

Title (en)  
CYLINDER AND TOTAL ROD STOPPAGE SYSTEM

Title (de)  
MIT EINEM SYSTEM ZUM VOLLSTÄNDIGEN ABSTOPPEN DER STANGE AUSGESTATTETER ZYLINDER

Title (fr)  
CYLINDRE EQUIPE D'UN SYSTEME D'ARRET TOTAL DE LA TIGE

Publication  
**EP 1155812 B1 20050420 (EN)**

Application  
**EP 99974057 A 19990930**

Priority  
ES 9900308 W 19990930

Abstract (en)  
[origin: EP1155812A1] The gas cylinder is of the type used for example in punching installations or tools, and comprises two hermetic and independent chambers (7) and (8), the first placed axially to the corresponding rod (6) and the latter placed annularly and externally, with said two chambers externally communicated through branches (16) and (17) which end in a common chamber (14) of a pressure accumulator (11), in which is defined a second chamber (13) which can be charged with nitrogen and is provided with a movable piston (12) for the filling and corresponding pressure balancing between chambers (14), (7) and (8). An electrovalve (18) can be closed at will after attaining the pressure balance between said three chambers (14), (7) and (8), preventing rod (6) from recovering its original position after the force exerted on it during operation ceases.  
<IMAGE>

IPC 1-7  
**B30B 15/16**

IPC 8 full level  
**B30B 15/16** (2006.01); **F15B 1/02** (2006.01)

CPC (source: EP)  
**B30B 15/163** (2013.01); **F15B 1/024** (2013.01)

Cited by  
ES2216673A1

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

DOCDB simple family (publication)  
**EP 1155812 A1 20011121**; **EP 1155812 B1 20050420**; AT E293534 T1 20050515; DE 69924881 D1 20050525; DE 69924881 T2 20060309; ES 2242455 T3 20051101; PT 1155812 E 20050930; WO 0123170 A1 20010405

DOCDB simple family (application)  
**EP 99974057 A 19990930**; AT 99974057 T 19990930; DE 69924881 T 19990930; ES 9900308 W 19990930; ES 99974057 T 19990930; PT 99974057 T 19990930