010705