Title (en)

Pressure fluid actuator with damping and speed control device

Title (de)

Druckmittelzylinder mit Enddämpfung und Geschwindigkeitssteuervorrichtung

Title (fr)

Vérin à fluide avec amortissement et dispositif de réglage de vitesse

Publication

EP 1074750 A2 20010207 (EN)

Application

EP 00116651 A 20000802

Priority

IT MI991751 A 19990804

Abstract (en)

The pressure fluid actuator (10) comprises a tubular body (11) and closing heads (12,13) to define a piston chamber (14) in which a piston (15) may reciprocate. The piston (15), at both ends, is provided with a damping bush (25) which may protrude into a flow damping chamber (18,19) in each closing head (12,13) connected to a fluid inlet/outlet port (16,17); a conduit (25A) comprising a flow throttling valve (23) is branched between each side of the piston chamber (14) and the damping chamber (18,19) in each closing head (12,13). The flow damping bush (25) comprises a longitudinally extending fluid supply duct (32) provided with a pressure actuated unidirectional flow control valve (30,32) which prevent the pressure fluid to flow from the piston chamber (14) into the damping chamber (18,19) during damping at the end of a piston stroke, while allowing flow circulation into the piston chamber (14) when the bush (25) is within the damping chamber (18,19) at the beginning of a piston stroke. <IMAGE>

IPC 1-7

F15B 15/22

IPC 8 full level

F15B 15/22 (2006.01)

CPC (source: EP)

F15B 15/222 (2013.01); **F15B 15/223** (2013.01)

Citation (applicant)

- EP 0005407 A1 19791114 - CLIMAX FRANCE SA [FR]
- EP 0082829 A1 19830629 - MECMAN AB [SE]
- EP 0648941 A1 19950419 - MIGLIORI LUCIANO [IT]

Cited by

EP3258117A4; WO2008089804A1

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EP 1074750 A2 20010207; **EP 1074750 A3 20030604**; CA 2314958 A1 20010204; IT 1313145 B1 20020617; IT MI991751 A0 19990804; IT MI991751 A1 20010204

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