

Title (en)
Control device for variable displacement pump

Title (de)
Regeleinrichtung für eine verstellbare Pumpe

Title (fr)
Equipement de réglage pour pompe à débit variable

Publication
EP 0402871 B1 19960417 (DE)

Application
EP 90111124 A 19900612

Priority
DE 3919175 A 19890612

Abstract (en)
[origin: EP0402871A2] The invention relates to a control device for an adjustable pump (6), with a hydraulic adjusting device (5) having an adjusting cylinder (4) and with a regulating valve (51), incorporating an output regulator (52) for adjusting the delivery and a pressure regulator (73) for limiting the working pressure (A) to a specific upper limit, a restricted outlet pipe which leads to the return (9) branching off with the pipe (19, 62) acting hydraulically on the adjusting cylinder (4). It is the object of the invention to reduce the flow loss necessary for dynamic stability. This is achieved in that the flow passing through the restricted outlet pipe (92, 89, 93, 47) is opened as the pressure regulator (73) increasingly responds. <IMAGE>

IPC 1-7
F04B 1/26

IPC 8 full level
F04B 1/26 (2006.01); **F04B 49/08** (2006.01)

CPC (source: EP)
F04B 1/26 (2013.01); **F04B 49/08** (2013.01)

Citation (examination)
• DE 3644769 A1 19880714 - BRUENINGHAUS HYDRAULIK GMBH [DE]
• DE 2516765 A1 19761021 - REXROTH GMBH G L
• DE 1922145 A1 19701029 - BELLOWS VALVAIR KAEMPER GMBH
• DE 2349124 A1 19750403 - REXROTH GMBH G L
• DE 1911695 A1 19701119 - MANNESMANN MEER AG

Cited by
CN103261706A; DE102018216831A1; CN114135458A; US11353120B2; US11346336B2; WO2019112554A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0402871 A2 19901219; EP 0402871 A3 19920902; EP 0402871 B1 19960417; DE 3919175 A1 19901213; DE 3919175 C2 19930107; DE 59010287 D1 19960523

DOCDB simple family (application)
EP 90111124 A 19900612; DE 3919175 A 19890612; DE 59010287 T 19900612