Title (en)

PISTON PUMP FOR LIQUIDS

Publication

EP 0093691 B1 19851227 (DE)

Application

EP 83810165 A 19830420

Priority

CH 242082 A 19820421

Abstract (en)

[origin: EP0093691A1] 1. Piston pump for liquids, having a cylinder (1) in which a piston (2) and a piston cover (5) separate from the piston (2), provided on the suction side of the piston (2), and connected to the piston rod (11), are reciprocatingly accommodated, by means of which reciprocating movement the liquid is drawn via an inlet (15) into the working room of the cylinder (1) and pressed out of the same via an outlet (17), the piston (2) being pierced parallel to its axis, and the piston cover (5) having a smaller outside diameter than the inside diameter of the cylinder (1) and the outside diameter of the piston (2) and being connected to the piston rod (11) in such a way that during the compression and suction stroke of the piston (2) it rests tightly against the same and closes the holes (3) in the piston, and during the return stroke of the piston (2) is situated spaced therefrom, whereby a gap (24) is formed between the piston (2) and the piston cover (5) for the flow of the liquid through the piston (2), characterized in that the piston (2) has a raised edge (9) on its suction side, and the piston cover (5) has an inwardly chamfered edge (10) on the side thereof facing the piston (2), so that the piston (2) forms a centred snug fit with the piston cover (5) during its compression and suction stroke, and that the piston cover (5) is provided with a neck (6) having an internal thread (7) and passing freely through a bore (22) of the piston (2), in which neck a plug (12) of the piston rod (11), having an external thread (13), is screwed in.

IPC 1-7

F04B 21/04

IPC 8 full level

F04B 53/12 (2006.01); F04F 7/00 (2006.01)

CPC (source: EP)

F04B 53/122 (2013.01); F04F 7/00 (2013.01)

Cited by

US5127804A; US5035440A; FR2817848A1; EP0569262A1; FR2689570A1; US5292236A; EP0715039A1; WO0247826A1

Designated contracting state (EPC)

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