

Title (en)  
ELECTROHYDRAULIC PROPORTIONAL CONTROL VALVE ASSEMBLIES

Title (de)  
ELEKTROHYDRAULISCHE PROPORTIONALE STEUERVERTILVORRICHTUNG

Title (fr)  
ENSEMBLES DE VANNES ELECTROHYDRAULIQUES A REGULATION PAR ACTION PROPORTIONNELLE

Publication  
**EP 0809737 B1 19990616 (EN)**

Application  
**EP 96903123 A 19960222**

Priority  
• GB 9600393 W 19960222  
• GB 9503854 A 19950225

Abstract (en)  
[origin: GB2298291A] An electrohydraulic proportional control valve assembly 1 for controlling a bidirectional fluid actuated device 7 has a first actuating port 4 for bidirectional fluid flow between the assembly and a first port of the device 7, a second actuating port 5 for bidirectional fluid flow between the assembly and a second port of the device 7, a pump port 15, 16 for input fluid flow from a pump 17, and a tank port 18, 19 for output fluid flow from a tank 20. The assembly 1 comprises a first and second spool valves 2 and 3 operable independently of each other. A position sensing arrangement 23, 24 is provided for supplying electrical position signals indicative of the actual positions of the spools 12, 13 of the first and second spool valves 2, 3 and a pressure sensing arrangement 26, 27, 28 and 29 is provided for supplying electrical pressure signals indicative of the fluid pressures in the first and second actuating ports 4, 5, the pump port 15, 16 and the tank port 18, 19. A servo control (not shown) controls the positions of the first and second spools 2, 3 in dependence on the electrical position and pressure signals and in response to an electrical demand signal provided in response to operator actuation, in order to set the throughflow cross-sections for fluid flow to effect the required control of the device 7.

IPC 1-7  
**E02F 9/20**; **E02F 9/22**; **F15B 11/05**

IPC 8 full level  
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Citation (examination)  
• US 5138838 A 19920818 - CROSSER JEFFREY A [US]  
• DE 3347000 A1 19850704 - BOSCH GMBH ROBERT [DE]  
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