

Title (en)
Pump unit

Title (de)
Pumpenaggregat

Title (fr)
Unité de pompage

Publication
EP 1574714 A2 20050914 (DE)

Application
EP 05005006 A 20050308

Priority
DE 102004013053 A 20040310

Abstract (en)
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.

Abstract (de)
Die Erfindung betrifft ein Pumpenaggregat, umfassend einen Elektromotor und wenigstens eine durch den Elektromotor angetriebene Förderpumpe zum Fördern von Hydraulikflüssigkeit, wobei der Elektromotor und die Förderpumpe gemeinsam in einem geschlossenen Gehäuse untergebracht sind. Die Erfindung kennzeichnet sich dadurch, dass das Gehäuse wenigstens abschnittsweise eine doppelte Wandung aufweist, deren Zwischenraum wenigstens von einem Teil der von dem Pumpenaggregat geförderten Hydraulikflüssigkeit durchströmbar ist. <IMAGE>

IPC 1-7
F04B 53/00; **F04B 53/08**; **F04B 53/16**

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

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1574714 A2 20050914; **EP 1574714 A3 20060503**; **EP 1574714 B1 20080123**; AT E384874 T1 20080215; DE 102004013053 A1 20050929; DE 102004013053 B4 20060727; DE 502005002603 D1 20080313

DOCDB simple family (application)
EP 05005006 A 20050308; AT 05005006 T 20050308; DE 102004013053 A 20040310; DE 502005002603 T 20050308