

Title (en)
MULTIPLE PUMP SYSTEM WITH HORSEPOWER LIMITING CONTROL.

Title (de)
SYSTEM MIT MEHREREN PUMPEN UND VERMÖGENSSTEUERUNG.

Title (fr)
SYSTEME A POMPES MULTIPLES AVEC COMMANDE DE LIMITATION DE PUISSANCE.

Publication
EP 0059710 A4 19840529 (EN)

Application
EP 81901179 A 19800912

Priority
US 8001197 W 19800912

Abstract (en)
[origin: WO8201048A1] Flow-pressure compensated valves are employed in the servo-systems for variable displacement pumps to maintain pump discharge pressure above a minimum pressure level and also above the load pressure in a fluid actuator. The utilization of multiple pumps in a particular fluid circuit, each functioning to charge a separate fluid actuator, dictates the need for closely controlling the displacements of the pumps simultaneously to obtain maximum performance efficiency from the prime mover for the pumps. It is further desirable to provide a control system which minimizes the total pump envelope size. The improved fluid circuit (10) of this invention includes a summing valve (22) for creating a control signal (P<uC>u) in response to the collective pump pressure signals (P<uP>u) in a plurality of fluid actuators (13) and a control arrangement (36) for controlling modulation of flow-pressure compensated valves of the above type in response to variations in the control signal (P<uC>u).

IPC 1-7
F16H 39/46

IPC 8 full level
F16H 61/46 (2010.01); **F04B 1/32** (2006.01); **F04B 49/08** (2006.01); **F16H 61/4148** (2010.01); **F16H 61/4183** (2010.01); **F16H 61/444** (2010.01)

CPC (source: EP)
F04B 1/324 (2013.01); **F04B 49/08** (2013.01)

Citation (search report)
No further relevant documents disclosed

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 8201048 A1 19820401; BE 890200 A 19820104; EP 0059710 A1 19820915; EP 0059710 A4 19840529; JP S57501395 A 19820805

DOCDB simple family (application)
US 8001197 W 19800912; BE 205853 A 19810903; EP 81901179 A 19800912; JP 50154580 A 19800912