

Title (en)

Micromechanical component with opening for attachment on a spindle

Title (de)

Mikromechanisches Bauteil mit Öffnung zur Befestigung auf einer Achse

Title (fr)

Pièce de micromécanique avec ouverture pour fixation sur un axe

Publication

EP 2112565 A1 20091028 (FR)

Application

EP 08405112 A 20080421

Priority

EP 08405112 A 20080421

Abstract (en)

The micromechanical part has an opening (10) whose edges include an alternating arrangement of rigid areas (11) and elastic areas (12). Ends (13) of the rigid areas that are closest to a center (C) of the opening are connected by a circle (C1) that has a diameter greater than a diameter of another circle (C2). The circle (C2) connects ends of the elastic areas that are closest to the center of the opening. Each rigid area is formed by a convex portion that projects into the opening. Each elastic area is formed by a curved arm. Independent claims are also included for the following: (1) a method of transmitting a torque (2) a method for reducing risks of obtaining a defective assembly during production of an assembly formed by a micromechanical part and a spindle (3) a method for forming an assembly formed by a micro- mechanical part and a spindle.

Abstract (fr)

Cette pièce de micromécanique est destinée à être fixée sur un axe et comporte au moins une ouverture (10,20,30) dont les bords comprennent alternativement des zones rigides (11) et des zones élastiques (12,22,32). Les extrémités (13) des zones rigides (11) les plus proches du centre C de l'ouverture (10,20,30) peuvent être reliées par un premier cercle C1 de diamètre supérieur au diamètre d'un deuxième cercle C2 reliant les extrémités (15,25,27) des zones élastiques (12, 22,32) les plus proches du centre de l'ouverture. Dans cette pièce de micromécanique, chaque zone rigide (11) est formée par une partie bombée faisant saillie dans l'ouverture (10, 20,30).

IPC 8 full level

G04B 13/02 (2006.01); **G04B 35/00** (2006.01); **G04D 7/04** (2006.01)

CPC (source: EP US)

G04B 13/023 (2013.01 - EP US); **G04B 35/00** (2013.01 - EP US); **G04D 7/04** (2013.01 - EP US); **Y10T 29/49465** (2015.01 - EP US)

Citation (applicant)

- EP 1826634 A1 20070829 - NIVAROX SA [CH]
- CH 338146 A 19590430 - EBAUCHESFABRIK ETA AG [CH]

Citation (search report)

- [DA] EP 1826634 A1 20070829 - NIVAROX SA [CH]
- [A] DE 811817 C 19510823 - STOCKO METALLWARENFAB HENKELS, et al

Cited by

EP3623876A1; CH710467A1; EP3382472A1; WO2011116486A1; US9250610B2; US11073798B2

Designated contracting state (EPC)

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EP 2112565 A1 20091028; **EP 2112565 B1 20101020**; CN 101566826 A 20091028; CN 101566826 B 20141126; DE 602008003097 D1 20101202; HK 1133931 A1 20100409; JP 2009265097 A 20091112; JP 5451162 B2 20140326; US 2009263182 A1 20091022; US 7926355 B2 20110419

DOCDB simple family (application)

EP 08405112 A 20080421; CN 200910135115 A 20090420; DE 602008003097 T 20080421; HK 10100820 A 20100126; JP 2009100185 A 20090416; US 41415009 A 20090330