

Title (en)

DEVICE FOR REGULATING THE TOTAL OUTPUT OF AT LEAST TWO HYDROSTATIC VARIABLE DISPLACEMENT PUMPS

Title (de)

VORRICHTUNG ZUR SUMMENLEISTUNGSREGELUNG VON WENIGSTENS ZWEI HYDROSTATISCHEN VERSTELLPUMPEN

Title (fr)

DISPOSITIF DE REGULATION DU DEBIT TOTAL D'AU MOINS DEUX POMPES HYDROSTATIQUES A CYLINDREE VARIABLE

Publication

EP 0745189 B1 19971229 (DE)

Application

EP 95908254 A 19950202

Priority

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- EP 9500382 W 19950202

Abstract (en)

[origin: DE4405234C1] A device is disclosed for regulating the total output of several variable displacement pumps (1, 2) provided each with a regulating valve (18) for regulating the displaced volume. A control pressure that corresponds to the working pressure of the variable displacement pumps is applied to the regulating valves (18) against a counterpressure. The regulating valve (18) responds when the control pressure exceeds the counterpressure, regulating the variable displacement pump according to a characteristic curve (KL) of constant torque. In order to adjust the individual driving torques in a simple manner and to prevent the torques from exceeding the set values, an electronic control unit (16) is connected to the measurement sensor (25) that senses the volumes displaced by the variable displacement pumps. The electronic control unit (16) stores the sum of the set values of the counterpressures and the torque characteristic curves (KL) of the variable displacement pumps and has a set value regulator (27) that distributes the set value sum. The electronic control unit (16) further sets said torque characteristic curves (KL1, KL2), transmits control signals to the associated control element (24) that generates counterpressures corresponding to predetermined counterpressure set values, senses the working pressure (p) corresponding to the displaced volume (V) on the torque characteristic curve (KL1, KL2) when the regulating valves respond, converts said working pressure (p) into a control signal and transmits said signal to the control element that generates a counterpressure.

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