

Title (en)
Piezoelectric MEMS Device

Title (de)
Piezoelektrische MEMS-Vorrichtung

Title (fr)
Dispositif MEMS piézoélectrique

Publication
EP 2317532 A1 20110504 (EN)

Application
EP 09174354 A 20091028

Priority
EP 09174354 A 20091028

Abstract (en)
A piezoelectric MEMS device, comprises a cantilever beam arrangement (16) with a piezoelectric actuation layer (24) for actuating movement of the cantilever beam arrangement between an open position and a closed position in which the cantilever beam arrangement causes contact with a first electrical contact (15). The cantilever beam arrangement (16) comprises at least three adjacent cantilever beams (40,42,44,46,48), wherein the beams each have a fixed connection end and are coupled together at their free contact ends to define a single shared contact region (54). The device thus comprises at least three cantilevers actuated next to each other in such a way that all contribute to the contact force. The contact force is thus increased nearly linearly with the number of cantilevers.

IPC 8 full level
H01H 57/00 (2006.01); **H01H 59/00** (2006.01)

CPC (source: EP)
H01H 57/00 (2013.01); **H01H 59/0009** (2013.01); **H01H 2057/006** (2013.01)

Citation (search report)

- [X] US 2006119227 A1 20060608 - IKEHASHI TAMIO [JP]
- [A] WO 2008075778 A1 20080626 - NIKON CORP [JP], et al
- [AD] GB 2353410 A 20010221 - MARCONI ELECTRONIC SYST LTD [GB], et al

Cited by
CN108249388A; US9016133B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2317532 A1 20110504

DOCDB simple family (application)
EP 09174354 A 20091028