

Title (en)  
Capacitive MEMS component with buried transmission line

Title (de)  
Kapazitive Mems-Komponente mit Erdübertragungslinie

Title (fr)  
Composant mems capacitif à ligne de transmission enterrée

Publication  
**EP 2747190 A1 20140625 (FR)**

Application  
**EP 13198695 A 20131220**

Priority  
FR 1203561 A 20121221

Abstract (en)  
The system has an electrostatic actuator including a stack (8) having a substrate (4), a radio frequency transmission line (3) along a longitudinal direction, and a dielectric layer (5). Two pillars (2a, 2b) arranged on the stack supports a metal membrane (1), where the upper surface of the stack is planar. The substrate includes a housing (9) in which the transmission line is placed. A passivation layer is located between the substrate and the dielectric layer, where a transverse dimension of the membrane in a direction perpendicular to the longitudinal direction is between 10 and 50 microns. An independent claim is also included for a method for development of a capacitive microelectromechanical system.

Abstract (fr)  
L'invention concerne un système micro électromécanique (MEMS) capacitif à actionneur électrostatique comprenant un empilement (8) comprenant un substrat (4), une ligne de transmission de radiofréquences (3) selon une direction longitudinale (d Long ), une couche diélectrique (5), ledit système comprenant en outre deux piliers (2a ; 2b) disposés sur l'empilement (8) supportant une membrane (1) métallique. La surface supérieure de l'empilement (8) est plane.

IPC 8 full level  
**H01P 1/12** (2006.01); **H01H 59/00** (2006.01)

CPC (source: EP)  
**H01P 1/127** (2013.01); **H01H 59/0009** (2013.01)

Citation (search report)  
• [XYI] WO 2010138929 A1 20101202 - QUALCOMM INC [US], et al  
• [XY] EP 2506282 A1 20121003 - DELFMEMS [FR]  
• [YA] WO 2010065517 A1 20100610 - UNIV COLUMBIA [US], et al  
• [A] EP 0709911 A2 19960501 - TEXAS INSTRUMENTS INC [US]  
• [A] US 2010141362 A1 20100610 - LEE CHIUNG-I [TW], et al

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2747190 A1 20140625; EP 2747190 B1 20201007**; FR 3000049 A1 20140627; FR 3000049 B1 20160115

DOCDB simple family (application)  
**EP 13198695 A 20131220**; FR 1203561 A 20121221