(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
03 August 2023 (03.08.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/143804 A1

(51) International Patent Classification:
H01L 21/20 (2006.01)

(21) International Application Number:
PCT/EP2022/085871

(22) International Filing Date:
14 December 2022 (14.12.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
EP22154292 31 January 2022 (31.01.2022) EP

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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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, 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,

(54) Title: METHOD FOR DEPOSITING A STRAIN RELAXED GRADED BUFFER LAYER OF SILICON GERMANIUM ON A SURFACE OF A SUBSTRATE

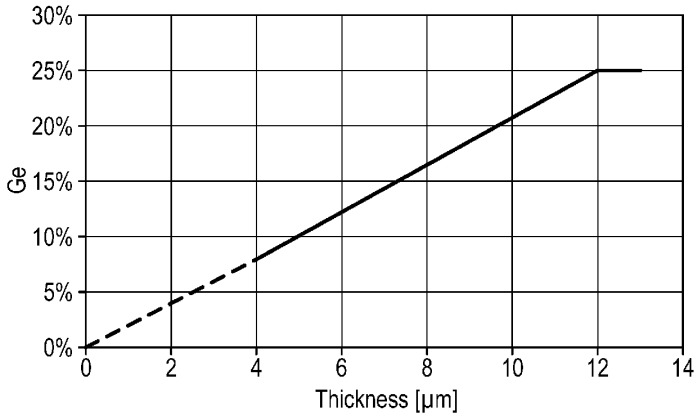


Fig.5

(57) Abstract: A method for depositing a strain relaxed graded buffer layer of silicon germanium on a surface of a substrate, the surface consisting of silicon and the buffer layer having an increasing content of germanium up to a final content, the method comprising conducting $GeCl_4$ and SiH_2Cl_2 during a first and a second stage over the surface of the substrate at a deposition temperature of not less than 800 °C; growing the buffer layer with a grade rate that is less than 10 % Ge / µm; and growing the buffer layer with a growth rate that is not less than 0.1 µm / min during the first stage and that is less than 0.1 µm / min during the second stage.

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WO 2023/143804 A1

LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

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