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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,

(54) **Title:** COMPOSITIONS AND METHODS FOR SEQUENCING MULTIPLE REGIONS OF A TEMPLATE MOLECULE USING ENZYME-BASED REAGENTS

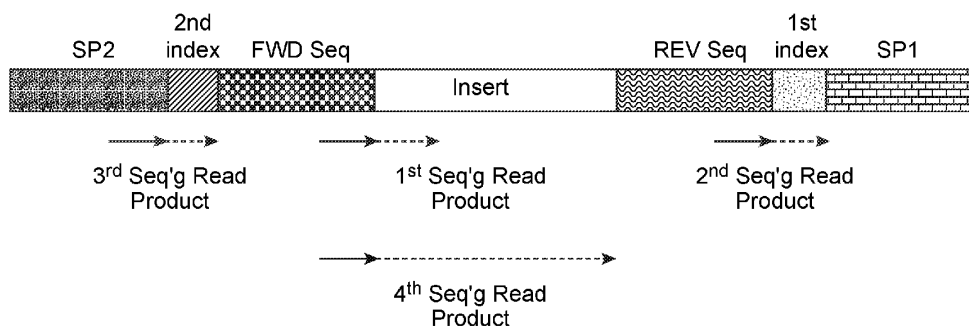


FIG. 4

(57) **Abstract:** The present disclosure provides compositions comprising enzyme-based reagents, and methods using the enzyme-based reagents, for nucleic acid sequencing. The enzyme-based reagents efficiently remove sequencing read products from a first sequenced region of a template molecule, thereby reducing residual signals in a second sequenced region on the same template molecule.

[Continued on next page]

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