

Title (en)

MICRO-ELECTRO-MECHANICAL SWITCH FOR SWITCHING AN ELECTRICAL SIGNAL, MICRO-ELECTRO-MECHANICAL SYSTEM, INTEGRATED CIRCUIT AND METHOD FOR PRODUCING AN INTEGRATED CIRCUIT

Title (de)

ELEKTROMECHANISCHER MIKROSCHALTER ZUR SCHALTUNG EINES ELEKTRISCHEN SIGNALS, MIKROELEKTROMECHANISCHES SYSTEM, INTEGRIERTE SCHALTUNG UND VERFAHREN ZUR HERSTELLUNG EINER INTEGRIERTEN SCHALTUNG

Title (fr)

DISPOSITIF MICRO-ÉLECTROMÉCANIQUE (MEMS) POUR COMMUTER UN SIGNAL ÉLECTRIQUE, SYSTÈME, CIRCUIT INTÉGRÉ ET PROCÉDÉ DE FABRICATION DU CIRCUIT INTÉGRÉ

Publication

EP 2510532 B1 20181107 (DE)

Application

EP 10787759 A 20101207

Priority

- DE 102009047599 A 20091207
- EP 2010069019 W 20101207

Abstract (en)

[origin: WO2011069988A2] The invention relates to a microelectromechanical system (MEMS) (100, 200) having an electromechanical microswitch (1) for switching an electrical signal (S), in particular a radio frequency signal (RFMEMS), in particular in the GHz range. Said system comprises, according to the invention: a multi-level conductor stack (102, 202) disposed on a substrate (101, 201), the conductors (111-115, 211-215) thereof being insulated from each other in different conductor levels (M1-M5) by means of electrically insulating layers (103, 203) and electrically connected to each other by means of interlayer contacts (104, 204), the electromechanical switch (1) integrated in a recess (105, 205) of the multilevel conductor stack (102, 202) and having a contact link (10), a counter-contact (20), and at least one drive electrode (30, 50) for the contact link (10), wherein the contact link (10), the counter-contact (20), and the at least one drive electrode (30, 50) each are part of a conductor level (M1-M5) of the multilevel conductor stack (102, 202).

IPC 8 full level

H01H 59/00 (2006.01)

CPC (source: EP KR US)

H01H 59/00 (2013.01 - KR); **H01H 59/0009** (2013.01 - EP US); **H01H 1/0036** (2013.01 - EP US)

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

DOCDB simple family (publication)

DE 102009047599 A1 20110609; EP 2510532 A2 20121017; EP 2510532 B1 20181107; KR 20120101089 A 20120912; US 2012280393 A1 20121108; US 9048052 B2 20150602; WO 2011069988 A2 20110616; WO 2011069988 A3 20110915

DOCDB simple family (application)

DE 102009047599 A 20091207; EP 10787759 A 20101207; EP 2010069019 W 20101207; KR 20127016628 A 20101207; US 201013514106 A 20101207