



US 20060063171A1

(19) **United States**
 (12) **Patent Application Publication** (10) **Pub. No.: US 2006/0063171 A1**
Akeson et al. (43) **Pub. Date: Mar. 23, 2006**

(54) **METHODS AND APPARATUS FOR CHARACTERIZING POLYNUCLEOTIDES**

Related U.S. Application Data

(60) Provisional application No. 60/555,665, filed on Mar. 23, 2004.

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Publication Classification

(51) **Int. Cl.**
C12Q 1/68 (2006.01)
 (52) **U.S. Cl.** **435/6**

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(57) **ABSTRACT**

Systems and methods for analysis of polymers, e.g., polynucleotides, are provided. The systems are capable of analyzing a polymer at a specified rate. One such analysis system includes a structure having a nanopore aperture and a molecular motor, e.g., a polymerase, adjacent the nanopore aperture.

(21) Appl. No.: **11/088,140**

(22) Filed: **Mar. 23, 2005**

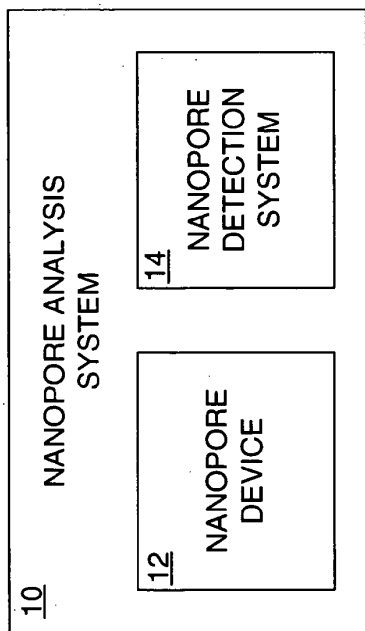


FIG. 1

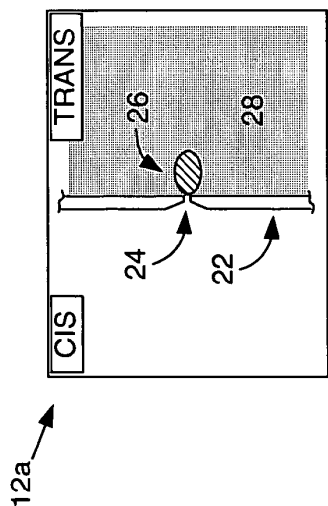


FIG. 2A

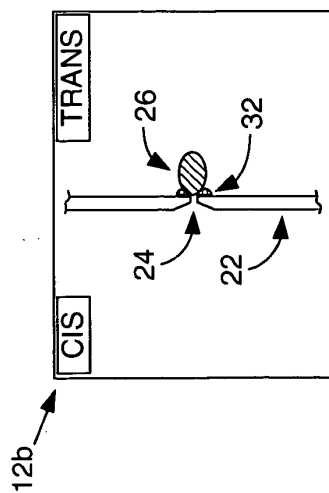


FIG. 2B

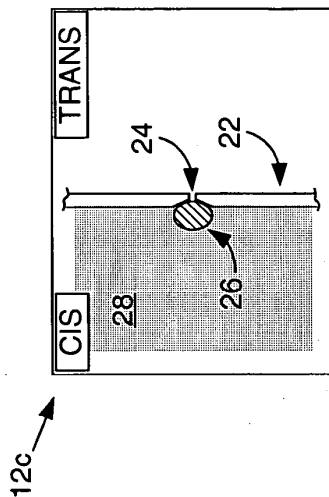


