

Title (en)
Variable capacity pump

Title (de)
Verdrängerpumpe mit Fördervolumenverstellung

Title (fr)
Pompe à capacité variable

Publication
EP 1363025 A3 20060419 (DE)

Application
EP 03011033 A 20030519

Priority
DE 10222131 A 20020517

Abstract (en)
[origin: EP1363025A2] The casing (3) contains a gear pump with two wheels (1,2). These have adjustable engagement, to vary the quantity of fluid pumped from inlet (5) to outlet (6). A piston (8) coupled to at least one of the wheels, makes the adjustment. Piston chambers (9,10) are subjected to pressures (P9, P10), which act on the piston, through connections (11,12) with the high pressure side. A spring in the first piston chamber (9) acts on the piston, against fluid pressure (P9). A controller (15) adjusts the pressure in the second chamber (10), in accordance with a control magnitude (PR) which sets the rate of delivery.

IPC 1-7
F04C 15/04

IPC 8 full level
F04C 2/10 (2006.01); **F04C 14/10** (2006.01); **F04C 14/18** (2006.01); **F04C 2/14** (2006.01); **F04C 2/18** (2006.01)

CPC (source: EP)
F04C 14/10 (2013.01); **F04C 14/185** (2013.01); **F04C 2/102** (2013.01); **F04C 2/14** (2013.01); **F04C 2/18** (2013.01)

Citation (search report)
• [PX] DE 10207350 A1 20020912 - JOMA HYDROMECHANIC GMBH [DE]
• [X] DE 10043842 A1 20010906 - VOLKSWAGEN AG [DE]
• [DXY] DE 3528651 A1 19870219 - ROHS HANS GUENTHER PROF DR ING [DE]
• [Y] DE 2008952 A1 19710909
• [DY] EP 1182351 A1 20020227 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]
• [YA] US 6244839 B1 20010612 - COLE JACK H [US], et al
• [A] EP 0565340 A1 19931013 - CONCENTRIC PUMPS LTD [GB]

Cited by
DE102011013756A1; DE102010020299B4; DE102012214503B4; CN105041639A; CN102345600A; AT500629A1; AT500629B1; GB2436594A; EP2366414A3; DE102010020299A1; US9735644B2; US8905970B2; US10314967B2; US11383025B2; EP2698541A2; DE102012214503A1; US9416786B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1363025 A2 20031119; EP 1363025 A3 20060419; EP 1363025 B1 20110706; AT E515636 T1 20110715; DE 10222131 A1 20031204; DE 10222131 B4 20050512; DE 10222131 C5 20110811; ES 2367969 T3 20111111

DOCDB simple family (application)
EP 03011033 A 20030519; AT 03011033 T 20030519; DE 10222131 A 20020517; ES 03011033 T 20030519