

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
10 March 2022 (10.03.2022)



(10) International Publication Number
WO 2022/051485 A2

(51) International Patent Classification:
C12Q 1/682 (2018.01)

Published:

— without international search report and to be republished
upon receipt of that report (Rule 48.2(g))

(21) International Application Number:
PCT/US2021/048854

(22) International Filing Date:
02 September 2021 (02.09.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/073,635 02 September 2020 (02.09.2020) US

(71) Applicant: MESO SCALE TECHNOLOGIES, LLC.
[US/US]; 1601 Research Boulevard, Rockville, Maryland
20850 (US).

(72) Inventors: KENTEN, John; 21021 Sugar Ridge Terrace,
Boyd's, Maryland 20841 (US). NIKOLENKO, Galina;
24228 Preakness Drive, Damascus, Maryland 20872 (US).
HARKINS, Seth B.; 6114 Temple Street, Bethesda, Mary-
land 20817 (US). BREAK, Timothy J.; 11715 Emerald
Green Drive, Clarksburg, Maryland 20871 (US).

(74) Agent: BOUCHEZ, Cynthia M.; 8201 Greensboro Drive,
Suite 1060, McLean, Virginia 22102 (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, 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, 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, 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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii))

(54) Title: KITS FOR DETECTING ONE OR MORE TARGET ANALYTES IN A SAMPLE AND METHODS OF MAKING AND
USING THE SAME

(57) Abstract: Oligonucleotides, methods and kits are provided for detecting, identifying or quantifying one or more target analytes in
a sample as well as methods for immobilizing oligonucleotides onto a support surface.



WO 2022/051485 A2