

Title (en)

METHOD FOR DETERMINING HYDRAULIC PARAMETERS IN A POSITIVE DISPLACEMENT PUMP

Title (de)

VERFAHREN ZUR BESTIMMUNG VON HYDRAULISCHEN PARAMETERN IN EINER VERDRÄNGERPUMPE

Title (fr)

PROCÉDÉ POUR DÉTERMINER DES PARAMÈTRES HYDRAULIQUES DANS UNE POMPE À DÉPLACEMENT POSITIF

Publication

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Application

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Abstract (en)

[origin: WO2015028386A1] The invention relates to a method for determining hydraulic parameters in a displacement pump, wherein the displacement pump has a movable displacement element, which bounds the metering chamber, which is connected to a suction and pressure line by means of valves, wherein a drive is provided for the oscillating motion of the displacement element. In order that pumped fluid can be alternately sucked into the metering chamber via the suction line and pressed from the metering chamber via the pressure line by means of an oscillating motion of the displacement element, a physical model having hydraulic parameters according to the invention is established for the hydraulic system, the force exerted by the displacement element on the fluid located in the metering chamber or the pressure in the metering chamber is determined and the position of the displacement element is determined, and at least one hydraulic parameter is calculated by means of an optimization calculation.

IPC 8 full level

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