

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
12 January 2023 (12.01.2023)



(10) International Publication Number
WO 2023/283214 A1

- (51) International Patent Classification:
G16H 20/13 (2018.01) *B65B 5/10* (2006.01)
- (21) International Application Number:
PCT/US2022/036173
- (22) International Filing Date:
06 July 2022 (06.07.2022)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
63/218,704 06 July 2021 (06.07.2021) US
- (71) Applicant: **10XBETA** [US/US]; Bldg. 128 New Lab, 19 Morris Ave., Brooklyn, NY 11205 (US).
- (72) Inventor: **KRUGER, Frederick Zacharias**; c/o 10xBeta, Bldg. 128 New Lab, 19 Morris Ave., Brooklyn, NY 11205 (US).
- (74) Agent: **TURNER, Ginger G.**; Troutman Pepper Hamilton Sanders LLP, 600 Peachtree Street, N.E., Suite 3000, Atlanta, GA 30308 (US).
- (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, 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,

(54) Title: SMART PILL DISPENSER PRESCRIPTION TREATMENT SYSTEM

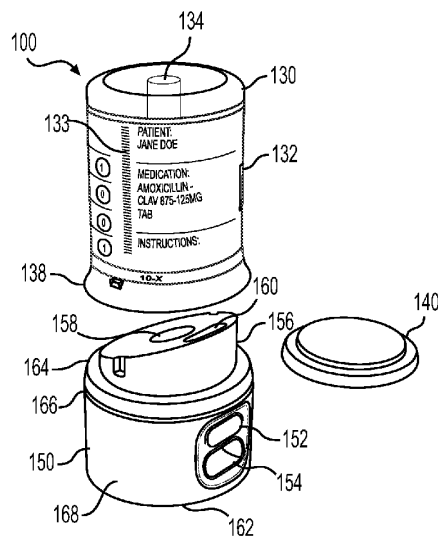


FIG. 1A

(57) Abstract: A securable and trackable pill dispenser assembly, a system for tracking and administering medication with the pill dispenser assembly, and related methods are presented herein. The pill dispenser assembly can include a tamper resistant cartridge and a smart pill dispensing portion. The pill dispensing portion of the pill dispenser assembly can be configured to authenticate a patient to the pill dispenser assembly and dispense medication according to a prescription accessible to the dispenser portion. The patient may be able to separate the cartridge from the dispenser portion at the end of a prescription period and mate a new cartridge to the dispenser portion for a new prescription period. The cartridge can be filled by a dispensing pharmacy and/or a pharmaceutical partner and delivered to the patient. The cartridge can inhibit extraction of medication when not mated to the dispensing portion.

[Continued on next page]

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, 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))