

Title (en)  
HYDRAULIC CONTROL DEVICE FOR GROUPS OF CONSUMERS

Publication  
**EP 0284831 B1 19920812 (DE)**

Application  
**EP 88103532 A 19880307**

Priority  
DE 3710699 A 19870331

Abstract (en)  
[origin: EP0284831A2] In such control devices, the monitoring valve switches off the supply controller at the pressure or stroke limit or it limits the effective volumetric flow. The monitoring valve does not tell whether the consumer has actually exceeded or fallen short of the pressure or stroke limit, because it responds independently of the operating direction of the consumer. The novel control device is to directionally monitor the consumers. To directionally monitor the consumers (V), the control line branch (34) is constantly attached via the relief control line (36, 37, 38) to the displacement control slide (S1 - S5) and in the interior of the same can be attached directly to the tank solely in a control position (a or b) in which the consumer has been loaded in a direction in which it exceeds a predetermined pressure or stroke limit in the group of consumers. Although the monitoring valve responds, the relieving or limiting function only comes to bear if the displacement control slide reaches a control position in which the consumer would move in a direction in which it exceeds the pressure or stroke limit. On account of the directional monitoring of the consumers, the control device is suitable, for example, for the simultaneous control of various operating cylinders and hydraulic motors in mobile cranes. <IMAGE>

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IPC 8 full level  
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Citation (examination)  
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• DE 3022592 A1 19811224 - HEILMEIER & WEINLEIN [DE]  
• Danfoss-Druckschrift HK50,1983, Lastunabhängige Proportionalventile PVG 60, Seite 22;

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DE4423583A1; US5813226A; US6367365B1; WO0000747A1

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