Title (en)

ELECTRO-MAGNETICALLY CONTROLLED SERVOMOTOR WITH FOLLOW-UP ACTION

Publication

EP 0049714 B1 19860423 (DE)

Application

EP 80108176 A 19801223

Priority

- US 18991380 A 19801002
- US 20521480 A 19801112

Abstract (en)

[origin: EP0049714A1] 1. Electromagnetically controlled servo drive with follow-up control, wherein : a) in a cylindrical chamber (10, 11) of a housing (H, M) having a high-pressure port (19, 20) and a low-pressure port (24, 25), an axially movable regulating piston (P) is acted upon by a control pressure in a control pressure chamber (22, 45) of the housing in opposition to a restoring force ; b) there is connected to the regulating position (P) an axial shank (E) which projects into the control pressure chamber (22, 45) and which has at least one pressure medium duct (70) opening into the control pressure chamber through a radial aperture (84) and connected to one of the ports (19, 20) ; and c) a spring-loaded (spring 95) sleeve-form control element (C) is provided which surrounds the shank (E) and which is adapted to be displaced axially relatively to the said shank by magnetic force and which, with a control edge (94) variably throttling a flow of pressure medium between the two ports (19, 20; 24, 25), controls the control pressure in the control pressure chamber (22, 45) ; characterised by the following features : d) the control element (C) is constructed as the armature of a proportional magnet device (S) surrounding said element, is situated in its entirety in the control pressure chamber (22, 45), and cooperates with its control edge (94) with the radial aperture (84) ; e) the other port (24, 25) is in throttled communication with the control pressure chamber (22, 45).

IPC 1-7

F15B 13/043; F15B 9/03

IPC 8 full level

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