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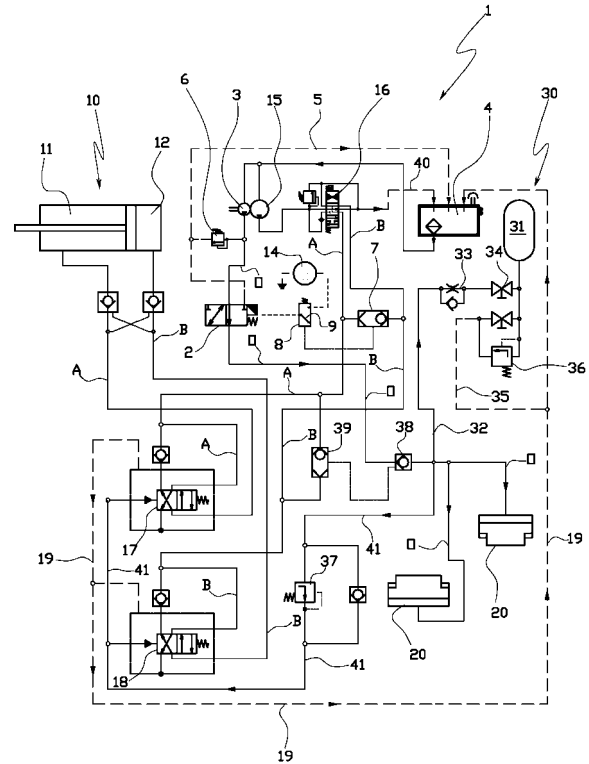
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(54) **Hydraulic system with automatic boom extension locking**

(57) A hydraulic system comprises:

- a first fluid distribution line (A) and a second fluid distribution line (B) communicating with a stem chamber (11) of a double-acting cylinder (10) destined to move two reciprocally mobile parts;
- a third fluid distribution line (O) communicating with a single-acting cylinder (20) for blocking the mobile parts;
- a solenoid distributor (2) which intercepts the third line (O) and switches the third line (O) between a first position in which it pressurises the single-acting cylinder (20) and a second position in which it discharges the single-acting cylinder (20);
- a first bistable selector valve (7) sending in outlet a pressure signal when a pressure difference between the first line (A) and the second line (B) exceeds a certain value;
- a pressure sensor (8) communicating with the first selector valve (7) and associated to the solenoid distributor (2) such as to switch the solenoid distributor (2) into the second position when the fluid pressure coming from the outlet of the first selector valve (7) exceeds a predetermined value.



**FIG.1**



## EUROPEAN SEARCH REPORT

Application Number  
EP 07 10 7740

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 591 669 A1 (HITACHI CONSTRUCTION MACHINERY [JP]) 2 November 2005 (2005-11-02) * paragraph [0113]; figures 7,9,13,14 * -----	1-10	INV. F15B11/20
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			TECHNICAL FIELDS SEARCHED (IPC)
			F15B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 March 2011	Examiner Regaud, Christian
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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