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(54) Title: SUBSTRATE FOR SINGLE MOLECULE ORGANIZATION

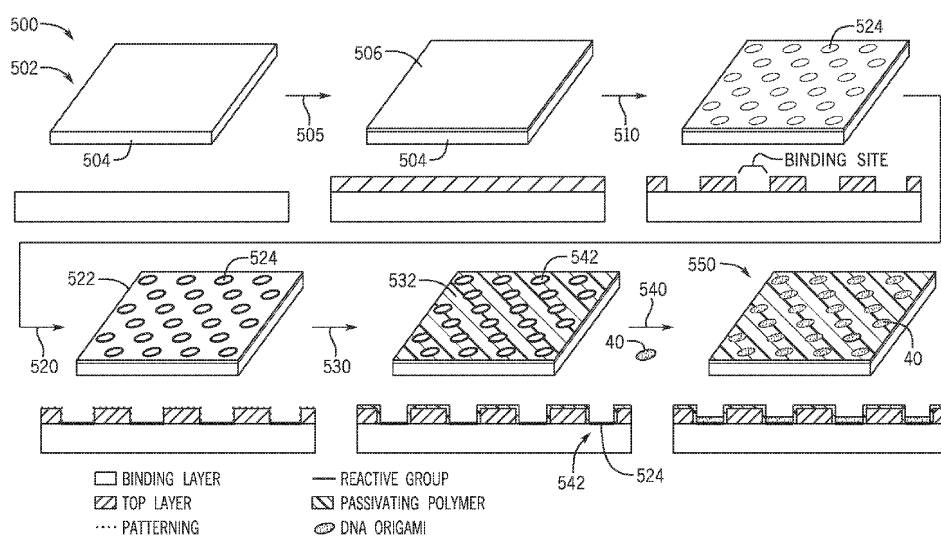


FIG. 14

(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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