

Title (en)  
Hydraulic system, particularly for a power brake

Title (de)  
Hydraulische Anlage, insbesondere für eine Abkantpresse

Title (fr)  
Système hydraulique, particulièrement pour une presse plieuse

Publication  
**EP 0628730 B1 19970625 (DE)**

Application  
**EP 94106726 A 19940429**

Priority  
DE 4314801 A 19930505

Abstract (en)  
[origin: DE4314801A1] The invention starts from a hydraulic system which is used in particular for a folding press and which has a differential cylinder, having a piston separating a piston space and an annular space from one another and connected to a press top beam which can be moved up and down, and a proportional directional control valve with which the pressure-medium paths between a pump and a tank on the one hand and the differential cylinder on the other hand can be controlled. The proportional directional control valve has a valve piston which can be displaced from a rest position into a working position and via which the annular space and the piston space of the differential cylinder can be connected to one another in the working position. In such a hydraulic system, a high margin of safety is to be achieved with few valves. This is achieved in that the annular space of the differential cylinder, in the rest position of the proportional directional control valve, can be shut off by the latter from the pump and from the tank. In the hydraulic system according to the invention, the proportional directional control valve is thus at the same time used as a safety valve to protect against a downwards movement of the top beam of the press.

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IPC 8 full level  
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**DE 4314801 A1 19941110; DE 4314801 B4 20040909**; EP 0628730 A1 19941214; EP 0628730 B1 19970625

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