

Title (en)

INITIAL PRESSURE GOVERNOR FOR A VARIABLE DISPLACEMENT PUMP.

Title (de)

EINRICHTUNG ZUR REGELUNG DES AUSGANGSDRUCKES EINER VERSTELLPUMPE.

Title (fr)

REGULATEUR DE LA PRESSION INITIALE D'UNE POMPE A CYLINDREE VARIABLE.

Publication

EP 0617758 B1 19950816 (DE)

Application

EP 93900035 A 19921212

Priority

- DE 4141108 A 19911213
- EP 9202880 W 19921212

Abstract (en)

[origin: WO9312342A1] An initial pressure governor for a main pump (11) designed as a variable displacement pump of a compression unit (10) that supplies a hydraulic consumer (54) has a pump capacity regulator (12) controllable by means of a regulating cylinder (13) driven by alternatively applying and reducing a pressure in a driving chamber (18). A pressure regulating valve (21) for applying and discharging the pressure is driven by the initial pressure of the pump and above a minimum pressure determined by a restoring spring delivers an initial pressure that increases with a control pressure coupled into its control chamber (27). The restoring spring (32) of the pressure regulating valve (21) is set at a restoring force that corresponds only to a small fraction of the maximum control force that can be generated by the control pressure. The pressure regulating valve (21) is provided with an additional control chamber (31) which, when a pressure is applied thereon, is capable of generating an additional restoring force whose maximum value corresponds at least approximately to that of the control force. The pressure coupled into the restoring chamber (31) is derived from the initial pressure of the main pump by means of a hydraulic retarder (36, 34).

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CPC (source: EP US)

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