

Title (en)
ELECTRIC AXIAL MEMBRANE PUMP

Title (de)
ELEKTRISCHE AXIALMEMBRANPUMPE

Title (fr)
POMPE ÉLECTRIQUE AXIALE À MEMBRANE

Publication
EP 3734066 A1 20201104 (EN)

Application
EP 19172663 A 20190503

Priority
EP 19172663 A 20190503

Abstract (en)
The invention relates to a membrane pump comprising:- a housing having, along a main axis, two coaxial arranged pump chambers in which each a flexible membrane is arranged perpendicular to the main axis, which membranes are parallel to each other and divide each pumping chamber into a main compartment and a sub compartment;- wherein each main compartment has at least one inlet opening and one outlet opening and wherein one way valves are arranged in each inlet opening and each outlet opening;- an inlet port arranged in the housing and in fluid connection with the inlet openings;- an outlet port arranged in the housing and in fluid connection with the outlet openings;- a connection rod extending coaxially through the housing, wherein each end of the rod is attached to a membrane;- driving means coupled to the connection rod for reciprocating driving of the connection rod in axial direction, wherein the two main compartments of the pump chambers are adjacent to each other and the two sub compartments of the pump chambers are distal from each other.

IPC 8 full level
F04B 9/04 (2006.01); **F04B 43/00** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01)

CPC (source: EP)
F04B 9/04 (2013.01); **F04B 43/0054** (2013.01); **F04B 43/026** (2013.01); **F04B 43/04** (2013.01)

Citation (applicant)
WO 2006055626 A2 20060526 - PROPORTIONAIR INC [US], et al

Citation (search report)
• [XAI] WO 9925999 A1 19990527 - BAHRTON SVANTE [SE]
• [XAI] EP 0298615 A2 19890111 - FLOTRONIC CONTROLS LIMITED [GB]
• [A] DE 2306900 A1 19740815 - LOTHAR PRACHT GMBH & CO KG MAS

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3734066 A1 20201104; **EP 3734066 B1 20210901**; ES 2891984 T3 20220201; PL 3734066 T3 20211227

DOCDB simple family (application)
EP 19172663 A 20190503; ES 19172663 T 20190503; PL 19172663 T 20190503