

Title (en)

MICRO-ELECTROMECHANICAL SYSTEM COMPRISING A DEFORMABLE PORTION AND A STRESS SENSOR

Title (de)

MIKROELEKTROMECHANISCHES SYSTEM MIT EINEM VERFORMBAREN TEIL UND EINEM BELASTUNGSSENSOR

Title (fr)

SYSTEME MICRO-ELECTROMECHANIQUE COMPRENANT UNE PARTIE DEFORMABLE ET UN DETECTEUR DE CONTRAINTE

Publication

**EP 1960307 A1 20080827 (FR)**

Application

**EP 06841917 A 20061212**

Priority

- FR 2006002713 W 20061212
- FR 0512740 A 20051215

Abstract (en)

[origin: FR2894953A1] The system has a stress detector (10) connected to a beam (1) and comprising a base portion (2) and shunt portion (3). The portions are juxtaposed such that the portion (2) is in electrical contact with the portion (3), where materials of the portions are selected such that contact resistance between the portions varies based on system's deformation. The portion (3) has electrical conductivity greater than that of the portion (2). Electrical connections (4a-4d) are arranged such that the modification of distribution of current in the portions is detected from the connections. An independent claim is also included for a method of forming a micro-electromechanical system from a substrate.

IPC 8 full level

**B81B 3/00** (2006.01)

IPC 8 main group level

**G01Q 60/00** (2010.01)

CPC (source: EP US)

**B82Y 35/00** (2013.01 - US); **G01L 1/2293** (2013.01 - EP US); **G01L 9/0052** (2013.01 - EP US); **G01P 15/12** (2013.01 - EP US); **G01Q 20/04** (2013.01 - EP US); **G01Q 60/38** (2013.01 - EP US); **G01P 2015/0828** (2013.01 - EP US)

Citation (search report)

See references of WO 2007080259A1

Citation (examination)

BHUSHAN: "Nanotechnology", 1 January 2004, SPRINGER, Heidelberg, Allemagne, ISBN: 3540012184, article "Piezoresistive Detection", pages: 355 - 356

Designated contracting state (EPC)

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

DOCDB simple family (publication)

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