



(51) International Patent Classification:
H01L 21/3213 (2006.01) *H01L 21/02* (2006.01)

(21) International Application Number:
PCT/US2010/031118

(22) International Filing Date:
14 April 2010 (14.04.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/426,027 17 April 2009 (17.04.2009) US

(71) Applicant (for all designated States except US): **TIZA LAB, L.L.C.** [US/US]; 1665 South Main Street, Milpitas, CA 95035 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MAKAROV, Vladimir, V.** [RU/US]; 38623 Cherry Lane, Unit 166, Fremont, CA 94536 (US).

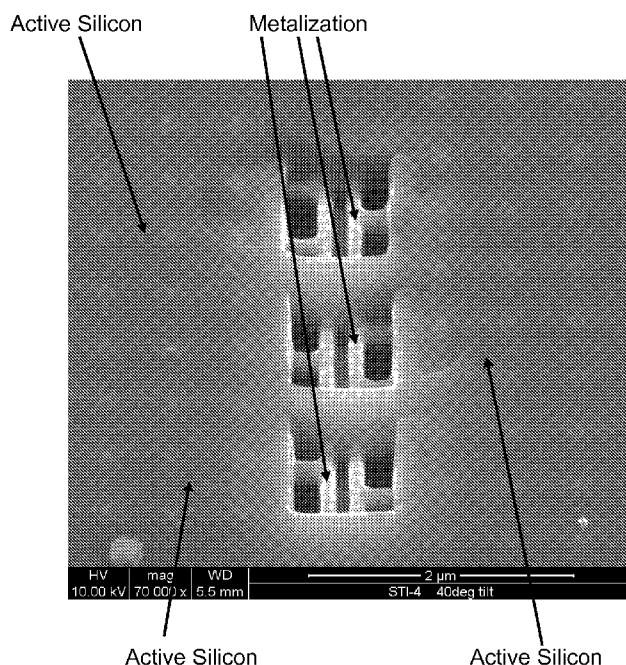
(74) Agent: **YOUNG, Barry, N.**; Law Offices of Barry N. Young, 200 Page Mill Road, Suite 102, Palo Alto, CA 94306 (US).

(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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, 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, SM,

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(54) Title: ENHANCED FOCUSED ION BEAM ETCHING OF DIELECTRICS AND SILICON



(57) Abstract: Silicon, silicon dielectrics and low-k dielectrics are etched in a focused ion beam process using gaseous fluorinating etchants selected from the group of triethylamine trihydrofluoride (TEATHF) and xenon fluoride. Xenon fluoride is combined with a secondary protecting agent to avoid undesired corrosion of bare silicon. The protecting agent may be an oxidizing agent such as oxygen, perfluorotripropylamine (PFTPA), or a heavy completely fluorinated hydrocarbon.

Fig. 3

WO 2010/120948 A1



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, **Published:**
ML, MR, NE, SN, TD, TG).

— *with international search report (Art. 21(3))*