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(54) Title: COMPOSITIONS, DEVICES, SYSTEMS, AND METHODS FOR USING A NANOPORE

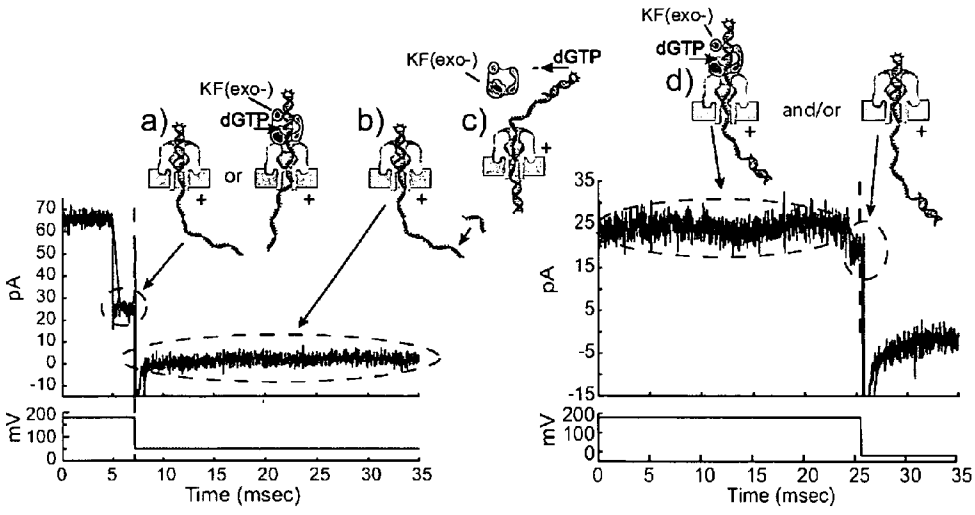


Figure 22

(57) Abstract: The invention herein disclosed provides for devices and methods that can detect and control an individual polymer in a mixture is acted upon by another compound, for example, an enzyme, in a nanopore. The devices and methods are also used to determine rapidly (~ >50 Hz) the nucleotide base sequence of a polynucleotide under feedback control or using signals generated by the interactions between the polynucleotide and the nanopore. The invention is of particular use in the fields of molecular biology, structural biology, cell biology, molecular switches, molecular circuits, and molecular computational devices, and the manufacture thereof.

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