

(51) International Patent Classification:

C12N 15/09 (2006.01) C12Q 1/6855 (2018.01)
C12Q 1/68 (2018.01) C12Q 1/6874 (2018.01)

(21) International Application Number:

PCT/US2023/073958

(22) International Filing Date:

12 September 2023 (12.09.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/405,733 12 September 2022 (12.09.2022) 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, MU, 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, SC, 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,

(54) Title: DOUBLE-STRANDED SPLINT ADAPTORS WITH UNIVERSAL LONG SPLINT STRANDS AND METHODS OF USE

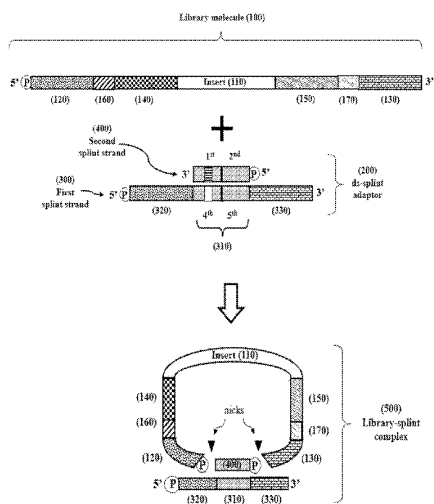


FIG. 7A

(57) Abstract: The present disclosure provides compositions comprising nucleic acid double-stranded splint adaptors, including kits, and methods that employ the double-stranded splint adaptors. The double-stranded splint adaptor (200) can be used in a one-pot, multi-enzyme reaction to introduce one or more new adaptor sequences into a library molecule. The double-stranded splint adaptor (200) comprises a first splint strand (long splint strand (300)) and a second splint strand (short splint strand (400)), where the first and second splint strands are hybridized together to form the double-stranded splint adaptor (200) having a double-stranded region and two flanking single-stranded regions. The second splint strand (400) carries the new adaptor sequence(s) to be introduced, such as for example a universal binding sequence, an index sequence and/or a random sequence.

[Continued on next page]

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))*

Published:

- *with international search report (Art. 21(3))*
- *with sequence listing part of description (Rule 5.2(a))*