

Title (en)  
Hydraulic control device.

Title (de)  
Hydraulische Steuereinrichtung.

Title (fr)  
Dispositif de commande hydraulique.

Publication  
**EP 0170815 A1 19860212 (DE)**

Application  
**EP 85106904 A 19850604**

Priority  
DE 3425303 A 19840710

Abstract (en)  
1. Hydraulic control device (10) having at least one directional valve (15) which is suitable for controlling an actuator (48) and whose control element (58), in a neutral position (II), shuts off at least one line (46, 51) leading to the actuator (48) and, in two operating positions (I and II), connects it alternately to a supply line (14) or a return line (17) having a pressure compensator (18) for the direct return to the return line (17) of the pressure medium, supplied from a pressure medium source (11) into the supply line (14) and not required by the actuator (48), having a branch line (22) associated with the pressure compensator (18), into which branch line (22) is connected at least one throttle position (25) and which leads to a spring (19) loaded control spool (95) of the pressure compensator (18), having a selector valve (32) which is connected, via its medium port (41), a first control line (31) and the branch line (22), to the supply line (14), the first seating port (42) of which selector valve (32) being connected to the return line (17) and its second seating port (43) being connected to the directional valve (15) via at least one line (44, 53) used for accepting the load pressure at the actuator (48), characterized in that a switching valve (24), having a 2/2 function and being hydraulically controlled by the pressure present in the first control line (31), and the at least one second throttle position (26) are located between the control line (31) and the branch line (22), and that the pressure present between the two throttle position (25, 26) is effective at the pressure compensator (18).

Abstract (de)  
Bei einer hydraulischen Steuereinrichtung (10) ist in einer Steuerleitung (22, 31) eines Umschaltventils (18), welches das in die Zulaufleitung (14) geförderte Druckmittel unmittelbar zur Rücklaufleitung (17) zurückführt, ein zweites Umschaltventil (24) angeordnet. Ein zwischen zwei Drosseln (25, 26) in der Steuerleitung (31, 22) abfallender Druck wirkt auf das Umschaltventil (18) ein. Die Drosseln (25, 26) sind in der Steuerleitung (31, 22) stromaufwärts vor dem Umschaltventil (24) angeordnet. Bei nicht betätigtem Wegeventil (15) fördert eine Pumpe (11) bei geringem Neutralumlaufdruck, der weitgehend durch die Feder (19) des Umschaltventils (18) bestimmt ist, Druck zum Tank (13). Ist das Wegeventil (15) betätigt, so ist der Druckabfall an dem als Druckwaage dienenden Umschaltventil (18) angestiegen, so daß ein größerer Druckmittelstrom zum Verbraucher (48) möglich ist. Es sind nur die Drosseln (25, 26) und das Umschaltventil (24) für alle angeschlossenen Verbraucher (15) notwendig. Die Steuereinrichtung (10) baut dadurch kompakt und einfach.

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