

(12) International Application Status Report

Received at International Bureau: 12 February 2016 (12.02.2016)

Information valid as of: 24 February 2016 (24.02.2016)

Report generated on: 06 December 2019 (06.12.2019)

(10) Publication number:

WO2017/131643

(43) Publication date:

03 August 2017 (03.08.2017)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2016/014969

(22) Filing Date:

26 January 2016 (26.01.2016)

(25) Filing language:

English (EN)

(51) International Patent Classification:

H01L 45/00 (2006.01); **H01L 45/02** (2006.01)

(71) Applicant(s):

HEWLETT PACKARD ENTERPRISE DEVELOPMENT LP [US/US]; 11445 Compaq Center Drive W. Houston, Texas 77070 (US) (for all designated states)

(72) Inventor(s):

JEON, Yoocham; 1501 Page Mill Rd. Palo Alto, California 94304-1100 (US)

(74) Agent(s):

PAGAR, Preetam; Hewlett Packard Enterprise 3404 E. Harmony Road Mail Stop 79 Fort Collins, Colorado 80528 (US)

(54) Title (EN): STABLE THRESHOLD SWITCHING MATERIALS FOR SELECTORS OF RESISTIVE MEMORIES

(54) Title (FR): MATÉRIAUX DE COMMUTATION À SEUIL STABLE POUR SÉLECTEURS DE MÉMOIRES RÉSISTIVES

(57) Abstract:

(EN): A stable threshold switching material for selectors employed in resistive memories is provided. The material is amorphous and has a composition given by $(V, Nb)_{1-x}(Si, Hf, W)_xO_y$, where $0 < x < 1$ and y is within a range of 1.5 to 3.

(FR): La présente invention concerne un matériau de commutation à seuil stable pour des sélecteurs employés dans des mémoires résistives. Le matériau est amorphe et présente une composition fournie par $(V, Nb)_{1-x}(Si, Hf, W)_xO_y$ où $0 < x < 1$ et y est compris de la plage de 1,5 à 3.

International search report:

Received at International Bureau: 27 October 2016 (27.10.2016) [KR]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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

European Patent Office (EPO) : AL, 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, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

Declarations:

Declaration made as to the identity of the inventor (PCT Rules 4.17(i) and 51bis.1(a)(i))