(11) Publication number:

0 092 315

A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 83301402.0

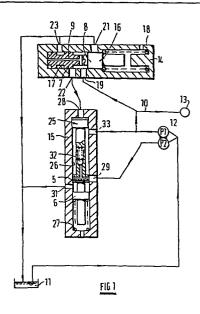
(51) Int. Cl.3: F 15 B 13/09

(22) Date of filing: 15.03.83

- (30) Priority: 15.04.82 GB 8210999
- 43 Date of publication of application: 26.10.83 Bulletin 83/43
- (88) Date of deferred publication of search report: 18.07.84
- 84) Designated Contracting States: AT BE DE FR GB IT NL SE

- 71) Applicant: AUTOMOTIVE PRODUCTS PUBLIC LIMITED COMPANY
 Tachbrook Road
 Leamington Spa Warwickshire CV31 3ER(GB)
- (2) Inventor: Young, Alastair John 39 Roundshill Kenilworth Warwickshire(GB)
- (72) Inventor: Chettle, Adrian John 9 Uplands Close Totteridge High Wycombe Buckinghamshire(GB)
- (74) Representative: Cundy, Anthony Brian
 Anthony Cundy & Company 384 Station Road Dorridge
 Solihull West Midlands B93 8ES(GB)

- (54) Hydraulic pump control.
- (5) A fluid pressure supply system incorporates two pumping units (P1) and (P2) for supplying fluid under pressure to a load (13). Pump (P1) supplies the load continuously. Pump (P2) is also connected to the load (13) through a load valve (15) when pressure in the load is low but is connected to drain through the load valve when load pressure is high. A pressure relief valve (14) controls the load valve (15) by a connection from port (22) to port (28) which applies system pressure to the load valve at low pressure and drain pressure via port (23) at higher pressures in response to relief valve spool movement. The high control pressure moves load valve spool (25) to connect its inlet port (29) to load (13) through port (33). When system pressure is high and control pressure is low, inlet (29) is connected to drain port (31) so that pump (P2) is off-load in that it is pumping direct to drain.





EUROPEAN SEARCH REPORT

Application number

EP 83 30 1402

DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate, Relevant					CLASSIFICATION OF THE			
ategory	of relevant passages		tc	claim	APPLIC	APPLICATION (Int. Ci. 3)		
х	US-A-2 549 897 * Complete docum)] 1	-6	F 15	5 B	13/09	
A			1	1				
A	US-A-3 250 411 al.) * Column 4, li line 23; figure	ne 32 - colu	8	-3,6- ,10				
A	DE-B-1 209 431 & CO.)	- (GARBE, LAHM	EYER					
A	GB-A-1 263 118	- (DEERE & CO.)					
				TECHNICAL FIELDS SEARCHED (Int. Cl. 3)				
					F 1	5 B 5 B 4 B	11/00	
	The present search report has b	peen drawn up for all claims						
Place of search Date of completion of the s BERLIN 15-03-1984				LEMBL	Exan	iner V 또	- 	
Y: A: O:	CATEGORY OF CITED DOCL particularly relevant if taken alone particularly relevant if combined w document of the same category technological background non-written disclosure intermediate document	JMENTS T	: theory or print: : earlier patent of after the filing: : document cite: : document cite: : member of the document	siple underl document, date d in the app d for other	ying the in out publis olication reasons	nvention hed on	n , or	