

Title (en)

Planar magnetic motor and magnetic microactuator with such a motor

Title (de)

Planarer magnetischer Motor und magnetischer Microantrieb mit einem solchen Motor

Title (fr)

Moteur planaire magnétique et micro-actionneur magnétique comportant un tel moteur

Publication

EP 0869519 A1 19981007 (FR)

Application

EP 98400763 A 19980331

Priority

FR 9703961 A 19970401

Abstract (en)

The winds are wound and connected between one another in order to combine the magnetic flows generated across the magnetic poles (111,121). The magnetic planar motor can be incorporated in a magnetic micro-activator which incorporates also a mechanical unit (200) with mobile contact, including a support frame (210) placed on the surface of the ferro-magnetic substrate through the intermediary of a spacer, and a flexible sheet (240) arranged essentially parallel to the surface of the substrate. An extremity of the flexible sheet is fixed on the support frame and the sheet also supports a core (230) of ferro-magnetic material and a mobile contact (220) forming part of the core faces a fixed contact (150) provided on the surface of the substrate.

Abstract (fr)

Moteur planaire magnétique (100), caractérisé en ce qu'il comporte une pluralité de pôles magnétiques (111, 121) en matériau ferromagnétique placés au centre de bobines planaires (110, 120) constituées d'au moins une couche de spires réalisées en surface d'un substrat (150) en matériau ferromagnétique, lesdites spires étant bobinées et connectées entre elles de manière à additionner les flux magnétiques générés par lesdits pôles magnétiques (111, 121). L'invention est applicable à la réalisation de moteurs et de micro-actionneurs magnétiques. <IMAGE>

IPC 1-7

H01H 1/00

IPC 8 full level

H01H 50/00 (2006.01)

CPC (source: EP US)

H01H 50/005 (2013.01 - EP US); **H01H 2050/007** (2013.01 - EP US)

Citation (search report)

- [A] EP 0573267 A1 19931208 - SHARP KK [JP]
- [A] US 5472539 A 19951205 - SAIA RICHARD J [US], et al
- [A] US 5475353 A 19951212 - ROSHEN WASEEM A [US], et al

Cited by

EP1399939A4; EP1437036A4; US7253710B2; US7420447B2; US7266867B2; US7250838B2; WO0157899A1; US7202765B2; US7027682B2; US7183884B2; US6836194B2; US7342473B2; US7300815B2; US6469603B1; US6469602B2; US7391290B2; US7327211B2; US6794965B2; US6633212B1; US7071431B2; US7372349B2; US6894592B2; US6496612B1

Designated contracting state (EPC)

CH DE FR GB LI NL

DOCDB simple family (publication)

EP 0869519 A1 19981007; **EP 0869519 B1 20020220**; DE 69803893 D1 20020328; DE 69803893 T2 20021010; FR 2761518 A1 19981002; FR 2761518 B1 19990528; US 6084281 A 20000704

DOCDB simple family (application)

EP 98400763 A 19980331; DE 69803893 T 19980331; FR 9703961 A 19970401; US 5298098 A 19980401