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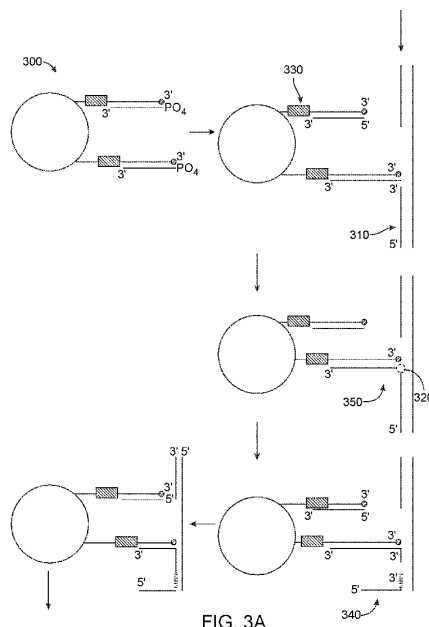
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(54) Title: NICK-LIGATE STLFR



(57) Abstract: This application relates to methods and compositions for preparing a library of polynucleotides for sequencing comprises in a single reaction mixture. The method comprises contacting a double-stranded target nucleic acid with one or more nicking agents to produce overlapping nucleic acid fragments separated by staggered single-stranded breaks; and contacting a partially double-stranded first adapter with at least one of the nucleic acid fragments in the presence of a ligase, thereby ligating the 5' terminus of the double-stranded region of the first adapter to the 3' terminus of the at least one of the nucleic acid fragments using a DNA ligase via 3' branch ligation. The first adapter comprises (i) a double-stranded blunt end having a 5' terminus and a 3' terminus and (ii) a single-stranded region comprising a barcode.

Declarations under Rule 4.17:

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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