



(51) International Patent Classification:
H01H 51/22 (2006.01)

(21) International Application Number:
PCT/US2009/037575

(22) International Filing Date:
18 March 2009 (18.03.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/038,340 20 March 2008 (20.03.2008) US

(71) Applicants (for all designated States except US): **HT MICROANALYTICAL, INC.** [US/US]; 3817 Academy Parkway S, Ne, Albuquerque, NM 87109 US (US). **COTO TECHNOLOGY, INC.** [US/US]; 171 Service Road, Suite 301, Warwick, RI 02886-0105 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CHRISTENSON, Todd, R.** [US/US]; 1621 Speakman Dr. Se, Albuquerque, NM 87123 (US).

(74) Agent: **GRAFE, V, Gerlad**; P. O. Box 2689, Corrales, NM 87048 (US).

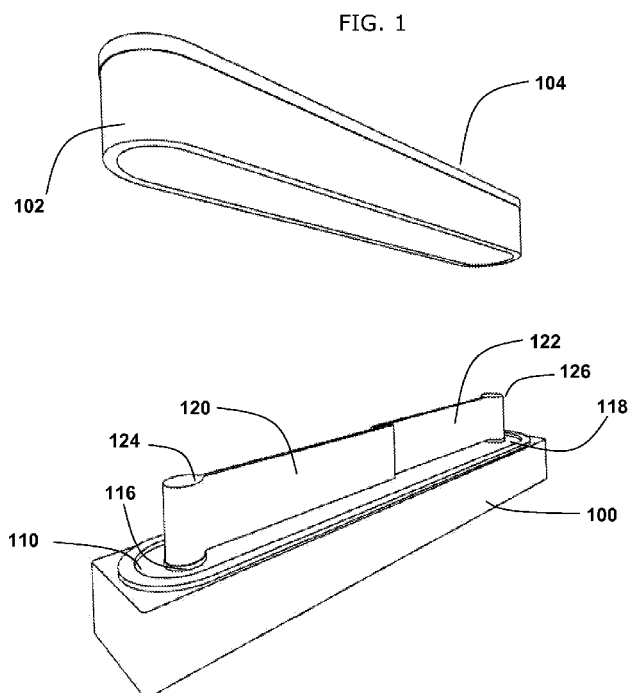
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

[Continued on next page]

(54) Title: INTEGRATED REED SWITCH



(57) Abstract: This invention relates to reed switches, and more particularly to micro-miniaturized reed switches and batch microfabrication techniques used to fabricate micro-miniaturized reed switches. The present invention can provide miniaturized reed switches with more consistent operating parameters, and that can be produced more efficiently than conventional reed switches. The present invention can also provide methods of making miniaturized reed switches using microfabrication techniques. The present invention can use lithographic-based fabrication to enable monolithic construction of a reed switch. Microlithography can repeatedly form micrometer dimensions with tight tolerances over large arrays of devices which, if the patterns are translated into materials appropriate for electromechanical devices, can provide for repeatable and consistent electromechanical operation. For example, tight dimensional control of the gap between two reeds in a reed switch or a reed and a fixed contact can provide consistency of performance between reed switches.



-
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *of inventorship (Rule 4.17(iv))*
- Published:**
- *with international search report (Art. 21(3))*
- (88) Date of publication of the international search report:**
30 December 2009