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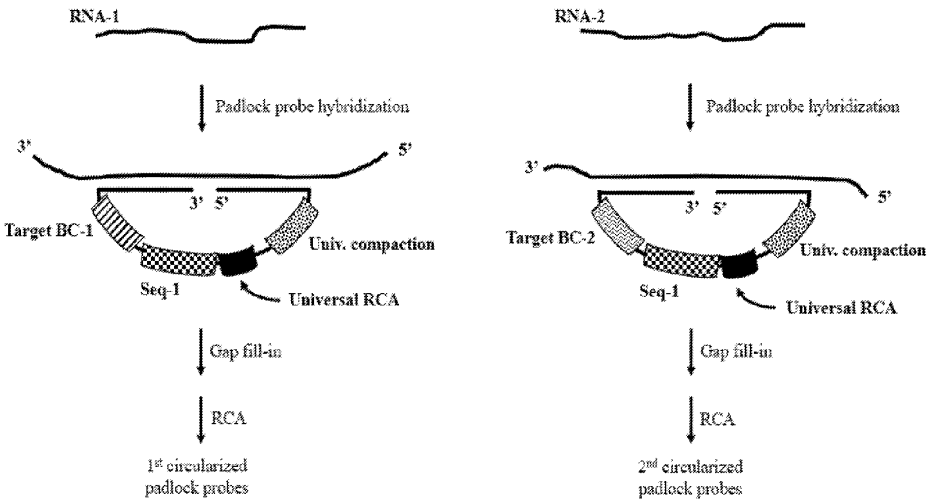

FIG. 28

(57) Abstract: Binding complexes including a detectable nucleotide conjugate having a plurality of copies of a nucleotide attached to the particle are described. The binding complexes allow one to localize detectable signals to active regions of biochemical interaction, e.g., sites of protein-protein interaction, protein-nucleic acid interaction, nucleic acid hybridization, or enzymatic reaction, and can be used to identify sites of base incorporation in elongating nucleic acid chains during polymerase reactions and to provide improved base discrimination for sequencing and array-based applications.

WO 2025/170937 A1

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