

Title (en)

Liquid piston pump driven by a compressed-air piston engine.

Title (de)

Durch einen Druckluft-Kolbenmotor angetriebene Flüssigkeits-Kolbenpumpe.

Title (fr)

Pompe à piston pour liquide, entraînée par un moteur à piston à air comprimé.

Publication

EP 0281794 A1 19880914 (DE)

Application

EP 88102159 A 19880215

Priority

DE 3706351 A 19870227

Abstract (en)

[origin: EP0281794B1] 1. Liquid piston pump driven by a compressed-air piston motor, comprising a flushing chamber arranged above the pump located underneath, a motor arranged with an interstice above this flushing chamber creating a free space, and a piston rod which connects pump and motor and has two parts connected to one another via a coupling point arranged in the free space, and also a control device for the motor, and an expansion space for the discharging air, which expansion space is arranged downstream from the control device, characterized in that the control device (9) is arranged in the free space radially outside the piston rod (7) and has a height which is at least equal to the maximum length of stroke of the motor (5), in which arrangement a control sleeve (27) surrounds the section of the piston rod (7) having the coupling point (7a), can be displaced a limited distance by a driving member (28), which is arranged at the coupling point (7a), in each case at the ends of the stroke, has stops (29, 30) at its ends for interacting with the driving member and carries along with it a flat slide (31) bearing against a slide seat (32).

Abstract (de)

Eine Flüssigkeits-Kolbenpumpe (1) ist durch einen Druckluft-Kolbenmotor (5) angetrieben. Über der Pumpe ist eine Spülkammer (8) angeordnet. Zwischen Spülkammer (8) und Motor (5) befindet sich die Steuereinrichtung (9) des Motors. Sie ist radial außerhalb der zur Pumpe (1) führenden Motor-Kolbenstange (7) angeordnet. Dies ergibt einen platzsparenden Aufbau und gute Voraussetzungen für eine glatte äußere Bauform und eine zufriedenstellende Schalldämpfung.

IPC 1-7

F01L 23/00; F04B 9/12

IPC 8 full level

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CPC (source: EP US)

F01B 17/02 (2013.01 - EP US); **F01L 23/00** (2013.01 - EP US); **F04B 9/125** (2013.01 - EP US)

Citation (applicant)

- DE 3342388 A1 19850605 - WAGNER WILHELM WIWA [DE]
- US 2637304 A 19530505 - DINKELKAMP HENRY T

Citation (search report)

- [A] GB 1301386 A 19721229
- [A] US 2637304 A 19530505 - DINKELKAMP HENRY T

Cited by

CN1070225C; EP1030059A1; GB2325711A; GB2325711B; WO9738224A1

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