Title (en)

PISTON PUMP FOR DELIVERING A FLUID, AND ASSOCIATED BRAKE SYSTEM

Title (de)

KOLBENPUMPE ZUR FÖRDERUNG EINES FLUIDS UND ZUGEHÖRIGES BREMSSYSTEM

Title (fr)

POMPE À PISTON DESTINÉE AU REFOULEMENT D'UN FLUIDE ET SYSTÈME DE FREINAGE ASSOCIÉ

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Application

EP 08804391 A 20080918

Priority

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Abstract (en)

[origin: WO2009043733A1] The invention relates to a piston pump having a piston assembly (22) which has at least one transverse bore (23) and has a longitudinal bore (24) which corresponds to the at least one transverse bore (23), having a cylinder (28) in which the piston assembly (22) is guided in a longitudinally movable manner, and having an inlet valve (25) which comprises a cage element (31), in which an inlet valve spring (25.2) and an inlet valve sealing element (25.3) are arranged, and a corresponding inlet valve seat (25.1) which is arranged on the piston assembly (22.2), wherein the inlet valve sealing element (25.3) can be pressed sealingly into the corresponding inlet valve seat (25.1) by means of a spring force of the inlet valve spring (25.2) in order to close off the longitudinal bore (24), wherein fluid can be sucked in via the at least one transverse bore (23) which is arranged in the piston assembly (22), which fluid can be conducted through the longitudinal bore (24) via the inlet valve (25) into a compression chamber (28.1) in which a restoring spring (30) for the piston assembly (22) is arranged, and to an associated brake system. The restoring spring (30) is designed as a simple cylindrical spiral spring which is supported axially with an upper end winding (30.1) against the cage element (31) and with a lower end winding (30.2) against a cylinder base (28.2), wherein the cage element (31) has an elastic high-pressure sealing element (31.1) which, in the direction of a cylinder wall (28.4), has a radial support region (31.4) for holding and centring the upper end winding (10.1) of the restoring spring (30), and wherein, in order to guide the restoring spring (30), the cylinder (28) has, at the transition between the cylinder wall (28.4) and the cylinder base (28.2), a cylinder base radius (28.4) which is adapted to the lower end winding (30.2).

IPC 8 full level

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