

Title (en)
THICK MATTER PUMP COMPRISING A TRANSPORT CAPACITY CONTROL SYSTEM

Title (de)
DICKSTOFFPUMPE MIT FÖRDERMENGENSTEUERUNG

Title (fr)
POMPE A LIQUIDES EPAIS A REGULATION DU DEBIT DE REFOULEMENT

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Application
EP 02772362 A 20021004

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Abstract (en)
[origin: US2006153700A1] A thick matter pump comprising a conveyance capacity control system. Said thick matter pump comprises a drive motor 50 which is preferably embodied as an internal combustion engine, a hydraulic pump 6 which is preferably embodied as a reversible pump, which has a variable displacement volume V and can be coupled to the driving motor, and two hydraulic cylinders 5, 5' which are connected to the hydraulic pump 6, can be controlled by the same in a push-pull manner, and are each coupled to a conveyor cylinder 7, 7' for conveying the thick matter. A regulator for regulating the rotational speed N is associated with the drive motor 50, and a regulating element 18, 20 for regulating the displacement volume V is associated with the hydraulic pump 6. A control module 54 is also provided for regulating the rotational speed N of the motor and the displacement volume V. According to the invention, the control module 54 comprises a final control element 56 for regulating the thick matter conveyance capacity F of the conveyor cylinders 7, 7', and an electronic control unit 108 which reacts to the position of the final control element 56 and allocates a nominal value to the rotational speed regulator and to the displacement volume regulator 20, in a software-assisted manner. These measures enable improvement of the operational ease of the thick matter pump, and reduction of fuel requirements, noise emission and waste gas emission during practical use.

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See references of WO 03033911A1

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