

Title (en)  
OIL PUMP

Title (de)  
ÖLPUMPE

Title (fr)  
POMPE À HUILE

Publication  
**EP 3808946 A4 20220316 (EN)**

Application  
**EP 19820469 A 20190607**

Priority  
• KR 20180068540 A 20180615  
• KR 2019006881 W 20190607

Abstract (en)  
[origin: EP3808946A1] The present invention provides an oil pump that sucks and discharges oil, including: a housing portion; a stator portion including an outer ring that is accommodated inside the housing portion and forms a variable chamber into which oil flows between the housing portion and the stator portion, and a main pressing end that is formed to protrude outward from an outer circumferential surface of the outer ring; a rotor portion accommodated inside the outer ring, and sucking and discharging oil through rotation; a spring portion including a main spring that presses the stator portion, and movably supporting the outer ring inside the housing portion; a guiding portion including a first guiding member that is installed on the outer circumferential surface of the outer ring, slidably installed in a first guiding groove formed in an inner wall of the housing portion, and guides a movement of the outer ring as the outer ring is pressed by the oil flowing into the variable chamber, and guiding the movement of the outer ring; and a sealing portion interposed between the housing portion and a stator portion to prevent the oil flowing into the variable chamber from leaking into another space between the housing portion and the stator portion.

IPC 8 full level  
**F01M 1/02** (2006.01); **F04C 2/10** (2006.01); **F04C 14/22** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP KR US)  
**F01M 1/02** (2013.01 - EP KR); **F04C 2/10** (2013.01 - KR US); **F04C 2/102** (2013.01 - EP); **F04C 14/18** (2013.01 - US); **F04C 14/22** (2013.01 - KR); **F04C 14/226** (2013.01 - EP); **F04C 15/0003** (2013.01 - KR); **F04C 15/0019** (2013.01 - US); **F04C 15/0034** (2013.01 - EP); **F01M 2001/0238** (2013.01 - EP KR); **F04C 2210/206** (2013.01 - EP US); **F04C 2240/10** (2013.01 - US); **F04C 2240/20** (2013.01 - US)

Citation (search report)  
• [I] EP 3333425 A1 20180613 - AISIN SEIKI [JP]  
• [YA] JP 2016098768 A 20160530 - AISIN SEIKI  
• [Y] JP 5141993 B2 20130213  
• [Y] JP H08159046 A 19960618 - SYST SOGO KENKYUSHO KK  
• See references of WO 2019240437A1

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

DOCDB simple family (publication)  
**EP 3808946 A1 20210421**; **EP 3808946 A4 20220316**; CN 112567111 A 20210326; KR 102108355 B1 20200512; KR 20190141845 A 20191226; US 2021254618 A1 20210819; WO 2019240437 A1 20191219

DOCDB simple family (application)  
**EP 19820469 A 20190607**; CN 201980052936 A 20190607; KR 20180068540 A 20180615; KR 2019006881 W 20190607; US 201917252242 A 20190607