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(54) **Title:** METHODS FOR SEQUENCING BIOPOLYMERS

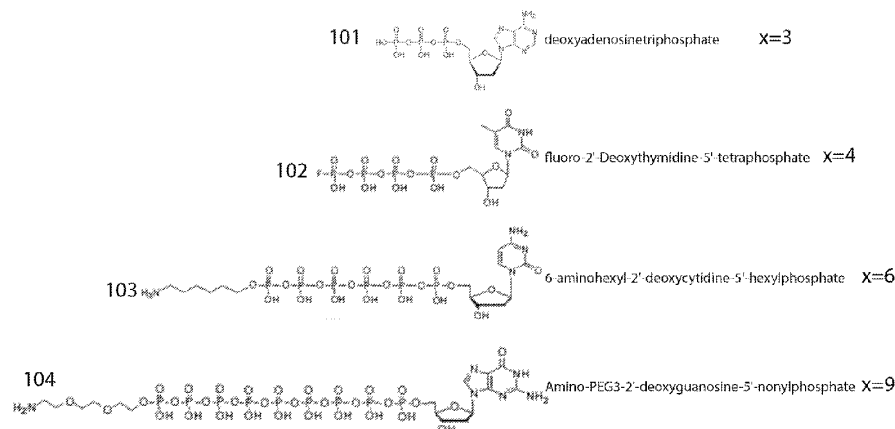


FIG. 1

(57) **Abstract:** The present disclosure provides devices, systems, and methods related to sequencing a biopolymer. In particular, the present disclosure relates to methods for sequencing a polynucleotide using a bioelectronic device that obtains a bioelectronic signature (e.g., current amplitude levels) of polymerase activity based on current fluctuations as complementary nucleotide diphosphate monomers (e.g., having distinct charges) are incorporated into the template polynucleotide.

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