



(51) International Patent Classification:
C30B 15/20 (2006.01) C30B 29/06 (2006.01)

(21) International Application Number:
PCT/EP2020/087962

(22) International Filing Date:
29 December 2020 (29.12.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/112,424 11 November 2020 (11.11.2020) 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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, 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, 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, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) Title: METHODS FOR FORMING A SILICON SUBSTRATE WITH REDUCED GROWN-IN NUCLEI FOR EPITAXIAL DEFECTS AND METHODS FOR FORMING AN EPITAXIAL WAFER

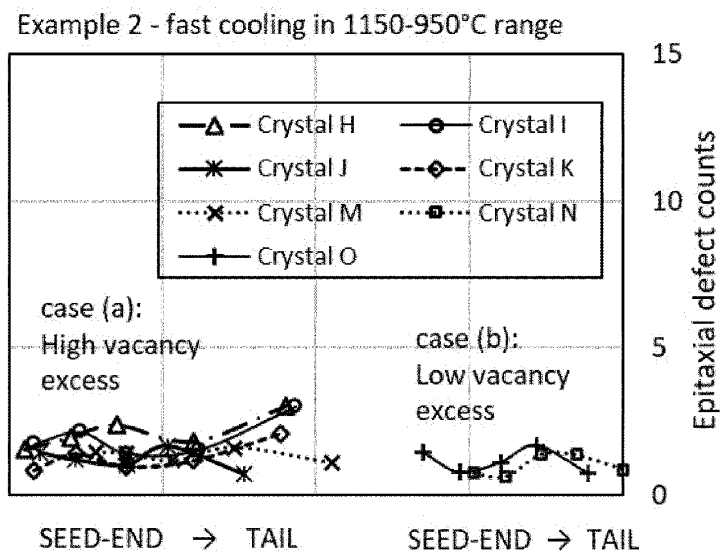


FIG. 5

(57) Abstract: Methods for preparing single crystal silicon substrates for epitaxial growth are disclosed. The methods may involve control of the (i) a growth velocity, v , and/or (ii) an axial temperature gradient, G , during the growth of an ingot segment such that v/G is less than a critical v/G and/or is less than a value of v/G that depends on the boron concentration of the ingot. Methods for preparing epitaxial wafers are also disclosed.

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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))*