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(54) Title: NUCLEIC ACID CONCATEMERS AND METHODS FOR STABILIZING AND/OR COMPACTING THE SAME

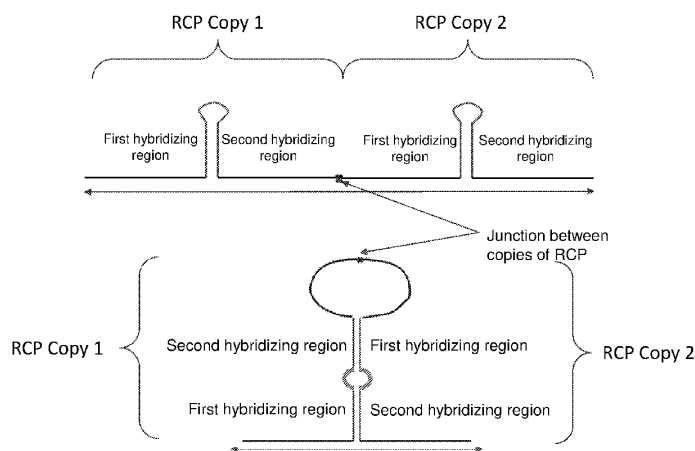


FIG. 3

(57) Abstract: The present disclosure in some aspects relates to methods and compositions for accurately detecting and quantifying multiple analytes present in a biological sample. In some aspects, the methods and compositions provided herein address one or more issues associated with the stability and/or size of nucleic acid structures, such as RCPs, in the biological sample without the use of exogenously added oligonucleotide compaction probes. In some embodiments, provided herein are methods involving the use of self-hybridizing hybridizing regions for compacting and/or stabilizing nucleic acid concatemers (e.g., RCPs). In some embodiments, dynamic inter-strand annealing between tandem units of an RCP is used for compaction and/or stabilization. In some embodiments, short palindromic regions in an RCP are used for compaction and/or stabilization.

[Continued on next page]

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