

Title (en)

DISPLACEMENT PUMP FOR MEDICAL LIQUIDS, BLOOD TREATMENT DEVICE, AND METHOD FOR CONTROLLING SAME

Title (de)

VERDRÄNGERPUMPE FÜR MEDIZINISCHE FLÜSSIGKEITEN UND BLUTBEHANDLUNGSVORRICHTUNG SOWIE VERFAHREN ZU DEREN STEUERUNG

Title (fr)

POMPE VOLUMÉTRIQUE POUR LIQUIDES MÉDICAUX ET DISPOSITIF DE TRAITEMENT DU SANG AINSI QUE PROCÉDÉ DE COMMANDE ASSOCIÉ

Publication

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Application

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Abstract (en)

[origin: WO2018114727A1] The invention relates to a displacement pump (1) for pumping medical liquids, having a pump chamber (5) and a displacement element (15), and to a blood treatment device comprising a displacement pump (1). The invention additionally relates to a method for controlling a displacement pump (1) for pumping medical liquids. The displacement pump (1) according to the invention has an actuation element (20), which is operatively connected to the displacement element (20) for moving or deforming the displacement element in order to pump the liquid into the pump chamber or out of the pump chamber, and a drive device (21) for moving the actuation element (20). A control unit (14) is provided for actuating the drive device (21), an inlet valve (12), and an outlet valve (13). The actuation element (20) is operatively connected to the displacement element (15) via a working chamber (19) which is filled with a gas and which has a closed volume. The aim of the invention is to achieve a high degree of delivery accuracy. This is achieved in that the pressure in the working chamber (5) is kept constant during the movement of the displacement element (15).

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