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(54) Title: METHODS FOR PROCESSING NUCLEIC ACID MOLECULES

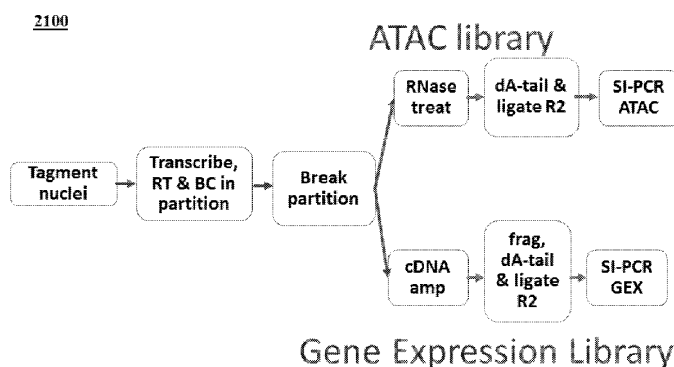


FIG. 21

(57) Abstract: The present disclosure provides methods, systems, and kits for processing nucleic acid molecules. A method may comprise providing a template nucleic acid fragment (e.g., within a cell, cell bead, or cell nucleus) within a partition (e.g., a droplet or well) and subjecting the template nucleic acid fragment to one or more processes including a barcoding process and a single primer extension or amplification process. The processed template nucleic acid fragment may then be recovered from the partition and subjected to further amplification to provide material for subsequent sequencing analysis. The methods provided herein may permit simultaneous processing and analysis of both DNA and RNA molecules originating from the same cell, cell bead, or cell nucleus.

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