

Title (en)  
OSCILLATING PISTON PUMP FOR FLUIDS

Title (de)  
SCHWENKKOLBENPUMPE FÜR FLUIDE

Title (fr)  
POMPE À PISTON ROTATIF POUR FLUIDES

Publication  
**EP 3688309 A1 20200805 (DE)**

Application  
**EP 18740840 A 20180716**

Priority  
• DE 102017122611 A 20170928  
• EP 2018069248 W 20180716

Abstract (en)  
[origin: WO2019063159A1] The invention relates to an oscillating piston pump for liquid and gaseous fluids, comprising: a pump housing (1) having at least two sector-shaped working chambers (10), which are diametrically opposed relative to a pivot axis (12) arranged in-between; an oscillating piston (2), having at least two displacement portions (20) which extend diametrically relative to the pivot axis (12) and are each received pivotably in one of the working chambers (10); an electric drive (3), which moves the oscillating piston (2) alternately on a pivot movement between two turning points delimited within the working chambers (10); a group of outlet valves (4), which ensure the discharge of a volume displaced from the working chambers (10) to a pump outlet (14); and a group of inlet valves (5), which ensure the entry of a volume flowing into the working chambers (10) from a pump inlet (15). The group of outlet valves (4) or inlet valves (5) is arranged on both sides of each working chamber (10) and communicates through the pump housing (1) with the pump outlet (14) or the pump inlet (15). The other group of inlet valves (5) or outlet valves (4) is arranged in the oscillating piston (2) and communicates via a cavity (25) in the oscillating piston (2) with the pump inlet (15) or the pump outlet (14).

IPC 8 full level  
**F04C 9/00** (2006.01); **F04C 15/06** (2006.01)

CPC (source: EP US)  
**F04C 9/002** (2013.01 - EP US); **F04C 15/064** (2013.01 - EP US); **F04C 2240/20** (2013.01 - EP); **F04C 2240/40** (2013.01 - US); **F04C 2240/60** (2013.01 - US); **F04C 2240/603** (2013.01 - EP)

Citation (search report)  
See references of WO 2019063159A1

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)  
**DE 102017122611 B3 20190131**; BR 112020004076 A2 20200924; CN 111164311 A 20200515; CN 111164311 B 20211214; EP 3688309 A1 20200805; US 2020217314 A1 20200709; WO 2019063159 A1 20190404

DOCDB simple family (application)  
**DE 102017122611 A 20170928**; BR 112020004076 A 20180716; CN 201880062365 A 20180716; EP 18740840 A 20180716; EP 2018069248 W 20180716; US 201816639159 A 20180716