

Title (en)
FLUID CONTROLLED PUMPING SYSTEM AND METHOD

Title (de)
FLUIDGESTEUERTES PUMPSYSTEM UND VERFAHREN

Title (fr)
SYSTEME ET PROCEDE DE POMPAGE REGULE DE LIQUIDE

Publication
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Application
EP 02726793 A 20020423

Priority
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Abstract (en)
[origin: WO02086322A2] A fluid controlled pumping system includes a pumping unit disposed within a fluid cavity. The pumping unit includes a passage extending to a suction end of the pumping unit. The system also includes a pressure source coupled to the passage and operable to force a fluid outwardly from the passage proximate to the suction end of the pumping unit. The system includes a pressure sensor coupled to the passage. The system further includes a controller coupled to the pumping unit and operable to regulate an operating parameter of the pumping unit using the fluid pressure. A fluid level controlled pumping system includes a pumping unit disposed within a fluid cavity. The pumping unit includes an inlet operable to receive a fluid to be pumped from the fluid cavity. The system also includes a valve slidably coupled to the pumping unit. The valve includes a passage for receiving pumped fluid from an outlet of the pumping unit. In response to a decreasing fluid level within the fluid cavity, movement of the valve relative to the pumping unit to recirculate the pumped fluid from the outlet to the inlet.
[origin: WO02086322A2] A fluid controlled pumping system includes a pumping unit (12) disposed within a fluid cavity (13). The pumping unit (12) includes a passage (60) extending to a suction end of the pumping unit. The system also includes a pressure source (72) coupled to the passage (60) and operable to force a fluid outwardly from the passage proximate to the suction end (34) of the pumping unit. The system includes a pressure sensor (74) coupled to the passage (60). The system further includes a controller (76) coupled to the pumping unit (12) and operable to regulate an operating parameter of the pumping unit using the fluid pressure. A fluid level controlled pumping system includes a pumping unit (106) disposed within a fluid cavity. The pumping unit includes an inlet (118) operable to receive a fluid to be pumped from the fluid cavity. The system also includes a valve (140) slidably coupled to the pumping unit. The valve (140) includes a passage (160) for receiving pumped fluid from an outlet (122) of the pumping unit. In response to a decreasing fluid level within the fluid cavity, movement of the valve relative to the pumping unit aligns the passage (160) with a port (190) of the pumping unit to recirculate the pumped fluid from the outlet to the inlet.

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