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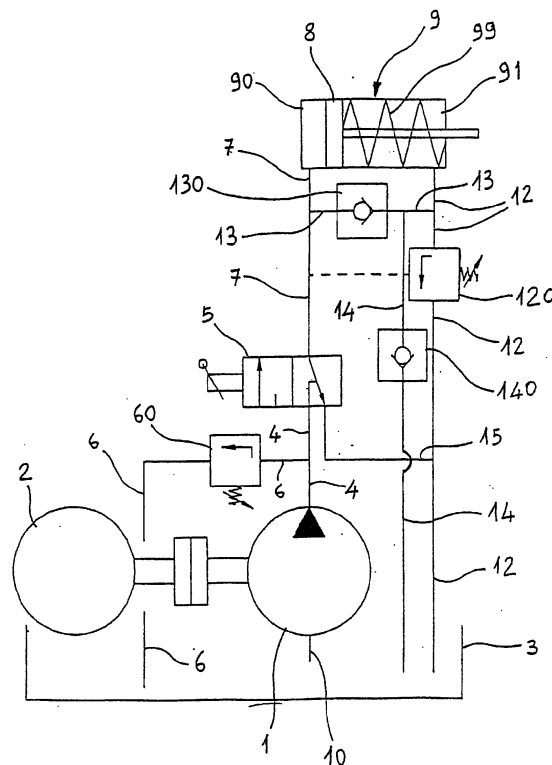
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(54) **Hydraulic unit with automatic regenerative system typically for log splitting machines operated by a single-acting cylinder-piston unit**

(57) A hydraulic operating system for a tool, typically for a log splitting machine, comprising a single acting hydraulic cylinder-piston unit (9), a motor-driven pump (1) and a hydraulic distributor (5) arranged to selectively connect the piston chamber (90) of said cylinder-piston unit (9) to the pump delivery (4) or to discharge (15), in which the piston rod chamber (91) of the cylinder-piston unit (9) is connected to the piston chamber (90) by a conduit (13) comprising a unidirectional valve (130) which prevents oil transfer towards the piston rod chamber (91), and to the oil reservoir (3) by a discharge conduit (12) closed by a preset overpressure valve (120) sensitive to the pump delivery pressure and by a separate suction conduit (14) provided with a unidirectional valve (140) which prevents oil flow towards the reservoir (3).



**FIG.1**

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# EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                     |                                                      |                                              |
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| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                     |                                                      |                                              |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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