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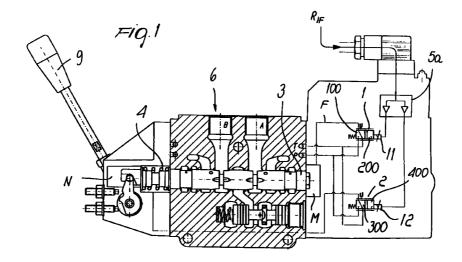
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(54) Electrohydraulic device for driving and remotely controlling a hydraulic distributor

(57) An electrohydraulic device for driving and remotely controlling a hydraulic distributor of a directional valve for pressurizing or connecting to the discharge a pair of user devices comprising: two proportional electric valves (1, 2), which are fed by a pressure line (P), have a discharge line (T), and are connected respectively to opposite end chambers (M, N) of a hydraulic distributor (6) adapted to pressurize or connect to the discharge (T) two user devices; remote control means adapted to generate an electric control signal to energize electromagnets (11, 12) of the elec-

tric valves (1, 2); and an electronic circuit (5a, 5b) adapted to control and adjust the energization current of the electromagnets as a function of the electric control signal; the energization current drives the electromagnets (11, 12) for the selective feeding of the chambers with a preset pressure or for their connection to the discharge across the electric valves in order to move the slider (3) of the distributor (6) proportionally to the energization current; the electronic circuit is integrated in the body that houses the hydraulic distributor.





EUROPEAN SEARCH REPORT

Application Number EP 98 10 4126

Category	Citation of document with it	ERED TO BE RELEVANT adication, where appropriate,	Relevant	CLASSIFICATION OF THE
X	US 4 543 875 A (IMH 1 October 1985 (198 * column 1, line 49	OF RAINER) 5-10-01)	1,2,4	F15B13/043
γ	* column 2, line 19 * column 3, line 9-	-44 *	3,9	
X	GB 2 248 910 A (TRA LIMITE) 22 April 19 * page 11, paragrap * page 17, paragrap	1		
Y	US 4 659 969 A (STU 21 April 1987 (1987 * column 1, line 31 * column 3, line 43	-04-21) -42 *	9	
Y	US 3 786 314 A (MISCH W) 15 January 1974 (1974-01-15) * column 1, line 57-65 * * column 2, line 64 - column 3, line * column 6, line 63 - column 7, line		3	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
	figures *			F15B
A	EP 0 601 995 A (HOE 15 June 1994 (1994- * claims; figures *	10,13		
A	US 4 960 365 A (HOR 2 October 1990 (199 * column 7, line 34	0-10-02)	9	
	The present search report has			Exampler
	Place of search BERLIN	Date of completion of the search 16 November 1999	Pö	ll, A
X : parl Y : parl door	ATEGORY OF CITED DOCUMENTS ioularly relevant if taken alone recularly relevant if combined with another of the same category invological background.	i. : doournent cited fo	oument, but public in the application or other reasons	ished on, or

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 98 10 4126

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of Information.

16-11-1999

Patent docume cited in search re		Publication date		Patent family member(s)	Publication date
US 4543875	Α	01-10-1985	DE	3245259 A	07-06-198
			JP	59113302 A	30-06-198
GB 2248910	A	22-04-1992	NONI	E	
US 4659969	Α	21-04-1987	AU	567822 B	03-12-198
			AU	4522885 A	13-02-1986
			BR	8503716 A	06-05-198
			CA	1238082 A	14-06-198
			EP	0172712 A	26-02-198
			JP	61048906 A	10-03-198
			US	4665348 A	12-05-198
US 3786314	Α	15-01-1974	CH	552134 A	31-07-197
			DE	2132717 A	18-01-197
			FR	2145221 A	16-02-197
			GB	1371579 A	23-10-197
EP 0601995	А	15-06-1994	AT	400634 B	26-02-199
			AT	243092 A	15-06-199
			DE	59305866 D	24-04-199
US 4960365	A	02-10-1990	JP	2256981 A	17-10-199
			JP	2658432 B	30-09-199
			DE	3939857 A	12-07-199

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82