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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 July 2023 (13.07.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/131952 A1

(51) International Patent Classification:
H04L 9/08 (2006.01)

(21) International Application Number:
PCT/IL2023/050018

(22) International Filing Date:
05 January 2023 (05.01.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/296,536 05 January 2022 (05.01.2022) 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, 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: SYSTEM AND METHOD OF CALIBRATING AND TESTING A QKD TRANSMITTER

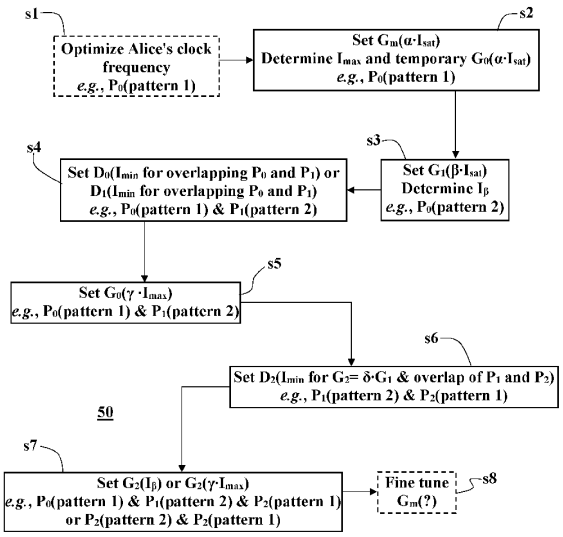


Fig. 5A

(57) Abstract: A QKD transmitter configured to generate a plurality of pulse signals, wherein voltage polarity of at least one of the plurality of pulse signals is opposite to a voltage polarity of at least another one of said plurality of pulse signals, combine the plurality of pulse signals and generate therefrom a light-modulating signal, modulate light signals by the light-modulating signal, measure the modulated light signals and generate measurement data indicative thereof, and adjust at least one of amplitude and delay time of at least some of the plurality of pulse signals for transmission of a desired quantum communication state.

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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))*