



- (51) International Patent Classification: Not classified
- (21) International Application Number: PCT/IB2012/053878
- (22) International Filing Date: 30 July 2012 (30.07.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 61/513691 1 August 2011 (01.08.2011) US
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- (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, 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, 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, QA, RO, RS, RU, RW, 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, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: A PROCESS FOR THE MANUFACTURE OF SEMICONDUCTOR DEVICES COMPRISING THE CHEMICAL MECHANICAL POLISHING OF ELEMENTAL GERMANIUM AND/OR $\text{Si}_{1-x}\text{Ge}_x$ MATERIAL IN THE PRESENCE OF A CMP COMPOSITION HAVING A pH VALUE OF 3.0 TO 5.5

(57) Abstract: A process for the manufacture of semiconductor devices comprising the chemical mechanical polishing of elemental germanium and/or $\text{Si}_{1-x}\text{Ge}_x$ material with $0.1 \leq x < 1$ in the presence of a chemical mechanical polishing (CMP) composition having a pH value in the range of from 3.0 to 5.5 and comprising: (A) inorganic particles, organic particles, or a mixture or composite thereof, (B) at least one type of an oxidizing agent, and (C) an aqueous medium.

