

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 contrôler 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>

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**G05D 7/06**

IPC 8 full level

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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

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