

Title (en)
SELF-CENTERING GEAR PUMP

Title (de)
SELBSTZENTRIERENDE ZAHNRADPUMPE

Title (fr)
POMPE A ENGRENAGES A CENTRAGE AUTOMATIQUE

Publication
EP 1370771 A1 20031217 (DE)

Application
EP 02724189 A 20020301

Priority
• DE 10114148 A 20010322
• EP 0202253 W 20020301

Abstract (en)
[origin: DE10114148C1] The pump has a plastics driving gearwheel (4) in a cylindrical housing (1) and non-detachably connected to a force-locking connection with the gearwheel hub (7). When driven by the smooth drive shaft (3) about the locally fixed center point (5) torque suddenly produces the force locking connection between the drive shaft and hub through a freewheel roller (6). Through the permanent toothed engagement (9) an eccentric hollow elastic wheel (8) having one tooth more slides along inside the housing in relative rotary movement to the driving gearwheel (4). When the material warms up as a result of operation radial heat expansions are moved from the elastic hollow wheel into the existing clearance (16) and compensated. When the drive shaft warms up axial longitudinal expansion is compensated.

IPC 1-7
F04C 2/10; **F04C 15/00**; **F04C 2/08**; **F04C 15/04**; **F04C 13/00**

IPC 8 full level
F04C 2/10 (2006.01); **F04C 2/08** (2006.01); **F04C 13/00** (2006.01); **F04C 14/06** (2006.01); **F04C 15/00** (2006.01)

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