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(71) Applicant: **PALAMEDRIX, INC.** [US/US]; 11149 N. Torrey Pines Rd., Ste. 220, La Jolla, California 92037 (US).

(72) Inventors: **GOPINATH, Ashwin**; Palamedrix, Inc., 11149 N. Torrey Pines Rd., Ste. 220, La Jolla, California 92037 (US). **ROTHEMUND, Paul**; Palamedrix, Inc., 11149 N. Torrey Pines Rd., Ste. 220, La Jolla, California 92037 (US).

(US). **SHETTY, Rishabh**; Palamedrix, Inc., 11149 N. Torrey Pines Rd., Ste. 220, La Jolla, California 92037 (US). **BOWEN, Shane**; Palamedrix, Inc., 11149 N. Torrey Pines Rd., Ste. 220, La Jolla, California 92037 (US).

(74) Agent: **BAKKER, Jila** et al.; P.O. Box 692289, Houston, Texas 77269 (US).

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(54) Title: SUBSTRATE FOR SINGLE MOLECULE ORGANIZATION

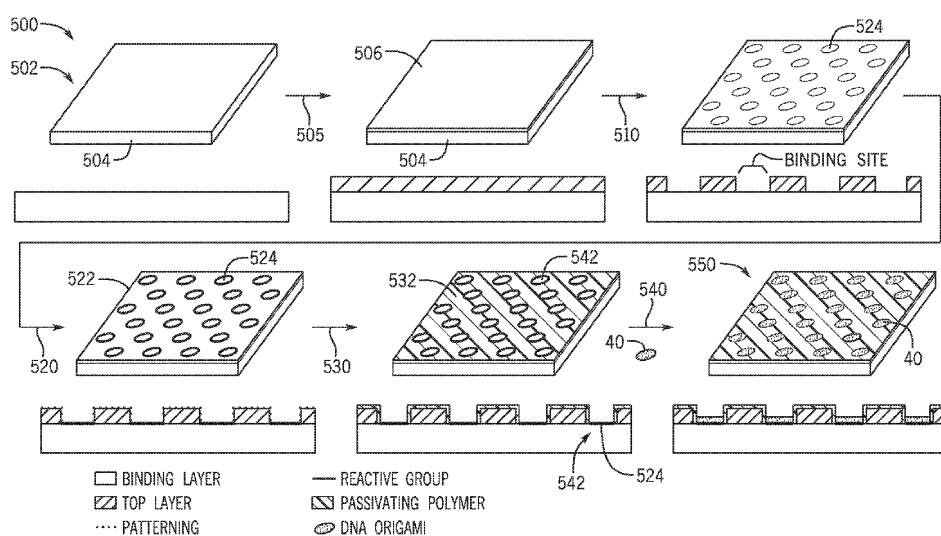


FIG. 14

(57) Abstract: Provided herein are structures and methods for detecting one or more analyte molecules 44 present in a sample. In some embodiments, the one or more analyte molecules 44 are detected using one or more supramolecular structures 40 that are coupled to a substrate, e.g., a solid support. In some embodiments, the supramolecular structures 40 are bi-stable, wherein the supramolecular structures 40 transition from an unstable state to a stable state through interaction with one or more analyte molecules 44 from the sample. In some embodiments, the stable state supramolecular structures 40 are configured to provide a signal for analyte molecule detection and quantification.

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