

Title (en)
PUMP CONTROL METHOD AND PUMP CONTROL DEVICE

Title (de)
METHODE UND EINRICHTUNG ZUR REGELUNG VON PUMPEN

Title (fr)
PROCEDE ET DISPOSITIF DE COMMANDE DE POMPE

Publication
EP 1207304 A4 20101013 (EN)

Application
EP 00966500 A 20001016

Priority
• JP 0007152 W 20001016
• JP 2000098405 A 20000331

Abstract (en)
[origin: EP1207304A1] Variable delivery main pumps (11) driven by an engine (13) have a capacity control means (35) for changing the discharge rates of the pumps. Power shift pressure output from a proportional control solenoid valve (46) based on signals from a controller (45) is controlled in accordance with the engine speed detected by an engine speed detector (44) and pump delivery pressure of a main pump (11) detected by a pump discharge pressure detector (42). The power shift pressure is introduced into a regulator control valve (39) of the capacity control means (35), and an angle of a swash plate (36) of the main pump (11) is controlled by a regulator (37) so that the pump discharge pressure - discharge rate characteristic is shifted to be optimized. With the configuration as above, the invention provides a pump control device that is capable of reducing the degree of change in the engine speed occurring due to a sudden change in load pressure. <IMAGE>

IPC 1-7
F04B 49/06

IPC 8 full level
E02F 9/22 (2006.01); **F02D 29/04** (2006.01); **F04B 49/00** (2006.01); **F04B 49/06** (2006.01); **F04B 49/08** (2006.01)

CPC (source: EP)
F04B 49/08 (2013.01); **F04B 2201/1204** (2013.01); **F04B 2201/1205** (2013.01); **F04B 2203/0605** (2013.01); **F04B 2205/05** (2013.01)

Citation (search report)
• No further relevant documents disclosed
• See references of WO 0175309A1

Cited by
EP3190237A1; KR20170082789A; EP3951092A4; US12018460B2; US10662616B2; EP3951087A4

Designated contracting state (EPC)
BE DE FR

DOCDB simple family (publication)
EP 1207304 A1 20020522; **EP 1207304 A4 20101013**; CN 1178003 C 20041201; CN 1353794 A 20020612; JP 2001280256 A 20011010; JP 3697136 B2 20050921; WO 0175309 A1 20011011

DOCDB simple family (application)
EP 00966500 A 20001016; CN 00808268 A 20001016; JP 0007152 W 20001016; JP 2000098405 A 20000331