

Title (en)  
PISTON VACUUM PUMP

Title (de)  
KOLBENVAKUUMPUMPE

Title (fr)  
POMPE A VIDE A PISTON

Publication  
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Application  
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Abstract (en)  
[origin: WO2004097220A1] The invention relates to a piston vacuum pump, comprising a cylinder (14) and a piston (12) which forms a compression chamber (28) together with the cylinder (14). The piston (12) reciprocates in the cylinder (14) with a compression stroke and an inlet stroke. A gas inlet (30) is provided in a side wall (16) of the cylinder (14), whereby the gas inlet (30) is sealed by the piston (12) at the beginning of the inlet stroke and open at the end of the inlet stroke. A balance line and a valve are provided, through which gas from the gas inlet flows from the gas inlet (30) into the compression chamber during the beginning of the inlet stroke. The aim of the invention is the provision of a simple arrangement for a balance line with valve. Said aim is achieved whereby the piston largely forms the balance line and the valve. The valve thus acts in the region of the piston crown such that dead volume is minimised.

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