

Title (en)
Fluid actuator with adjustable abutment

Title (de)
Zylinderanordnung mit einstellbarem Anschlag

Title (fr)
Vérin avec butée réglable

Publication
EP 1653088 A3 20080903 (DE)

Application
EP 05109555 A 20051013

Priority
US 97804704 A 20041029

Abstract (en)
[origin: EP1653088A2] The arrangement has a spacer arrangement (30) including spacers (34) that swivel into a storage position and into a stop position. The spacers form a mechanical stop relative to a housing of a cylinder to limit a piston rod in the stop position. The arrangement (30) is connected with a cylinder (10) adjacent to the rod. The spacers disconnect from the rod in the storage position and surround the rod in the stop position.

IPC 8 full level
F15B 15/24 (2006.01)

CPC (source: EP US)
F15B 15/24 (2013.01 - EP US)

Citation (search report)
• [Y] US 4073345 A 19780214 - MILLER MAURICE E
• [Y] US 5988293 A 19991123 - BRUEGGEN SHANE JULIUS [US], et al

Cited by
WO2016074963A1; EA027031B1; EA034338B1; US10844883B2; DE102014117940A1; WO2013178562A1; EP3128185A1; DE102015112351A1; DE102014116328A1

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 1653088 A2 20060503; EP 1653088 A3 20080903; EP 1653088 B1 20100922; AR 051235 A1 20061227; AU 2005227411 A1 20060518; AU 2005227411 B2 20110317; BR PI0504681 A 20060627; DE 502005010285 D1 20101104; ES 2352842 T3 20110223; RU 2005133408 A 20070510; RU 2381390 C2 20100210; US 2006090640 A1 20060504; US 7044047 B1 20060516

DOCDB simple family (application)
EP 05109555 A 20051013; AR P050104483 A 20051026; AU 2005227411 A 20051028; BR PI0504681 A 20051026; DE 502005010285 T 20051013; ES 05109555 T 20051013; RU 2005133408 A 20051028; US 97804704 A 20041029