

Title (en)  
DEVICE AND METHOD FOR CONTROLLING A THICK MATTER PUMP

Title (de)  
VORRICHTUNG UND VERFAHREN ZUR STEUERUNG EINER DICKSTOFFPUMPE

Title (fr)  
DISPOSITIF ET PROCEDE DE COMMANDE D'UNE POMPE A PATES

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Abstract (en)  
[origin: WO2005093253A1] The invention relates to a device and a method for controlling a two-cylinder thick matter pump comprising delivery pistons that are actuated by means of a hydraulic reversing pump (6) and hydraulic drive cylinders that are controlled by said pump in a push-pull manner. For each pressure stroke, the delivery cylinders (50, 50') are connected to a delivery line (58) by means of a pipe junction (56). At the end of each delivery stroke, a reversal process of the pipe junction (56) and the reversing pump (6) is triggered. The aim of the invention is to achieve a reliable operation even of single-circuit two-cylinder thick matter pumps. To this end, the pipe junction comprises a position transmitter responding to the pivoting position thereof. According to the invention, at least two cylinder switching sensors are arranged on the working cylinders at a distance from each other, responding to the passing pistons of the drive cylinder, and/or a pressure sensor responding to the pressure course at the high-pressure outlet of the reversing pump is provided. The computer-assisted reversing device comprises a control routine responding to output signals of the position transmitter and to output signals of the cylinder switching sensors and/or the pressure sensors, enabling the programmed control of a control body for adjusting the flow quantity and direction of the reversing pump, and a reversing body arranged in the hydraulic branch of the pipe junction.

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