

Title (en)

METHOD TO CONTROL A HYDRAULIC MECHANISM, AND HYDRAULIC MECHANISM SUITED TO CARRY OUT SAID METHOD

Publication

EP 0053370 B1 19861015 (DE)

Application

EP 81109942 A 19811127

Priority

DE 3044675 A 19801127

Abstract (en)

[origin: EP0053370A2] 1. A method of controlling a hydraulic adjusting mechanism comprising a hydraulic cylinder (1) a hydraulic piston (2), a high-pressure source (6, 12) and a low-pressure accumulator (8, 37) for the hydraulic fluid and comprising conduits which open into the hydraulic cylinder (1) and connect the cylinder chamber sections (16, 17) separated by the piston with the high-pressure source or the low-pressure accumulator, wherein during a first stage in the movement of the piston (2) from one end position to the other the increasing chamber section of the hydraulic cylinder (1) is connected to the high-pressure source (6, 12) to accelerate the piston (2), while the diminishing chamber section is connected to the low-pressure accumulator (8, 37), and wherein during a second stage in the movement of the piston (2) the increasing cylinder chamber is connected to the low-pressure accumulator, a braking of the piston being effected by a pressure increase in the diminishing cylinder chamber section caused by an interruption in its connection with the low-pressure accumulator (8, 37), characterized in that the braking stage follows on immediately from the acceleration phase, that the reversal for the purpose of the transition from the acceleration stage to the braking stage occurs at a point when the piston (2) has covered about half its path, that in order to effect the reversal from the acceleration stage to the braking stage the supply of hydraulic fluid from the high-pressure source (6, 12) to the increasing cylinder chamber section is cut off and that during the braking stage hydraulic fluid is displaced from the diminishing cylinder chamber section into a high-pressure accumulator (6, 12) as a result of the inertia of the bodies (2, 3, 4) to be slowed down.

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Cited by

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