

Title (en)
METHOD FOR OPERATING A PUMP THAT IS DRIVEN BY AN ELECTRIC MOTOR IN A POWER-OPTIMIZED MANNER IN THE EVENT OF LOW VOLUMETRIC FLOW RATES

Title (de)
VERFAHREN ZUM LEISTUNGSOPTIMIERTEN BETREIBEN EINER ELEKTROMOTORISCH ANGETRIEBENEN PUMPE BEI GERINGEN VOLUMENSTRÖMEN

Title (fr)
PROCÉDÉ DE FONCTIONNEMENT À RENDEMENT OPTIMISÉ D'UNE POMPE ENTRAÎNÉE PAR MOTEUR ÉLECTRIQUE LORS DE FAIBLES DÉBITS VOLUMÉTRIQUES

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Abstract (en)
[origin: WO2012095274A2] The invention relates to a method for operating a pump that is driven by an electric motor in a hydraulic system in a power-optimized manner in the event of very low volumetric flow rates (Q). The target delivery head (H) of the pump is regulated along a preset characteristic curve (K) dependent on the volumetric flow rate (Q). The target delivery head (H) is reduced compared to the preset characteristic curve (K) if the volumetric flow rate (Q) falls short of a reference value (Q_ref) that is maximally a tenth, preferably a twentieth of the maximum volumetric flow rate (Q_max) on the characteristic curve (K). The reduction is carried out as long as the volumetric flow rate (Q) lies below the volumetric flow rate reference value (Q_ref) and a delivery head minimum value (H_min) has not been reached. The invention further relates to a pump that is driven by an electric motor, comprising a control and regulating electronic system that is equipped to carry out said method, and to a computer program product with instructions for carrying out the method for operating a pump that is driven by an electric motor when said method is carried out in a control and regulating electronic system of the pump.

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