

Title (en)

HYDRAULIC ASSEMBLY WITH LOAD HOLDING FUNCTION AND CONTROL METHOD OF THE HYDRAULIC ASSEMBLY

Title (de)

HYDRAULISCHE ANORDNUNG MIT LASTHALTEFUNKTION UND STEUERUNGSVERFAHREN DER HYDRAULISCHEN ANORDNUNG

Title (fr)

ENSEMble HYDRAULIQUE AVEC FONCTION DE MAINTIEN DE CHARGE ET PROCÉDÉ DE COMMANDE DE L'ENSEMble HYDRAULIQUE

Publication

**EP 4361450 A1 20240501 (DE)**

Application

**EP 23203942 A 20231017**

Priority

DE 102022211393 A 20221027

Abstract (en)

[origin: CN117948306A] The invention relates to a hydraulic device (1) comprising a hydraulic cylinder (6, 8, 10) and a hydraulic pump (4) for supplying the hydraulic cylinder with a pressure medium, which hydraulic pump can be driven by an electric motor (2) of the device (1) and can be fluidically connected to a cylinder chamber via a pressure medium flow path (12, 14, 18). According to the invention, at least one shut-off valve (22, 32) is provided in the pressure medium flow path (12, 14, 18), by means of which shut-off valve the pressure medium flow path (12, 14, 18) can be hydraulically shut off in order to maintain the load of the hydraulic cylinder (6, 8, 10) without driving. According to the invention, an operating variable of the electric motor (2) is ascertained or detected when the pressure medium flow path (12, 14, 18) is hydraulically blocked, and the detected or ascertained operating variable is set and tracked on the electric motor (2) when a condition occurs, in which the pressure medium flow path (12, 14, 18) is open.

Abstract (de)

Offenbart ist eine hydraulische Anordnung (1) mit einem Hydrozylinder (6, 8, 10) und einer Hydropumpe (4) zu dessen Druckmittelversorgung, die von einem Elektromotor (2) der Anordnung (1) antreibbar ist und mit einem Zylinderraum über einen Druckmittelströmungspfad (12, 14, 18) fluidisch verbindbar ist. In dem Druckmittelströmungspfad (12, 14, 18) ist zumindest ein Sperrventil (22, 32) vorgesehen, durch das der Druckmittelströmungspfad (12, 14, 18) zum antriebslosen Halten einer Last des Hydrozylinders (6, 8, 10) hydraulisch abtrennbar ist. Eine Betriebsgröße des Elektromotors (2) wird beim hydraulischen Trennen des Druckmittelströmungspfads (12, 14, 18) ermittelt oder erfasst und die erfasste oder ermittelte Betriebsgröße wird beim Einstellen einer Bedingung, bei deren Eintreten der Druckmittelströmungspfad (12, 14, 18) geöffnet wird, an dem Elektromotor (2) eingestellt und nachgeführt.

IPC 8 full level

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Citation (applicant)

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Citation (search report)

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