

Title (en)

Servo actuator control/damping mechanism.

Title (de)

Hydraulisch betriebener Kontroll- oder Dämpfungsmechanismus.

Title (fr)

Mécanisme de commande ou d'amortissement d'un servo-actionneur.

Publication

EP 0136005 A1 19850403 (EN)

Application

EP 84305122 A 19840727

Priority

US 52911583 A 19830902

Abstract (en)

A fluid servo actuator control/damping mechanism (10) and method which utilize and combine the functions of an electro-mechanically driven servo valve (26) to achieve ram (16) or actuator (12, 14) fluid flow and load control even after loss of fluid power as well as the main ram position control function under normal operating conditions. The mechanism comprises a main control servo valve (26) including a positionable valve element (34) for selective application of fluid power to a ram (16), a sensor (88) connectable to the ram for providing ram load feedback information, and an electro-mechanical drive (78) operable independently of fluid power for selectively positioning the valve element (34) under normal operating conditions for controlled atuation of the same and, upon loss of fluid power, for providing variable orifices to controllably meter bypass fluid flow across the ram by utilizing the existing metering pattern of the servo valve (26) and modulating the valve element (34) thereof in response to feedback information received from the sensor (88), for actively controlled damping of the ram.

IPC 1-7

F15B 20/00

IPC 8 full level

F15B 9/09 (2006.01); **B64C 13/40** (2006.01); **F15B 18/00** (2006.01)

CPC (source: EP)

F15B 18/00 (2013.01)

Citation (search report)

- [Y] US 4351357 A 19820928 - ORME MYRL E
- [Y] US 2826896 A 19580318 - GEORGE GLAZE STANLEY, et al

Cited by

US10029904B2; US10046959B2; US10280060B2; US9821992B2; US10631558B2; US10631560B2

Designated contracting state (EPC)

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DOCDB simple family (application)

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