

Title (en)
Control mechanism for adjusting the displacement of an axial piston pump

Title (de)
Verstelleinrichtung zur Verstellung des Fördervolumens einer Axialkolbenpumpe

Title (fr)
Dispositif de réglage de la capacité d'une pompe à pistons axiaux

Publication
EP 0849468 B1 20040107 (DE)

Application
EP 97120301 A 19971119

Priority
DE 19653165 A 19961219

Abstract (en)
[origin: DE19653165C1] The adjustment device includes a control valve (39) through which the control pipe (37) is connected to a high pressure pipe. A return coupling element (49) is mounted between the setting piston (30) and control valve (39) and the setting piston is displaced hydraulically controlled in dependence on the force difference arising between the control faces (33,35) so far until the force difference is zero. A swivel-out spring (47) is pretensioned by the setting piston shortly before reaching the zero position where the axial piston pump operates without or with only minimum delivery. The pretension of the spring (47) is such that it moves the setting piston when swivelling out from the zero position so far until the delivery pressure built up by the pump in the high pressure pipe is sufficient for hydraulically controlling the setting piston.

IPC 1-7
F04B 1/30

IPC 8 full level
F04B 1/30 (2006.01); **F04B 1/32** (2006.01)

CPC (source: EP)
F04B 1/328 (2013.01)

Cited by
WO2009024337A1; US11111899B2; US10711771B2; US11378068B2; US11885317B2

Designated contracting state (EPC)
DE FR GB IT SE

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DE 19653165 C1 19980402; DE 19653165 C2 20020425; DE 59711184 D1 20040212; EP 0849468 A2 19980624; EP 0849468 A3 19990915; EP 0849468 B1 20040107; EP 0849468 B2 20120905

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