



(51) International Patent Classification:
C12Q 1/6834 (2018.01)

(21) International Application Number:
PCT/US2022/017377

(22) International Filing Date:
22 February 2022 (22.02.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/152,709 23 February 2021 (23.02.2021) US
63/196,834 04 June 2021 (04.06.2021) US
63/235,487 20 August 2021 (20.08.2021) US
63/251,446 01 October 2021 (01.10.2021) 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, 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,

(54) Title: PROBE-BASED ANALYSIS OF NUCLEIC ACIDS AND PROTEINS

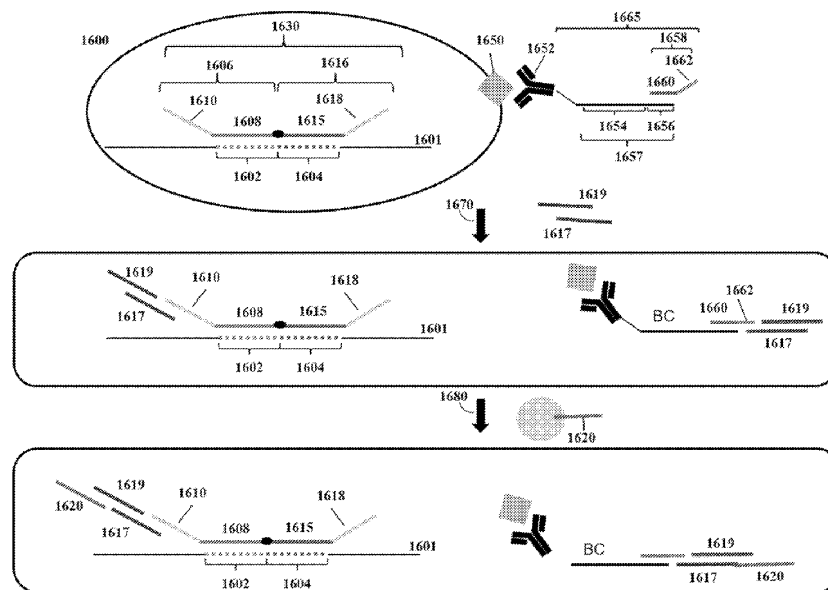


FIG. 16A

(57) Abstract: Provided herein are systems and methods for processing biomolecules (e.g., nucleic acid molecules, proteins) from a sample. A method for processing biomolecules may comprise hybridizing a probe molecule to a target region of a nucleic acid molecule (e.g., a ribonucleic acid (RNA) molecule) and barcoding the probe-nucleic acid molecule complex or derivatives thereof. Such a method can comprise performing a nucleic acid reaction, e.g., extension, denaturation, and amplification. A method for processing a sample may comprise hybridizing probes to (i) target regions of a nucleic acid molecule (e.g., RNA molecule) and (ii) a reporter oligonucleotide of a feature binding group, and barcoding the probe-associated molecules. One or more processes of the methods described herein may be performed within a partition, such as a droplet or well.

[Continued on next page]

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, 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))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*