

Title (en)

Control system for a hydraulic circuit including a plurality of parallel variable-delivery pumps.

Title (de)

Regelungssystem für eine Hydraulikanlage mit einer Mehrzahl paralleler Pumpen veränderlichen Förderstromes.

Title (fr)

Système de contrôle pour un circuit hydraulique comprenant plusieurs pompes en parallèle et à débit variable.

Publication

EP 0027743 A1 19810429 (EN)

Application

EP 80303741 A 19801022

Priority

JP 13661879 A 19791022

Abstract (en)

A hydraulic circuit includes a plurality of parallel variable-delivery pumps (11-14) for supplying pressure fluid to an appliance such as an extrusion press (60). A control system is provided to optimize the operation of the pumps. This system utilizes a sensor which senses the quantity of fluid demanded by the appliance and a controller provides control signals which vary in accordance with the sensor function. These control signals in turn control solenoid valves (41-44) and regulators (31-34) which control the individual pumps in accordance with the demanded fluid.

IPC 1-7

F15B 1/00

IPC 8 full level

B30B 1/32 (2006.01); **B30B 15/20** (2006.01); **F04B 49/00** (2006.01); **F15B 11/02** (2006.01); **F15B 11/04** (2006.01)

CPC (source: EP)

F15B 11/02 (2013.01); **F15B 2211/20553** (2013.01); **F15B 2211/30505** (2013.01); **F15B 2211/30575** (2013.01); **F15B 2211/327** (2013.01); **F15B 2211/329** (2013.01); **F15B 2211/50518** (2013.01); **F15B 2211/50536** (2013.01); **F15B 2211/5151** (2013.01); **F15B 2211/5153** (2013.01); **F15B 2211/55** (2013.01); **F15B 2211/615** (2013.01); **F15B 2211/6336** (2013.01); **F15B 2211/6355** (2013.01); **F15B 2211/6651** (2013.01); **F15B 2211/6653** (2013.01); **F15B 2211/7052** (2013.01); **F15B 2211/7053** (2013.01); **F15B 2211/71** (2013.01); **F15B 2211/7107** (2013.01); **F15B 2211/7128** (2013.01); **F15B 2211/88** (2013.01)

Citation (search report)

- US 2947317 A 19600802 - HATHORN TOWLER FRANK
- US 3744932 A 19730710 - PREVETT P
- FR 1410250 A 19650910 - COMPTEURS COMP D
- US 2811838 A 19571105 - LINDSEY ROBERT J

Cited by

US11407192B2; US2015090132A1; AT411784B; DE3614967A1; CN111572083A; US6128900A; US2014096581A1; US9643225B2; US5128335A; CN104428077A; US9506480B2; WO2013167111A1

Designated contracting state (EPC)

CH DE GB

DOCDB simple family (publication)

EP 0027743 A1 19810429; **EP 0027743 B1 19850515**; DE 3070650 D1 19850620; JP H0258482 B2 19901207; JP S5659005 A 19810522

DOCDB simple family (application)

EP 80303741 A 19801022; DE 3070650 T 19801022; JP 13661879 A 19791022