

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
06 July 2023 (06.07.2023)



(10) International Publication Number
WO 2023/130049 A1

- (51) **International Patent Classification:**
C12Q 1/6813 (2018.01) *C12Q 1/6869* (2018.01)
- (21) **International Application Number:**
PCT/US2022/082594
- (22) **International Filing Date:**
29 December 2022 (29.12.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/294,964 30 December 2021 (30.12.2021) US
- (71) **Applicant: SOMALOGIC OPERATING CO., INC.**
[US/US]; 2945 Wilderness Place, Boulder, Colorado 80301 (US).
- (72) **Inventors: ZICHI, Dom;** c/o SomaLogic Operating Co., Inc., 2945 Wilderness Place, Boulder, Colorado 80301 (US). **WEISS, Allison;** c/o SomaLogic Operating Co., Inc., 2945 Wilderness Place, Boulder, Colorado 80301 (US). **SEGHETTI, David;** c/o SomaLogic Operating Co., Inc., 2945 Wilderness Place, Boulder, Colorado 80301 (US). **JENKO, Kathryn;** c/o SomaLogic Operating Co., Inc., 2945 Wilderness Place, Boulder, Colorado 80301 (US).

(74) **Agent: MONDLOCH, Erin;** Kolitch Romano Dascenzo Gates LLC, 621 SW Morrison St., Ste. 1100, Portland, Oregon 97205 (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, 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, 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).

(54) **Title:** NEXT-GENERATION SEQUENCING FOR PROTEIN MEASUREMENT

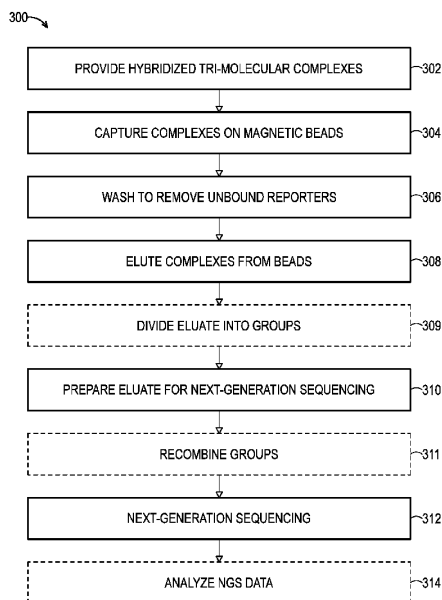


FIG. 3A

(57) **Abstract:** Methods of detecting and quantifying target molecules, such as proteins, in a biological sample are provided. The disclosed methods include capturing target molecules with aptamers, replacing the aptamers with aptamer identification sequences, and then sequencing the aptamer identification sequences using next-generation sequencing techniques.

WO 2023/130049 A1

[Continued on next page]

Published:

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