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## (54) Title: INTEGRATED SINGLE CELL SEQUENCING

## FRAGMENTATION OF RNA:DNA HYBRID (PT)

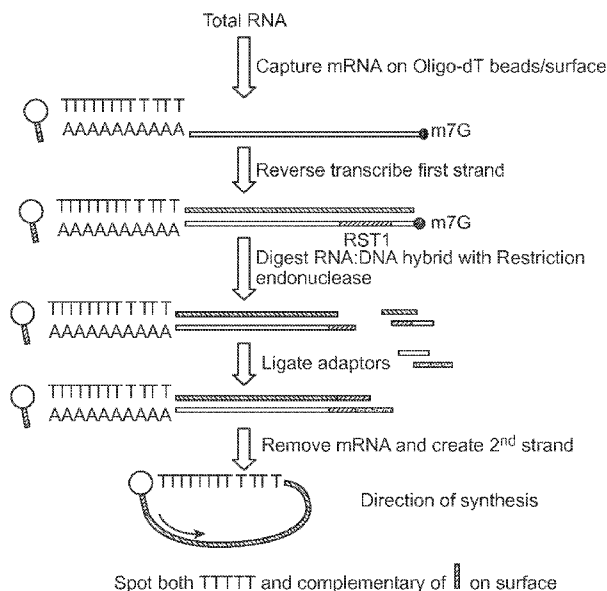


FIG. 1

(57) Abstract: This disclosure provides a method of forming tagged nucleic acid sequences. A target polynucleotide is immobilized on a solid support; a recognition-oligonucleotide is hybridized thereto; the recognition-oligonucleotide-target polynucleotide hybrid is cleaved; and an adapter nucleic acid is ligated to the cleaved target polynucleotide, thereby forming a tagged nucleic acid sequence. Also provided is a method of forming a tagged single stranded cDNA; a method of forming a plurality of tagged heterogeneous nucleic acid sequences; a library of recognition-oligonucleotides; and methods for amplifying a cDNA sequence immobilized on a solid support. These methods and products can be used alone or in combination for integrated single cell sequencing, and can be adapted for use in a microfluidic apparatus or device.



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