

Title (en)
Gear pump with integrated control valve

Title (de)
Zahnradpumpe mit integriertem Steuerventil

Title (fr)
Pompe à engrenages avec valve de contrôle intégrée

Publication
EP 1522730 B1 20071121 (DE)

Application
EP 03450286 A 20031223

Priority
AT 15942003 A 20031009

Abstract (en)
[origin: EP1522730A1] Rotary piston machine (1), especially a gear pump, comprises at least one first conveying wheel (3) connected to a drive shaft (5), and at least one second conveying wheel (4) rotatably mounted on an axle (6) and driven by the first conveying wheel. The conveying wheels are rotatably arranged in the conveying chamber (20) of a pump housing (2). The pump also comprises a control valve (7) for pressure-side shut-off of part of the conveying medium. The control valve is formed by the axle. The axle is mounted in the pump housing so that it can be displaced in an axial direction and forms a control piston.

IPC 8 full level
F04C 2/18 (2006.01); **F04C 14/26** (2006.01); **F04C 2/08** (2006.01)

CPC (source: EP)
F04C 2/18 (2013.01); **F04C 14/26** (2013.01); **F04C 2/084** (2013.01); **F04C 2270/20** (2013.01)

Cited by
CN111173737A; EP2034184A3; GB2452493B; GB2452493A; US8691140B2; US8657592B2

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 1522730 A1 20050413; EP 1522730 B1 20071121; AT 413235 B 20051215; AT A15942003 A 20050515; DE 50308658 D1 20080103

DOCDB simple family (application)
EP 03450286 A 20031223; AT 15942003 A 20031009; DE 50308658 T 20031223