

Title (en)

LORENTZ MOTOR CONTROL SYSTEM FOR A PAYLOAD

Title (de)

STEUERUNGSSYSTEM EINES LORENTZ-MOTORS FÜR EINE NUTZLAST

Title (fr)

SYSTEME DE COMMANDE DE MOTEURS DE LORENZ POUR CHARGE UTILE

Publication

**EP 1654605 A1 20060510 (EN)**

Application

**EP 04744669 A 20040728**

Priority

- IB 2004051316 W 20040728
- EP 03102413 A 20030804
- EP 04744669 A 20040728

Abstract (en)

[origin: WO2005013027A1] Control arrangement for and method of controlling a plurality of Lorentz motors (1, 2) actuating a payload (4) where the payload has a center of gravity (12). Height signals (z1,z2) are received from sensors sensing heights of said payload. At least one angle of rotation of the center of gravity about a horizontal axis is calculated from these height signals (z1, z2) and from this at least one angle of rotation control signals (C1, C2) for the Lorentz motors (1, 2) are calculated such that a predetermined rotational stiffness for supporting the payload (4) is achieved. A typical application is a suspension for floor vibration isolation of an electron microscope or of a lithographic apparatus.

IPC 1-7

**G05D 19/02**; **G03F 7/20**; **F16F 7/10**; **F16F 15/00**

IPC 8 full level

**F16F 7/10** (2006.01); **F16F 15/00** (2006.01); **F16F 15/03** (2006.01); **G03F 7/20** (2006.01)

CPC (source: EP US)

**F16F 7/1011** (2013.01 - EP US); **F16F 15/005** (2013.01 - EP US); **F16F 15/03** (2013.01 - EP US); **G03F 7/70758** (2013.01 - EP US); **G03F 7/70816** (2013.01 - EP US); **G03F 7/709** (2013.01 - EP US)

Citation (search report)

See references of WO 2005013027A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005013027 A1 20050210**; CN 1829948 A 20060906; EP 1654605 A1 20060510; JP 2007502095 A 20070201; US 2006213362 A1 20060928

DOCDB simple family (application)

**IB 2004051316 W 20040728**; CN 200480022195 A 20040728; EP 04744669 A 20040728; JP 2006522461 A 20040728; US 56676504 A 20040728