

Title (en)
A hydraulic piston pump

Title (de)
Hydraulische Kolbenpumpe

Title (fr)
Pompe à piston hydraulique

Publication
EP 2728190 A1 20140507 (EN)

Application
EP 13175582 A 20130708

Priority
IT RE20120078 A 20121102

Abstract (en)
A hydraulic piston pump (1) comprising a head (10) in which an aspiration conduit (12), a delivery conduit (13), and at least a pump chamber (11) in which an alternating piston (14) is partially housed are fashioned, wherein the pump chamber (11) is separated from the aspirating conduit (12) and from the delivery conduit (13) respectively by an automatic aspirating valve (121) and an automatic delivery valve (131), which are housed in respective seatings realised in the head (10), and wherein the piston (14) is slidably housed internally of a cylindrical bushing (30), which is housed internally of the head (10) and bears at least a first annular seal (35) able to be coaxially interposed between the piston (14) and the bushing (30), such as to sealingly close the pump chamber (11); the pump comprising a cap (31) which is coupled to the bushing (30) by connecting means (312, 322) constraining the bushing (30) to the cap (31) in an axial direction and enabling reciprocal free rotations about the axis of the bushing (30), the cap (31) being rotatably coupled to the head (10) by threaded means which define a screw axis of the cap (31) coinciding with the axis (A) of the bushing (30).

IPC 8 full level
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CPC (source: EP)
F04B 53/007 (2013.01); **F04B 53/16** (2013.01); **F04B 53/22** (2013.01)

Citation (search report)
• [A] US 6382940 B1 20020507 - BLUME GEORGE H [US]
• [A] US 6000764 A 19991214 - DOKAS DAVID M [US]
• [A] EP 2466138 A1 20120620 - INTERPUMP ENGINEERING SRL [IT]

Cited by
EP3578811A1; CN104895760A; CN104895759A; IT201800006145A1

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