

Title (en)

HYDRAULIC DRIVE, IN PARTICULAR FOR MACHINE TOOLS, AND METHOD FOR CONTROLLING THE HYDRAULIC DRIVE

Title (de)

HYDRAULISCHER ANTRIEB, INSBESONDERE FÜR WERKZEUGMASCHINEN, UND VERFAHREN ZUM STEUERN DES HYDRAULISCHEN ANTRIEBS

Title (fr)

ENTRAÎNEMENT HYDRAULIQUE, EN PARTICULIER POUR MACHINES-OUTILS, ET PROCÉDÉ POUR COMMANDER L'ENTRAÎNEMENT HYDRAULIQUE

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Application

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Abstract (en)

[origin: WO2008151732A1] The invention relates to a hydraulic drive, in particular for a press or a punching or nibbling machine with a double-acting working cylinder (3.5) whose piston (3.1) has a first working surface (3.15) which acts in the retraction direction and a second working surface (3.16) which acts in the deployment direction, which first working surface (3.15) and second working surface (3.16) delimit in each case one pressure chamber, wherein at least two different pressures can be set by means of an actuating element (3.4) in order to retract and deploy the piston into and out of the working cylinder, the hydraulic drive has an actuating unit (3.10) which selectively enables a throttled return flow of hydraulic medium from the first pressure chamber (3.8) which is delimited by the first working surface. The invention is characterized in that the drive has control means (3.11, 3.12), by means of which, before an abrupt acceleration of the piston on account of its being suddenly relieved of load, the actuating unit can be activated in such a way that hydraulic damping of the movement of the piston takes place by means of a throttling, effected directly or indirectly by the actuating unit, of the return flow of hydraulic medium from the first pressure chamber.

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