

Title (en)
SERVO ACTUATOR CONTROL/DAMPING MECHANISM

Publication
EP 0136005 B1 19880120 (EN)

Application
EP 84305122 A 19840727

Priority
US 52911583 A 19830902

Abstract (en)
[origin: EP0136005A1] 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.

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Cited by
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