

Title (en)  
Pump unit

Title (de)  
Pumpenaggregat

Title (fr)  
Unité de pompage

Publication  
**EP 1574714 B1 20080123 (DE)**

Application  
**EP 05005006 A 20050308**

Priority  
DE 102004013053 A 20040310

Abstract (en)  
[origin: EP1574714A2] The electrically-driven pump assembly (10) for hydraulic fluid has pump modules (14,16) at either end of a shaft (30) carrying the rotor (15). The shaft is carried on two bearings (32). The stator (13) of the electric motor (12) is surrounded by a housing (22) which accommodates the two pump modules. The stator support tube fits concentrically inside an outer housing (18). The hydraulic fluid enters through a channel (58) in the first end (26) of the pump assembly. The first pump assembly drives the fluid through the annular channel (20) between the two housings toward the second pump. Fluid can flow through the motor to cool it.

IPC 8 full level  
**F04B 53/08** (2006.01); **F04B 17/03** (2006.01); **F04B 23/02** (2006.01); **F04B 53/00** (2006.01); **F04B 53/16** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)  
**F04B 17/03** (2013.01); **F04B 23/021** (2013.01); **F04B 53/001** (2013.01); **F04B 53/08** (2013.01)

Cited by  
CN110469502A; US11293390B2; CN103590998A; US11725582B1; WO2016100535A1; WO2013107648A1; WO2017055145A1; US11955782B1; US11708752B2; US11939852B2; US11255173B2; US11613979B2; US11913315B2; US9534473B2; US9562420B2; US10374485B2; US11799356B2; US10378326B2; US11168554B2; US11891993B2; US9366114B2; US10107085B2; US10107084B2; US10221668B2; US10227855B2; US10502042B2; US10648312B2; US10689961B2; US10718194B2; US10718195B2; US10724353B2; US10774630B2; US10837270B2; US10851634B2; US10876386B2; US10895138B2; US10982521B2; US11002125B2; US11118438B2; US11187069B2; US11391136B2; US11391133B2

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