Title (en)

AN APPARATUS FOR GENERATING POWER RESPONSIVE TO MECHANICAL VIBRATION

Title (de)

VORRICHTUNG ZUM ERZEUGEN VON STROM ALS REAKTION AUF MECHANISCHE VIBRATION

Title (fr)

APPAREIL PERMETTANT DE GÉNÉRER UNE PUISSANCE SENSIBLE AUX VIBRATIONS MÉCANIQUES

Publication

EP 2404371 A4 20131225 (EN)

Application

EP 09841253 A 20090306

Priority

US 2009036394 W 20090306

Abstract (en)

[origin: WO2010101577A1] A vibrational energy harvesting apparatus comprising: a substrate having a plurality of integral compliant regions; at least two ferromagnetic masses each coupled to a corresponding one or more of the integral compliant regions such that at least one of the ferromagnetic masses moves with respect to the substrate responsive to substrate acceleration, each ferromagnetic mass having an inner magnetic pole disposed such that the inner magnetic poles are separated by a flux gap, wherein the magnetic polarities of the inner magnetic poles on the opposing sides of the flux gap are similar; wherein the inner magnetic poles form a steep flux gradient region in the flux gap; and a coil coupled to the substrate and disposed within the steep flux gradient region where it is exposed to a changing magnetic flux arising from motion of at least one of the ferromagnetic masses with respect to the substrate.

IPC 8 full level

H02K 35/02 (2006.01)

CPC (source: EP KR)

H02K 35/02 (2013.01 - EP); **H02N 2/18** (2013.01 - KR)

Citation (search report)

- [XYI] WO 2008138278 A2 20081120 - VUT V BRNE [CZ], et al
- [Y] US 2005104159 A1 20050519 - LU NAI-CHEN [TW]
- [Y] EP 1841049 A1 20071003 - INFINEON TECHNOLOGIES SENSONOR [NO]
- See references of WO 2010101577A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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