



- (51) **International Patent Classification:**
G06T 7/00 (2017.01) *G06T 7/11* (2017.01)
- (21) **International Application Number:**
PCT/EP2024/060361
- (22) **International Filing Date:**
17 April 2024 (17.04.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/496,830 18 April 2023 (18.04.2023) 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, 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.

- (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,

- (54) **Title:** SYSTEMS AND METHODS FOR MICROVOID ANALYSIS IN CRYSTALS GROWN BY CONTINUOUS CZOCHRALSKI PULLERS

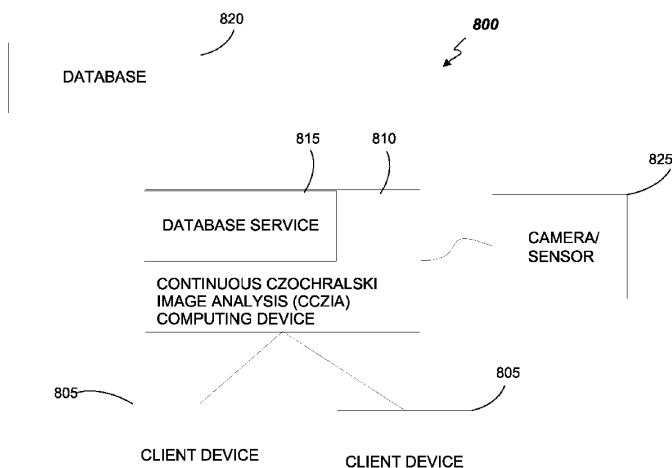


FIGURE 8

- (57) **Abstract:** A computer device includes at least one processor in communication with at least one memory device. The at least one processor is programmed to: a) receive at least one image of a silicon melt of a crystal in a crucible; b) execute a model trained to segment the at least one image into different classes; c) analyze segmentation to determine a quality of the crystal; and/or d) approve or reject the crystal based upon the analysis.

[Continued on next page]

WO 2024/218120 A1

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))