

Title (en)

HYDRAULIC SYSTEM FOR A CONSTRUCTION MACHINE

Publication

**EP 0279356 B1 19910522 (EN)**

Application

**EP 88102009 A 19880211**

Priority

US 1631987 A 19870219

Abstract (en)

[origin: EP0279356A1] An excavator has a number of different hydraulically powered functions (28, 32, 36) that are controlled by a closed center hydraulic system which features a pair of variable displacement, engine driven hydraulic pumps (44, 46), the displacement of which is responsive to the demands of the system. The flow to various hydraulic motors (30, 34, 38) for the functions (28, 32, 36) is controlled by pilot operated load sensing control valves (85, 86, 87, 88, 89, 90) which direct fluid pressure to a load sensing line (74) when one of the hydraulic motors in the system is being operated. This load sensing line (74) is connected to controls (48, 50) of the pumps (44, 46) to place the pumps in stroke when a flow of pressurized fluid is required. The flow of the load sensing pressure to the control (48) for one of the pumps (44) can be optionally disconnected by an on/off valve (78) to place this pump (44) in a standby condition and thereby reduce the flow capacity of the hydraulic system at the option of the operator.

IPC 1-7

**E02F 3/22; E02F 3/32; F15B 11/16; F15B 13/09**

IPC 8 full level

**F15B 11/00** (2006.01); **E02F 3/32** (2006.01); **E02F 9/22** (2006.01); **F15B 11/17** (2006.01)

CPC (source: EP)

**E02F 9/2232** (2013.01); **E02F 9/2239** (2013.01); **E02F 9/2292** (2013.01); **E02F 9/2296** (2013.01); **F15B 11/17** (2013.01);  
F15B 2211/20553 (2013.01); F15B 2211/20576 (2013.01); F15B 2211/30505 (2013.01); F15B 2211/3111 (2013.01); F15B 2211/351 (2013.01);  
F15B 2211/353 (2013.01); F15B 2211/6313 (2013.01); F15B 2211/65 (2013.01); F15B 2211/6651 (2013.01); F15B 2211/7142 (2013.01);  
F15B 2211/715 (2013.01); F15B 2211/78 (2013.01)

Cited by

EP0518345A1; EP0353799A1; EP0797009A3

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**EP 0279356 A1 19880824; EP 0279356 B1 19910522**; CA 1278978 C 19910115; DE 3862874 D1 19910627; JP 2589736 B2 19970312;  
JP S63217025 A 19880909

DOCDB simple family (application)

**EP 88102009 A 19880211**; CA 557947 A 19880202; DE 3862874 T 19880211; JP 3731988 A 19880219