

Title (en)

ALTERNATING POSITIVE-DISPLACEMENT PUMP HAVING A MEMBRANE FOR MEDICAL USE

Title (de)

ALTERNIERENDE VERDRÄNGERPUMPE MIT MEMBRAN FÜR MEDIZINISCHE ZWECKE

Title (fr)

POMPE VOLUMÉTRIQUE ALTERNATIVE A MEMBRANE POUR USAGE MÉDICAL

Publication

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Application

EP 10807428 A 20101220

Priority

- CH 19812009 A 20091223
- CH 2010000318 W 20101220

Abstract (en)

[origin: WO2011075859A1] The invention relates to an alternating positive-displacement pump (1) having a membrane that is intended for fluids and for medical use, and including a driving portion (10) in which an electromagnetic actuator (11) is arranged, said actuator including at least one coil (12) and actuating a piston (14) of a mobile member (15) capable of linear cyclic movement. The pump includes a pump body (20) in which a pre-stressed membrane (22) is provided, said membrane being capable of translation by means of elastic deformation from a normal rest position to an adjacent position by means of the transmission of the piston (14) operation. Said pump also includes means (30) for detecting tolerance-exceeding variations in the intensity of the supply current using measurements (33), means (40) for continuously measuring the position of the mobile member (15), and means (30, 45) for analyzing and processing said measurements for generating at least one alarm signal (35) indicating the detection of at least one malfunction of the pump.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2011075859A1

Citation (examination)

- EP 0798558 A2 19971001 - SHIMADZU CORP [JP]
- WO 0022298 A2 20000420 - LIQUID METRONICS INC [US]
- EP 1757809 A1 20070228 - PROMINENT DOSIERTECHNIK GMBH [DE]

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