

Title (en)
VOLUMETRIC PUMP

Title (de)
VOLUMETRISCHE PUMPE

Title (fr)
POMPE VOLUMÉTRIQUE

Publication
EP 3480460 A1 20190508 (EN)

Application
EP 17382733 A 20171102

Priority
EP 17382733 A 20171102

Abstract (en)
A volumetric pump (1) comprises a chamber (2) divided into a main sub-chamber (21) and a secondary sub-chamber (22) by a first diaphragm (5) which is clamped in the chamber (2). An inlet port (23) and an outlet port (24) are located in the main sub-chamber (21), and a compensation port (26) is located in the secondary sub-chamber (22). A linear actuator (6) is configured to cause a reciprocating movement in the first diaphragm (5), thus causing a variation in the volume of the main sub-chamber (21). The pump (1) also comprises a by-pass channel connecting a compensation port (26) located in the secondary sub-chamber (22) with the inlet port (23) of the main sub-chamber (21).

IPC 8 full level
F04B 43/02 (2006.01); **F04B 7/00** (2006.01); **F04B 43/00** (2006.01); **F04B 43/04** (2006.01)

CPC (source: EP US)
F04B 7/00 (2013.01 - EP US); **F04B 43/009** (2013.01 - EP); **F04B 43/046** (2013.01 - EP US)

Citation (applicant)
• FR 2824366 A1 20021108 - KATSUKURA SHOZO [JP]
• EP 2264317 B1 20111026 - CENTRE NAT ETD SPATIALES [FR]
• US 6345963 B1 20020212 - THOMIN GEORGES [FR], et al

Citation (search report)
• [X] EP 2930363 A1 20151014 - STICHTING NATIONAAL LUCHT EN RUIMTEVAART LAB [NL], et al
• [XY] WO 2005001288 A1 20050106 - SHARP KK [JP], et al
• [Y] GB 1395403 A 19750529 - BECKER E
• [Y] US 2009311116 A1 20091217 - BAI SHUSHAN [US], et al
• [Y] US 2005238506 A1 20051027 - MESCHER MARK J [US], et al
• [AD] US 6345963 B1 20020212 - THOMIN GEORGES [FR], et al

Cited by
CN113137363A

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

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EP 3480460 A1 20190508; EP 3480460 B1 20210623

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