

Title (en)

HIGH PRESSURE DOUBLE MEMBRANE PUMP AND MEMBRANE ELEMENT FOR SUCH A PUMP

Title (de)

HOCHDRUCK-DOPPELMEMBRANPUMPE UND MEMBRANELEMENT FÜR EINE SOLCHE PUMPE

Title (fr)

POMPE À DOUBLE MEMBRANE À HAUTE PRESSION, ET ÉLÉMENT FORMANT MEMBRANE POUR UNE TELLE POMPE

Publication

**EP 2179177 A1 20100428 (DE)**

Application

**EP 08803172 A 20080822**

Priority

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- DE 102007039964 A 20070823

Abstract (en)

[origin: WO2009024619A1] A high pressure double membrane pump has a central housing (3), two cylindrical pump chambers (7,8), a coupling rod (4) which moves back and forth when the pump is in operation and which has a pump piston (9), two membranes which divide each of the pump chambers (7,8) into a product chamber (11,12) and a compressed air chamber (1,2) with changing volumes of which the membranes have a peripherally mounted membrane body (15). In the central area of the membrane body (15) a rigid implant body (17) is embedded which is equipped with a dog (18) which is connected to one end of the coupling rod (4), and a pneumatic control unit for the alternating impinging of compressed air upon the compressed air chambers. In the area of the compressed air chambers (1,2) a rigid supporting ring (20) is pushed onto the dog (18) between the end of the coupling rod (4) and the inner side of the membrane (5). The diameter of said supporting ring is between 50% and 95% of the diameter of the working surface of the membrane (5), and the periphery thereof is formed as a rounded shoulder (21) facing away from the membrane body (15).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2009024619A1

Citation (examination)

US 5927954 A 19990727 - KENNEDY DENNIS E [US], et al

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Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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