

Title (en)

Multiple membrane pump for food liquids and the like

Title (de)

Mehrfachmembranpumpe für Nahrungsflüssigkeiten und Ähnliches

Title (fr)

Pompe à membranes multiples pour liquides alimentaires et similaires

Publication

**EP 1936187 A1 20080625 (EN)**

Application

**EP 06425858 A 20061222**

Priority

EP 06425858 A 20061222

Abstract (en)

A multiple membrane pump for food liquids and the like, comprising at least one duct (6) for the compensated intake of the liquid, which is closed on itself in a loop and is provided with at least one intake port (7), at least one duct (8) for the compensated delivery of the liquid, which is closed on itself in a loop and is provided with at least one delivery port (9), at least four branches (10, 11, 12, 13), which provide a unidirectional connection between the intake duct (6) and the delivery duct (8) and are associated respectively with four liquid pumping membranes (14, 15, 16, 17), a gearmotor assembly (18), which is associated with a crank system (19) for actuating the membranes (14, 15, 16, 17) and is adapted to convert the rotary motion of an output shaft (20) of the gearmotor assembly (18) into a reciprocating motion, adjusted with an appropriate timing between two mutually opposite intake and delivery stroke limit positions, of each of the actuation axes (21, 22, 23, 24) of the membranes (14, 15, 16, 17).

IPC 8 full level

**F04B 11/00** (2006.01); **F04B 17/06** (2006.01); **F04B 23/06** (2006.01); **F04B 43/00** (2006.01)

CPC (source: EP US)

**F04B 11/0008** (2013.01 - EP US); **F04B 11/005** (2013.01 - EP US); **F04B 17/06** (2013.01 - EP US); **F04B 43/026** (2013.01 - EP US); **F04B 53/18** (2013.01 - EP US)

Citation (applicant)

DE 2059903 A1 19720615 - MESSERSCHMITT BOELKOW BLOHM

Citation (search report)

- [A] DE 2059903 A1 19720615 - MESSERSCHMITT BOELKOW BLOHM
- [A] WO 2006122268 A2 20061116 - PENDOTECH [US], et al
- [A] US 2951450 A 19600906 - FISHER JOHN C
- [A] DE 1428007 A1 19681205 - BECKER ERICH
- [A] EP 0976925 A2 20000202 - MITSUBISHI ELECTRIC CORP [JP]

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GB2532517A; EP3280914A4; EP3380731A4; CN114787511A; EP2511528A1; CN103477072A; US10753544B2; WO2017153808A1; EP2697513B1

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Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 1936187 A1 20080625**; **EP 1936187 B1 20110928**; AT E526503 T1 20111015; ES 2374715 T3 20120221; US 2009304532 A1 20091210; WO 2008077725 A1 20080703

DOCDB simple family (application)

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