

Title (en)
PUMP CONTROL FOR LOW FLOW VOLUMES

Title (de)
PUMPENSTEUERUNG FÜR NIEDRIGE DURCHFLUSSMENGEN

Title (fr)
COMMANDE DE POMPE POUR DES VOLUMES À FAIBLE DÉBIT

Publication
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Application
EP 15862407 A 20151127

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Abstract (en)
[origin: WO2016085400A1] The invention relates to a method for controlling a gas flow of a pump for high flow rates at a low average flow rate by changing the gas pressure inside a cavity in said pump, said method comprising the steps of: decreasing the gas pressure in said cavity, during a first predetermined time period; increasing the gas pressure in said cavity during a second predetermined time period; stopping the active change of gas pressure during at least a third predetermined time period; and wherein the decreased gas pressure and the increased gas pressure are predefined to overcome an opening resistance of an inlet valve and an outlet valve, respectively. The invention further relates to a pump assembly for high flow rates operated at a low average flow rate comprising: a number of pumps; a pump motor with a number of windings adapted to drive said pumps; a control unit adapted to control said pump motor; wherein said number of pumps is equal to said number of stator windings or where the motor can momentarily increase its force on the pumps.

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Citation (search report)
• [X] CA 2863775 A1 20130822 - ULVAC KIKO INC [JP]
• [I] US 3814552 A 19740604 - GUGGENHEIM S, et al
• [A] WO 2009031543 A1 20090312 - FUJI CLEAN CO LTD [JP], et al
• See references of WO 2016085400A1

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