

Title (en)

MEMBRANE PUMP HAVING AN INERTIALLY CONTROLLED LEAK EXTENSION VALVE

Title (de)

MEMBRANPUMPE MIT TRÄGHEITSGESTEUERTEM LECKERGÄNZUNGSVENTIL

Title (fr)

POMPE À MEMBRANE MUNIE D'UNE SOUPAPE DE COMPENSATION DE FUITE COMMANDÉE PAR INERTIE

Publication

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Application

EP 11745539 A 20110815

Priority

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Abstract (en)

[origin: CA2808388A1] The invention relates to a membrane pump having a delivery chamber (9) separated from a hydraulic chamber (8) by means of a membrane (1), wherein the delivery chamber (9) is connected to one intake connection and one pressure connection and the hydraulic chamber (8) that can be filled with a working fluid can have a pulsating working fluid pressure applied thereto, wherein the hydraulic chamber (8) is connected to a working fluid reservoir (15) by means of a leak extension valve (6), wherein the leak extension valve comprises a closing body that can be displaced back and forth between a closed position in which the valve passage is closed, and an open position in which the valve passage is opened, said body being held in the closed position with the aid of a pressure element, wherein the pressure element is designed such that, when the pressure in the hydraulic chamber (8) is less than a set pressure pL, the closing body (16) is displaced in the direction of the open position. In order to provide a membrane pump having a leak extension valve reducing or even eliminating the disadvantages of the state of the art, according to the invention the mass of the closing body (16) is so great that the closing body (16) is displaced by no more than 0.2 mm in the direction of the open position in case of a pressure drop to 0 bar lasting no longer than 1 millisecond due to a pressure surge in the hydraulic chamber (8).

IPC 8 full level

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