

Title (en)
Actuator with dampening at the end of stroke

Title (de)
Arbeitszylinder mit Endlagendämpfung

Title (fr)
Vérin avec amortissement de fin de course

Publication
EP 1744062 A2 20070117 (DE)

Application
EP 06012469 A 20060617

Priority
DE 102005032853 A 20050714

Abstract (en)
The cylinder has a piston (4) supported in a longitudinal displaceable manner between two end positions. A damping device for damping the movement of the piston has a retaining opening (15) and a casing (19), in which the opening is provided at an end part. The opening and the casing are inserted into one another in the piston movement direction, where the casing is movable to an end position during the convergence of the piston at its end positions. The casing is movable to another end position and again returns to its initial position, when the piston moves away from its end position.

Abstract (de)
Ein Arbeitszylinder mit Endlagendämpfung weist wenigstens einen teleskopischen Dämpfungszapfen auf, der bei der Annäherung an die entsprechende Endlage des Kolbens in eine einen Dämpfungsraum abschließende und ein Dämpfungselement bildende Aufnahmeöffnung in einem Endteil des Arbeitszylinders oder in dem Kolben eintaucht.

IPC 8 full level
F15B 15/22 (2006.01); **F15B 15/08** (2006.01)

CPC (source: EP US)
F15B 15/082 (2013.01 - EP US); **F15B 15/222** (2013.01 - EP US)

Citation (applicant)
• US 6758127 B2 20040706 - SCHULT KARL [DE]
• DE 29706364 U1 19970619 - BUEMACH ENGINEERING INTERNATIO [NL]
• US 3999463 A 19761228 - GREENWOOD MARTIN W
• JP H11132203 A 19990518 - HITACHI CONSTRUCTION MACHINERY
• DE 3818833 A1 19890202 - DIMTER ERWIN [DE]

Cited by
CN102155457A; CN102155458A

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

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1744062 A2 20070117; **EP 1744062 A3 20090722**; **EP 1744062 B1 20111123**; AT E534825 T1 20111215; CN 1896552 A 20070117; DE 102005032853 B3 20070208; DK 1744062 T3 20111219; ES 2378077 T3 20120404; US 2007012532 A1 20070118; US 7581485 B2 20090901

DOCDB simple family (application)
EP 06012469 A 20060617; AT 06012469 T 20060617; CN 200610105866 A 20060713; DE 102005032853 A 20050714; DK 06012469 T 20060617; ES 06012469 T 20060617; US 48649106 A 20060714