

Title (en)

Method and arrangement for control and regulation of a pressure generator for several different hydraulic consumers connected in parallel.

Title (de)

Verfahren und Schaltungsanordnung zur Steuerung und Regelung eines Druckstromerzeugers für mehrere parallel geschaltete unterschiedliche hydraulische Verbraucher.

Title (fr)

Procédé et arrangement pour contrôle et régulation d'un générateur de pression pour plusieurs utilisateurs différents et hydrauliques branchés en parallèle.

Publication

EP 0587043 A3 19950426 (DE)

Application

EP 93114029 A 19930902

Priority

DE 4229950 A 19920908

Abstract (en)

[origin: EP0587043A2] The object of the invention, by means of an activating electronic unit for the variable displacement pump, is to effect automatically hydraulically regulated adaptation of the delivery flow of the variable displacement pump as a function of the volumetric flow of the different hydraulic consumers at constantly controlled pump pressure. The method according to the invention, after input of the various pressure values into the input unit (16) for the individual hydraulic consumers (12, 13, 15) connected in parallel, provides for the activating electronic unit (4.1) for the variable displacement pump (1) to determine the maximum operating pressure from the pressure values. The pressure level thus predetermined is signalled to the proportional pressure-relief valve (3) with a larger value predetermined in a defined manner. The hydraulic pressure requirement is then secured by the hydraulic pressure-regulating unit (2) via the variable displacement pump (1). <IMAGE>

IPC 1-7

G05D 7/06

IPC 8 full level

E02F 9/22 (2006.01); **F15B 11/05** (2006.01); **F15B 20/00** (2006.01); **G05D 7/06** (2006.01); **G05D 16/20** (2006.01)

CPC (source: EP)

F04B 49/065 (2013.01); **F04B 49/08** (2013.01); **F15B 11/165** (2013.01); **F04B 2205/05** (2013.01); **F04B 2205/09** (2013.01); **F15B 2211/20546** (2013.01); **F15B 2211/251** (2013.01); **F15B 2211/253** (2013.01); **F15B 2211/6313** (2013.01); **F15B 2211/6336** (2013.01); **F15B 2211/6652** (2013.01); **F15B 2211/6653** (2013.01); **F15B 2211/7135** (2013.01); **F15B 2211/75** (2013.01); **F15B 2211/781** (2013.01)

Citation (search report)

- [A] EP 0419673 A1 19910403 - HITACHI CONSTRUCTION MACHINERY [JP]
- [A] US 4864671 A 19890912 - EVANS DONALD L [US]
- [A] GB 1205056 A 19700916 - AIDA IRON WORKS & CO LTD [JP]
- [A] DE 3709504 A1 19881006 - REXROTH MANNESMANN GMBH [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 169 (M - 231)<1314> 26 July 1983 (1983-07-26)

Cited by

EP1236558A1

Designated contracting state (EPC)

AT CH DE FR IT LI NL

DOCDB simple family (publication)

EP 0587043 A2 19940316; **EP 0587043 A3 19950426**; **EP 0587043 B1 19991201**; AT E187267 T1 19991215; DE 4229950 A1 19940324; DE 4229950 C2 19960201; DE 59309888 D1 20000105

DOCDB simple family (application)

EP 93114029 A 19930902; AT 93114029 T 19930902; DE 4229950 A 19920908; DE 59309888 T 19930902