

Title (en)
HIGH-PRESSURE FUEL PUMP

Title (de)
KRAFTSTOFF-HOCHDRUCKPUMPE

Title (fr)
POMPE À CARBURANT HAUTE PRESSION

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Application
EP 22732207 A 20220609

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Abstract (en)
[origin: WO2023006288A1] The invention relates to a high-pressure fuel pump (10) having a pressure-limiting valve (22) which fluidically connects a high-pressure region (29) to a low-pressure region (28) and opens towards the low-pressure region (28). The pressure-limiting valve (22) is disposed in a pressure-limiting valve bore (22a) which is designed as a through bore through the pump body (12b), extends from a damping region (28a) to a stepped chamber (28d) and is closed on the side facing the damping region (28a) by a closure (56, 57) which is pressed in. The pressure-limiting valve bore (22a) is designed as a stepped bore comprising a first portion (22.1) which has a larger diameter and a second portion (22.3) which has a smaller diameter, and comprising an annular step (22.2) formed between the first portion (22.1) and the second portion (22.3). The pressure-limiting valve (22) has a valve seat body (38) pressed into the pressure-limiting valve bore (22a), and the pressure-limiting valve (22) has a valve element (44) which is pushed in the closing direction by a holding element (46) which is pushed in the closing direction by a spiral spring (52) which is supported on the annular step (22.2).

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