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Title (de)
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Abstract (en)
[origin: WO2014206607A1] The invention relates to a high-pressure pump (1) which serves in particular for fuel injection systems of internal combustion engines, comprising a low pressure chamber (4) configured as a power unit chamber (4) and a drive (5) which is disposed at least partially in the low pressure chamber (4). In operation pressure pulses are generated in the low pressure chamber (4) by the drive unit (5). A damping device (30) is provided which on the one hand is coupled to the low pressure chamber (4) and on the other hand is connected to a low pressure level (25) which in operation is located below a pressure (p1) in the low pressure chamber (4). The damping device (30) has a piston which is displaceable in a piston bore (33) and which not only is acted upon by the pressure 1 in the low pressure chamber (4) against a spring force of a spring element (36) but also delimits a vapour chamber (34) in the piston bore (33). Furthermore the damping device (30) has a pressure relief means (37) which connects the vapour chamber at least intermittently to the low pressure level (25).

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