Title (en)

Pump assembly and method for operating the same

Title (de)

Pumpenanordnung und Verfahren zum Betreiben derselben

Title (fr)

Agencement de pompe et son procédé de fonctionnement

Publication

EP 1911970 A2 20080416 (DE)

Application

EP 07017624 A 20070908

Priority

DE 102006048050 A 20061011

Abstract (en)

The pump arrangement (100) has a pump (116), a mechanical drive (118) and an electrical drive (108). The two drives are assigned to a common pump. An overrunning clutch (104) is provided between the pump and the mechanical drive. Another overrunning clutch is provided between the pump and the electrical drive. The mechanical drive takes place on the basis of a crankshaft of the internal combustion engine. The electrical drive takes place by electric motors. The electric motor, provided for drive of the pump, has a stator (110) and a rotor (112). An independent claim is also included for a method for the operation of the pump arrangement.

Abstract (de)

Pumpenanordnung zur Förderung eines Betriebsfluids einer Brennkraftmaschine, umfassend eine Pumpe sowie einen ersten mechanischen Antrieb und einen zweiten elektrischen Antrieb, wobei der erste und der zweite Antrieb derselben Pumpe zugeordnet sind und Verfahren zum Betreiben einer derartigen Pumpenanordnung.

IPC 8 full level

F04B 17/03 (2006.01); **F04B 17/05** (2006.01); **F04D 13/02** (2006.01); **F04D 13/06** (2006.01)

CPC (source: EP)

F04B 17/03 (2013.01); **F04B 17/05** (2013.01); **F04D 13/021** (2013.01); **F04D 13/022** (2013.01); **F04D 13/06** (2013.01)

Citation (applicant)

- DE 10128059 C1 20021128 - GERAETE & PUMPENBAU GMBH [DE]
- EP 0821187 A2 19980128 - TOYOTA MOTOR CO LTD [JP]
- DE 19923154 A1 19991125 - LUK GETRIEBE SYSTEME GMBH [DE]
- DE 10214637 A1 20031023 - WOCO FRANZ JOSEF WOLF & CO GMBH [DE]
- DE 10213598 A1 20021010 - TOYODA BOSHOKU KK [JP], et al

Cited by

IT201700107668A1; CN103032147A; IT201700010400A1; US10989099B2; WO2019064083A1; WO2018142251A1

Designated contracting state (EPC)

DE FR GB IT

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1911970 A2 20080416; **EP 1911970 A3 20130227**; DE 102006048050 A1 20080417

DOCDB simple family (application)

EP 07017624 A 20070908; DE 102006048050 A 20061011