

Title (en)  
Compact electrohydraulic apparatus

Title (de)  
Kompakte elektrohydraulische Einheit

Title (fr)  
Groupe électro-hydraulique compact

Publication  
**EP 0761970 A1 19970312 (FR)**

Application  
**EP 96401657 A 19960725**

Priority  
FR 9510219 A 19950830

Abstract (en)  
The assembly comprises an electric motor which drives a hydraulic pump feeding a number of different circuits consisting of a pump housing with a series of sound wave damping cavities (36) surrounding the chamber (11) containing the pump gears (9,10), and at least some of the cavities are connected via the pump's lateral face with a chamber (19) inside the cover (18) and a coupling (42) for the utilisation circuit (44). The pump body (12), its side plates (16,17) and the cover (18) are held together by bolts and centering pins (21) to form a single unit. The side plates are made from a material with a high module of elasticity, especially steel.

Abstract (fr)  
Groupe électro-hydraulique compact dans lequel un moteur électrique (1) entraîne une pompe hydraulique (2) dont le corps de pompe (12) comporte des cavités d'amortissement (36) des ondes sonores entourant partiellement au moins la cavité (11) contenant les pignons (9, 10) de la pompe, caractérisé en ce que certaines au moins des cavités communiquent par une face latérale du corps de pompe (12) avec une chambre (19) d'un couvercle (18) menant à un raccord (42) du circuit d'utilisation (44). <IMAGE>

IPC 1-7  
**F04C 15/00**; **F04C 11/00**

IPC 8 full level  
**F04C 2/18** (2006.01); **F04C 11/00** (2006.01); **F04C 14/00** (2006.01); **F04C 15/00** (2006.01); **F04C 15/06** (2006.01); **F04D 29/66** (2006.01)

CPC (source: EP US)  
**F04C 11/00** (2013.01 - EP US); **F04C 15/0049** (2013.01 - EP US)

Citation (search report)  
• [A] WO 8604393 A1 19860731 - ZAHNRADFABRIK FRIEDRICHSHAFEN [DE]  
• [A] EP 0088674 A1 19830914 - HYDROPERFECT INT [FR]  
• [A] GB 2036873 A 19800702 - SOUTH WESTERN IND RES  
• [A] DE 3438680 A1 19850515 - HITACHI LTD [JP]  
• [A] EP 0541337 A1 19930512 - VICKERS INC [US]  
• [A] DE 2922731 A1 19801218 - BOSCH GMBH ROBERT

Cited by  
DE19833372A1; DE102004021885B4; DE102004021885A1; US6506029B1; WO2016062538A1; WO2006111314A1; WO0005504A1; EP1026392B2

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**EP 96401657 A 19960725**; AR 10415196 A 19960829; BR 9603535 A 19960823; CN 96111166 A 19960828; DE 69601290 T 19960725; DE 96401657 T 19960725; ES 96401657 T 19960725; FR 9510219 A 19950830; JP 22717996 A 19960828; US 69398296 A 19960808