

Title (en)

CONTROL ARRANGEMENT FOR AT LEAST TWO HYDRAULIC CONSUMERS

Title (de)

STEUERANORDNUNG FÜR WENIGSTENS ZWEI HYDRAULISCHE VERBRAUCHER

Title (fr)

SYSTEME DE COMMANDE POUR AU MOINS DEUX CONSOMMATEURS HYDRAULIQUES

Publication

EP 0760908 A1 19970312 (DE)

Application

EP 95919366 A 19950429

Priority

- DE 4417962 A 19940521
- EP 9501642 W 19950429

Abstract (en)

[origin: DE4417962A1] The invention is based on a control arrangement for at least two hydraulic consumers (15, 16) having a variable displacement pump (10), the setting of which can be altered by a load sensing regulator (41), to which the highest load pressure can be applied via a load signalling line (28), on which maximum pressure and power control are superimposed, two adjustable metering diaphragms (13, 14), a first one of which is fitted between the variable displacement pump (10) and a first hydraulic consumer (15) and the second between the variable displacement pump (10) and a second hydraulic consumer (16), and two pressure balances (19, 20), the first of which is fitted after the first metering diaphragm (13) and the second after the second diaphragm (14), to the control pistons (22) of which can be applied pressure, at the front (23) according to the metering diaphragm (13, 14) concerned, in the opening direction and pressure at the rear (26) in the load signalling line (28) in the closing direction. To prevent the pump pressure from reaching a maximum, because, with the simultaneous actuation of both hydraulic consumers (15, 16), one of them is driven against a stop or exerts a clamping effect, it is envisaged that with such joint control only of the first (15) and second (16) hydraulic consumers and from a limiting pressure lying below the maximum pressure, pressure can be applied to the load sensing regulator (41) only as a function of the load pressure of one, the first, hydraulic consumer.

IPC 1-7

F15B 11/16; F15B 11/05

IPC 8 full level

F15B 11/02 (2006.01); **F15B 11/05** (2006.01); **F15B 11/16** (2006.01); **F15B 13/04** (2006.01)

CPC (source: EP KR US)

F15B 11/16 (2013.01 - EP KR US); **F15B 11/165** (2013.01 - EP US); **F15B 13/0417** (2013.01 - EP US); **F15B 2211/20553** (2013.01 - EP US);
F15B 2211/253 (2013.01 - EP US); **F15B 2211/30535** (2013.01 - EP US); **F15B 2211/31576** (2013.01 - EP US);
F15B 2211/40515 (2013.01 - EP US); **F15B 2211/40569** (2013.01 - EP US); **F15B 2211/45** (2013.01 - EP US); **F15B 2211/455** (2013.01 - EP US);
F15B 2211/50518 (2013.01 - EP US); **F15B 2211/6052** (2013.01 - EP US); **F15B 2211/6055** (2013.01 - EP US);
F15B 2211/6355 (2013.01 - EP US); **F15B 2211/7053** (2013.01 - EP US); **F15B 2211/71** (2013.01 - EP US)

Citation (search report)

See references of WO 9532364A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 4417962 A1 19951123; DE 59504916 D1 19990304; EP 0760908 A1 19970312; EP 0760908 B1 19990120; JP H10500472 A 19980113;
KR 970703494 A 19970703; US 5752384 A 19980519; WO 9532364 A1 19951130

DOCDB simple family (application)

DE 4417962 A 19940521; DE 59504916 T 19950429; EP 9501642 W 19950429; EP 95919366 A 19950429; JP 53000795 A 19950429;
KR 19960706459 A 19961115; US 75031896 A 19961120