

Title (en)

Hydraulic cylinder with stroke end damping.

Title (de)

Hydraulikzylinder mit Endlagendämpfung

Title (fr)

Cylindre hydraulique avec amortissement de fin de course.

Publication

**EP 1793050 B1 20151014 (DE)**

Application

**EP 06017903 A 20060828**

Priority

DE 202005018999 U 20051205

Abstract (en)

[origin: EP1793050A2] The hydraulic cylinder has a piston (12) and piston rod (14) with two hydraulic lines (16,18) connected to the cylinder. At least one of the hydraulic lines contains a switchable throttle valve (30) which can be moved from one position in which the hydraulic fluid can flow unhindered, into another position in which the throttle valve is active. The throttle valve comprises a valve unit which can be displaced in a housing through a plunger and which by operating the plunger can move into the fluid path to throttle the volume flow of fluid. Independent claim describes construction machine with hydraulic cylinder with damping action.

IPC 8 full level

**B66F 9/22** (2006.01); **E02F 9/22** (2006.01); **F15B 11/048** (2006.01); **F15B 15/22** (2006.01)

CPC (source: EP)

**B66F 9/22** (2013.01); **E02F 9/2214** (2013.01); **F15B 11/048** (2013.01); **F15B 15/22** (2013.01); **F15B 2211/40515** (2013.01); **F15B 2211/41527** (2013.01); **F15B 2211/424** (2013.01); **F15B 2211/455** (2013.01); **F15B 2211/755** (2013.01); **F15B 2211/853** (2013.01)

Citation (examination)

- DE 20114538 U1 20011031 - KUEPPER WEISSER GMBH [DE]
- US 4915014 A 19900410 - GILMORE MICHAEL R [US], et al
- WO 2004099626 A1 20041118 - FLUID S R L G [IT], et al
- WO 0214698 A1 20020221 - PARKER HANNIFIN AB [SE], et al
- WO 2005005843 A1 20050120 - HYDAC SYSTEM GMBH [DE], et al
- GB 519321 A 19400321 - VICKERS INC
- JP S57161307 A 19821004 - AMADA CO LTD

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)

**DE 202005018999 U1 20070412**; EP 1793050 A2 20070606; EP 1793050 A3 20110803; EP 1793050 B1 20151014

DOCDB simple family (application)

**DE 202005018999 U 20051205**; EP 06017903 A 20060828