

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
27 February 2025 (27.02.2025)



(10) International Publication Number
WO 2025/042329 A1

(51) International Patent Classification:

G02B 6/122 (2006.01) G02B 6/13 (2006.01)
G02F 1/025 (2006.01) G02F 1/225 (2006.01)

(21) International Application Number:

PCT/SG2023/050578

(22) International Filing Date:

22 August 2023 (22.08.2023)

(25) Filing Language:

English

(26) Publication Language:

English

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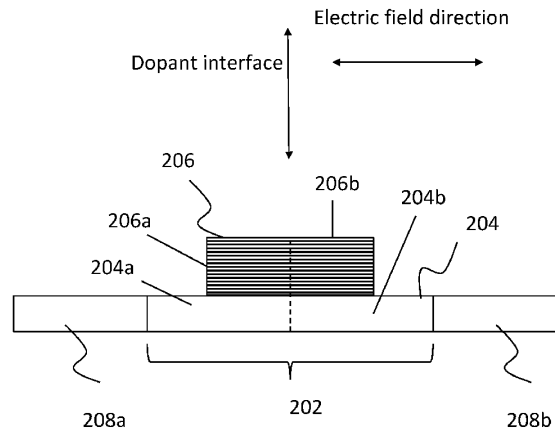
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, 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, MU, 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.

(54) Title: PHASE SHIFTER AND METHOD OF FORMING THE SAME

FIG. 2



(57) Abstract: Various embodiments may relate to a phase shifter. The phase shifter may include rib waveguide. The rib waveguide may include a base and a stacked arrangement on the base, the stacked arrangement including alternate layers of silicon (Si) and layers of silicon-germanium (SiGe). The phase shifter may also include a first slab waveguide region and a second slab waveguide region. A first region of the rib waveguide, the first region of the rib waveguide including a first region of the base and a first region of the stacked arrangement, may be a doped region having a first type conductivity. A second region of the rib waveguide adjoining the first region of the rib waveguide, the second region of the rib waveguide including a second region of the base and a second region of the stacked arrangement, may be a doped region having a second type conductivity.

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(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, SC, 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, 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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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