

Title (en)  
PISTON PUMP

Title (de)  
KOLBENPUMPE

Title (fr)  
POMPE A PISTONS

Publication  
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Application  
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Priority  

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Abstract (en)

[origin: US6206663B1] The invention relates to a piston pump (1) for delivering a fluid at low pressure and at a higher pressure, a higher delivery volume being provided in one pumping cycle at low pressure than at a higher pressure, having a low-pressure delivery piston (4), which is moved inside a pump cylinder (2) and acts upon a pressure chamber (7) under prestress into its delivery end position, a high-pressure delivery piston (11), an inlet valve (9) and an outlet valve (9, 10), a fluid delivery path (5) furthermore being provided between the inlet valve (9) and the outlet valve (10), and the low-pressure delivery piston (4) being able to be moved back counter to its prestress into a delivery starting position, and proposes, to achieve effective delivery at low pressure and at a higher pressure with the simplest possible construction, that the fluid delivery path (5) passes through the low-pressure delivery piston (4), that a valve (6) is provided in the low-pressure delivery piston (4), which valve shuts in the case of movement into the delivery starting position, that the high-pressure delivery piston (11) and the low-pressure delivery piston (4) operate in a common pressure chamber (7), and that the high-pressure delivery piston (11) moves the low-pressure delivery piston (4) counter to its prestress.

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Cited by

EP3091230A1; WO2008138987A3; DE102012109255A1; WO2014049035A1; US10406586B2; DE102008024018A1; EP2722133A2; EP3243604A1; DE102008024018B4

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