FIG. 2C

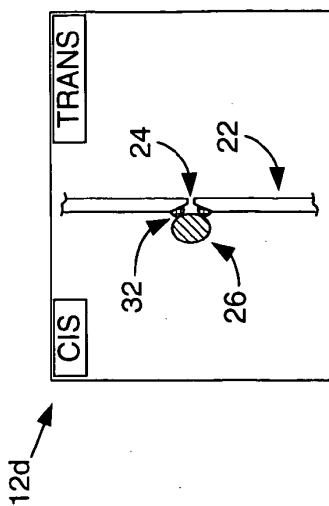


FIG. 2D

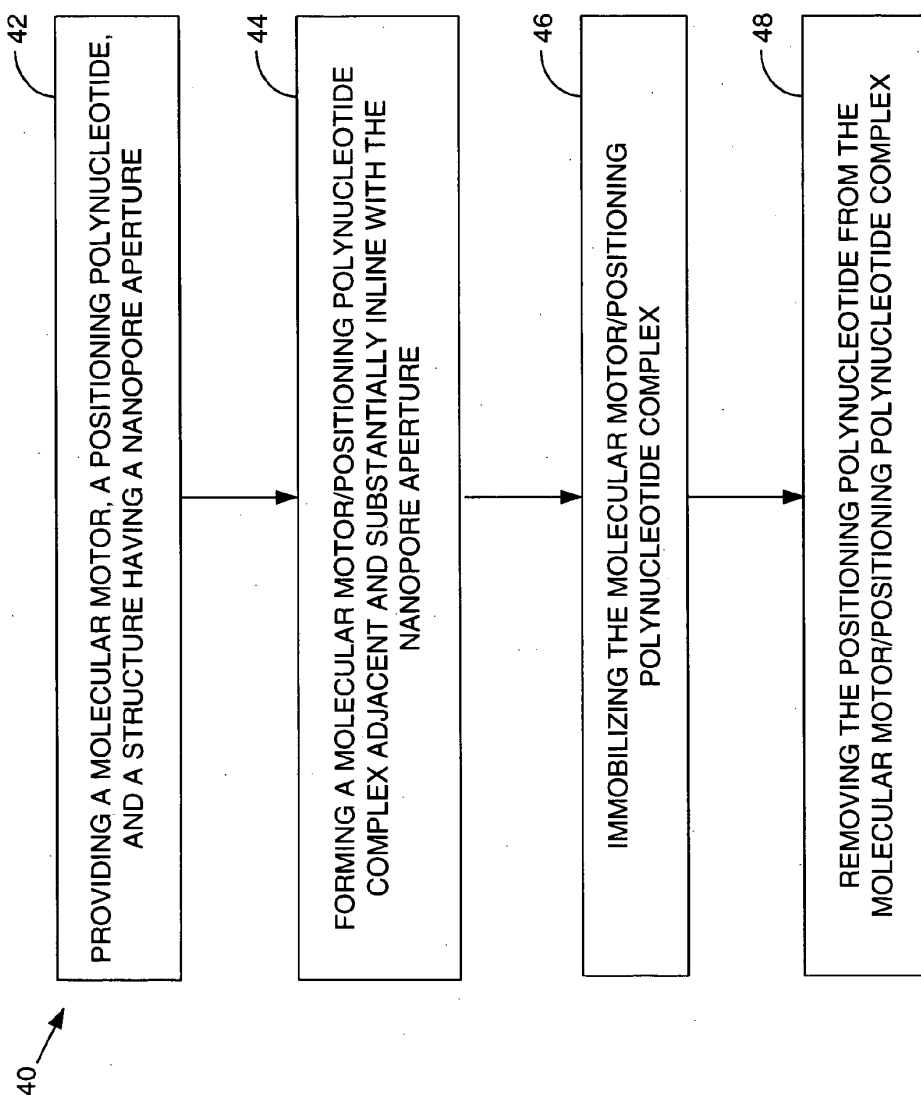


FIG. 3

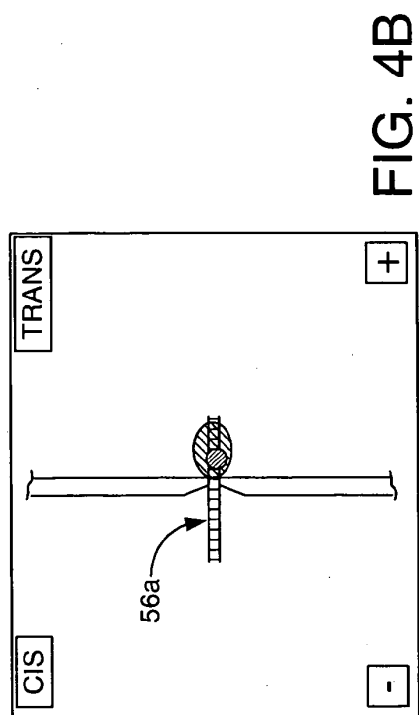


FIG. 4A

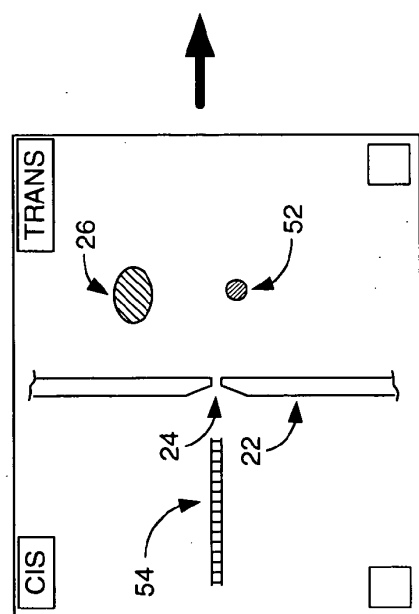


FIG. 4B

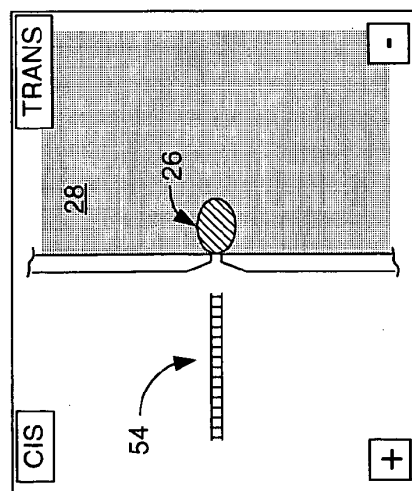


FIG. 4C

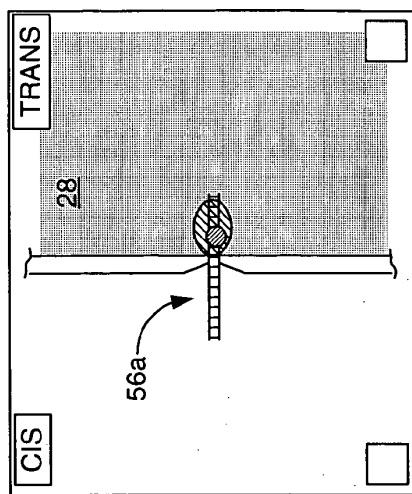


FIG. 4D



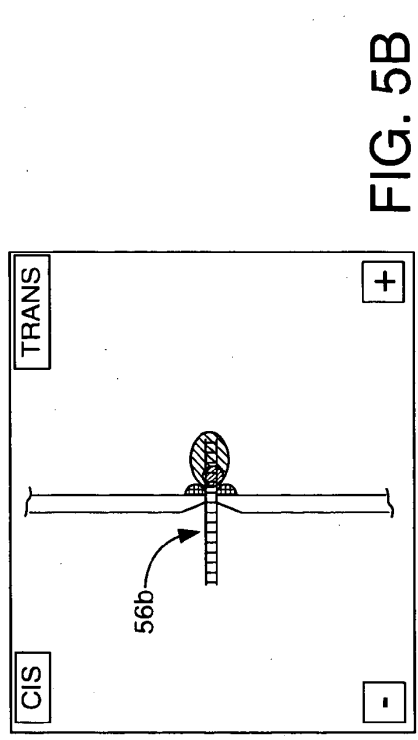


FIG. 5A

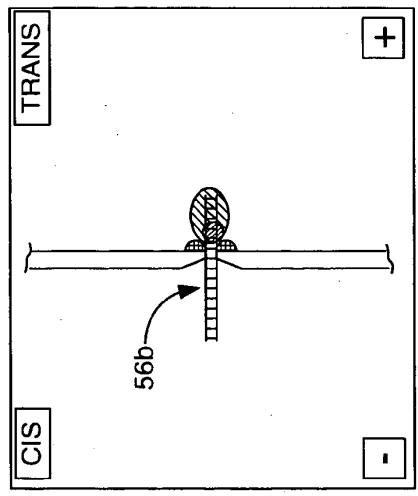


FIG. 5B

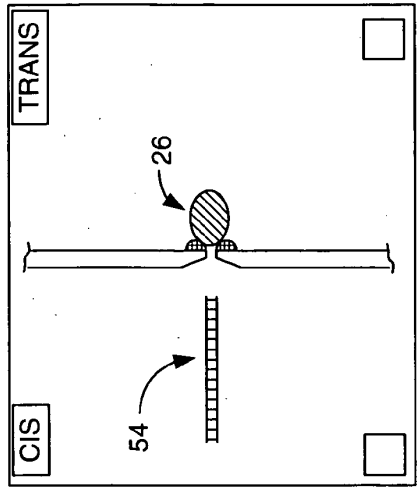


FIG. 5C

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