

Title (en)
Variable-Flow High-Pressure Pump

Title (de)
Hochdruckpumpe mit veränderlicher Fördermenge

Title (fr)
Pompe à haute pression à débit variable

Publication
EP 1302664 A1 20030416 (EN)

Application
EP 02022716 A 20021010

Priority
IT BO20010625 A 20011012

Abstract (en)
A variable-flow high-pressure pump (1) comprising at least one piston (4) mounted to slide axially and in a leak-tight manner within a cylindrical cavity (5) obtained in the body (6) of the pump so as to define a variable-volume pumping chamber (7) adapted to be filled with a fluid, and an intake valve (9) and a delivery valve (8) adapted to enable the one-way flow of the fluid respectively into and out of the pumping chamber (7), the intake valve (9) being formed by a non-return valve (9) comprising a shutter body (10) which can move to and from a closed position in which it prevents the passage of the fluid via the valve, and an elastic member (12) adapted to maintain the shutter body (10) in the above-mentioned closed position, the high-pressure pump (1) further comprising a hydraulic piston (14) selectively adapted to distance the shutter body (10) from the closed position by overcoming the resistance of the elastic member (12) so as to enable the fluid also to flow freely via the valve in a direction opposite to the normal direction. <IMAGE>

IPC 1-7
F04B 49/24; **F04B 7/02**; **F02M 59/36**; **F02M 63/02**

IPC 8 full level
F02M 59/36 (2006.01); **F02M 59/46** (2006.01); **F02M 63/02** (2006.01); **F04B 7/02** (2006.01); **F04B 49/24** (2006.01)

CPC (source: EP US)
F02M 59/36 (2013.01 - EP US); **F02M 59/365** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 59/46** (2013.01 - EP US); **F02M 59/462** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US); **F04B 7/0266** (2013.01 - EP US); **F04B 49/243** (2013.01 - EP US)

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