

Title (en)

MAGNETIC FLUID-ASSISTED ELECTROMAGNETIC DRIVE FOR A BLOOD PUMP USED TO SUPPORT THE HEART OR FOR PARTIAL OR COMPLETE REPLACEMENT OF THE HEART

Title (de)

MAGNETFLUIDUNTERSTÜTZTER ELEKTROMAGNETISCHER ANTRIEB FÜR EINE BLUTPUMPE ZUR UNTERSTÜTZUNG ODER ZUM TEILWEISEN BIS TOTALEN ERSATZ DES HERZENS

Title (fr)

COMMANDE ELECTROMAGNETIQUE ASSISTEE PAR FLUIDE MAGNETIQUE POUR UNE POMPE CARDIAQUE SERVANT A ASSISTER LE COEUR OU A SUPPLEER PARTIELLEMENT OU TOTALEMENT LA FONCTION CARDIAQUE

Publication

EP 0822840 A1 19980211 (DE)

Application

EP 97918007 A 19970227

Priority

- DE 9700441 W 19970227
- DE 19609281 A 19960227

Abstract (en)

[origin: DE19654864A1] The aim of the invention is to create a magnetic fluid with high saturation magnetisation and a saturation concentration above 100 mT in order to transmit greater loads. This is done according to the invention by forming stable dispersions in carrier fluids of cobalt and nanometer particles modified with adsorption layers. The volume concentration of the ferromagnetic components is between 5 and 35 %, preferably 15 and 30 %, and the volume concentration of the modified particles (bare particles with adsorption coating) is up to 50 vol. %.

IPC 1-7

A61M 1/10; **A61M 1/12**; **F04B 43/09**

IPC 8 full level

A61M 60/178 (2021.01); **A61M 60/196** (2021.01); **A61M 60/268** (2021.01); **F04B 43/08** (2006.01); **A61M 60/427** (2021.01); **A61M 60/857** (2021.01); **H01F 1/44** (2006.01)

CPC (source: EP US)

A61M 60/178 (2021.01 - EP US); **A61M 60/196** (2021.01 - EP US); **A61M 60/427** (2021.01 - EP US); **H01F 1/442** (2013.01 - EP US); **A61M 60/148** (2021.01 - EP US); **A61M 60/892** (2021.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

US 6074365 A 20000613; AU 2631797 A 19970916; AU 719915 B2 20000518; BR 9702122 A 19990126; CA 2219490 A1 19970904; DE 19654864 A1 19970828; EA 000221 B1 19981224; EA 199700273 A1 19980226; EP 0822840 A1 19980211; HU P9901479 A2 19990830; HU P9901479 A3 20010628; JP H11504554 A 19990427; WO 9731662 A1 19970904

DOCDB simple family (application)

US 94578098 A 19980126; AU 2631797 A 19970227; BR 9702122 A 19970227; CA 2219490 A 19970227; DE 19654864 A 19960227; DE 9700441 W 19970227; EA 199700273 A 19970227; EP 97918007 A 19970227; HU P9901479 A 19970227; JP 53051897 A 19970227