

Title (en)  
ELECTROHYDRAULIC CONTROL VALVE ARRANGEMENT

Title (de)  
ELEKTROHYDRAULISCHE STEUERVERTILANORDNUNG

Title (fr)  
ENSEMBLE A VANNES DE REGULATION ELECTROHYDRAULIQUE

Publication  
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Application  
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Abstract (en)  
[origin: US6039077A] PCT No. PCT/EP96/04156 Sec. 371 Date Mar. 30, 1998 Sec. 102(e) Date Mar. 30, 1998 PCT Filed Sep. 24, 1996 PCT Pub. No. WO97/13074 PCT Pub. Date Apr. 10, 1997The invention concerns an electrohydraulic control valve arrangement (10) for controlling the movement of a hydraulic motor. The control valve arrangement (10) comprises a main control valve (11), which can be actuated by the alternating application and relieving of pressure in two control chambers, and an electrohydraulic servo-control valve (14) which operates with electronically controllable piston setpoint input and mechanical actual position data feedback in order to pilot the main control valve accordingly in a manner guided by the setpoint value. The servo-control valve (14) comprises a sleeve-shaped housing element (99) which is disposed so as to be moveable in a pressure-tight manner in a connection block (114) rigidly connected to the housing of the main control valve (11). The servo-control valve (14) further comprises a piston (66) which is likewise disposed so as to be moveable in a pressure-tight manner in the sleeve-shaped housing element and can be driven in alternate directions by means of a controllable electric motor (131) in order to perform incremental deflections with respect to the sleeve-shaped housing element (99) for inputting the position setpoint. The housing element (99) is coupled for movement in a positive and force-locking manner to the piston (16) of the main control valve (11). The servo-control valve (14) is provide with a valve spring arrangement (118, 119) which, in the non-controlled state of the setpoint input motor (131), sets the piston (66) in the setpoint input position associated with the operationally-neutral centre position of the main control valve (11).

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IPC 8 full level  
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