

Title (en)  
PUMP ASSEMBLY HAVING TWO PUMPS PROVIDED IN A SINGLE HOUSING

Title (de)  
PUMPENANORDNUNG MIT ZWEI PUMPEN IN EINEM EINZIGEN GEHÄUSE

Title (fr)  
ENSEMBLE DE POMPES À DEUX POMPES DISPOSÉES DANS UN SEUL BOÎTIER

Publication  
**EP 3903004 A4 20220824 (EN)**

Application  
**EP 19907328 A 20191219**

Priority  
• US 201862786961 P 20181231  
• IB 2019061144 W 20191219

Abstract (en)  
[origin: US2020208629A1] A pump assembly that has a first pump and a second pump for pumping lubricant, both pumps being integrated into a single housing. A drive shaft is provided that drives both pumps. Both the first pump and the second pump have a gear or rotor that is rotated by the drive shaft. Each of the pumps have an inlet provided on the housing to receive input from a source outside the housing and an outlet. The housing has a wall that is common to both pumps. The first pump is provided on a first side of the wall and the second pump is provided on the second, opposite side. The gears or rotors of the pumps may be provided in pockets provided on the first and second sides of the wall. The drive shaft extends through the wall and connects to each of the drive gears or rotors.

IPC 8 full level  
**F04C 11/00** (2006.01); **F01C 21/10** (2006.01); **F04C 2/08** (2006.01); **F04C 2/10** (2006.01); **F04C 2/22** (2006.01); **F04C 2/344** (2006.01)

CPC (source: CN EP KR US)  
**F01C 21/10** (2013.01 - EP); **F01M 1/02** (2013.01 - EP); **F04C 2/086** (2013.01 - CN EP KR); **F04C 2/10** (2013.01 - CN US); **F04C 2/102** (2013.01 - EP KR); **F04C 2/123** (2013.01 - US); **F04C 2/18** (2013.01 - CN); **F04C 2/22** (2013.01 - EP KR); **F04C 2/3442** (2013.01 - EP KR); **F04C 2/356** (2013.01 - CN); **F04C 11/00** (2013.01 - CN); **F04C 11/001** (2013.01 - CN); **F04C 11/005** (2013.01 - EP KR); **F04C 11/008** (2013.01 - US); **F04C 15/00** (2013.01 - CN); **F04C 15/0061** (2013.01 - KR US); **F04C 18/10** (2013.01 - CN); **F04C 29/00** (2013.01 - CN); **F16H 57/0435** (2013.01 - EP); **F16H 57/0436** (2013.01 - CN EP); **F16H 57/0441** (2013.01 - EP); **F16H 57/0446** (2013.01 - EP); **F16H 61/0031** (2013.01 - EP); **F16N 13/20** (2013.01 - CN EP); **F16N 23/00** (2013.01 - CN); **F04C 2210/14** (2013.01 - CN KR); **F04C 2240/30** (2013.01 - CN KR); **F16H 57/0412** (2013.01 - EP); **F16H 61/0267** (2013.01 - EP); **F16H 2061/0037** (2013.01 - EP)

Citation (search report)  
• [XYI] US 2016281712 A1 20160929 - MUIZELAAR RICHARD [CA], et al  
• [Y] US 2018291900 A1 20181011 - VALKENBERG RALPH [DE], et al  
• See references of WO 2020141393A1

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