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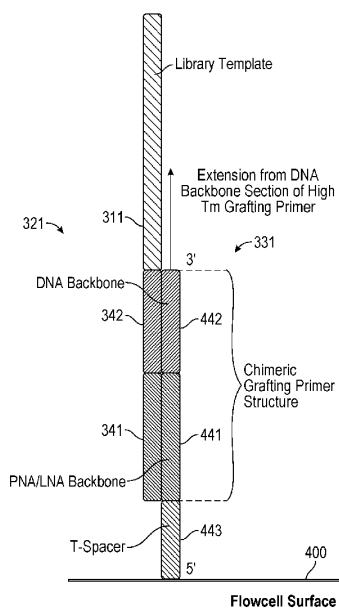


FIG. 4

(57) Abstract: A composition for capturing target polynucleotides at a surface of a substrate is provided. The composition may include a plurality of capture primers coupled to the surface of the substrate and including modified nucleic acids; and a plurality of orthogonal capture primers coupled to the surface of the substrate and including modified nucleic acids. The modified nucleic acids of the capture primers may include locked nucleic acid (LNA), peptide nucleic acid (PNA), or super T. The modified nucleic acids of the orthogonal capture primers may include locked nucleic acid (LNA), peptide nucleic acid (PNA), or super T.

WO 2022/140254 A1