

Title (en)
VARIABLE DISPLACEMENT PUMP FOR FLUIDS WITH MODULATED REGULATION, AND METHOD FOR REGULATING ITS DISPLACEMENT

Title (de)
VERSTELLPUMPE FÜR FLÜSSIGKEITEN MIT MODULIRTER REGULIERUNG UND VERFAHREN ZUR REGELUNG DER VERDRÄNGUNG

Title (fr)
POMPE À DÉPLACEMENT VARIABLE POUR FLUIDES À RÉGULATION MODULÉE, ET PROCÉDÉ DE RÉGULATION DE SON DÉPLACEMENT

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Abstract (en)
[origin: WO2015097637A1] A variable displacement pump (1) comprises a regulation ring (11) having at least a pair of actuation stages (19, 20), of which a first stage is permanently exposed to pressure conditions of the pumped fluid and is arranged to make the regulation ring (11) move against the action of a spring (23), and a second stage is arranged to act concordantly with the spring (23) in a manner controlled by an electrically-controlled valve (50). A spool valve (40), controlled by the electrically-controlled valve (50) and the pressure conditions of the pumped fluid, is connected between the second stage (20) and the electrically- controlled valve (50) and is arranged to modulate a regulation pressure acting on the second stage (20) depending on a control signal supplied by the electrically-controlled valve (50) and on such pressure conditions. A method for regulating the displacement of such a pump is also provided.

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