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FRAGMENTATION OF RNA:DNA HYBRID (PT)

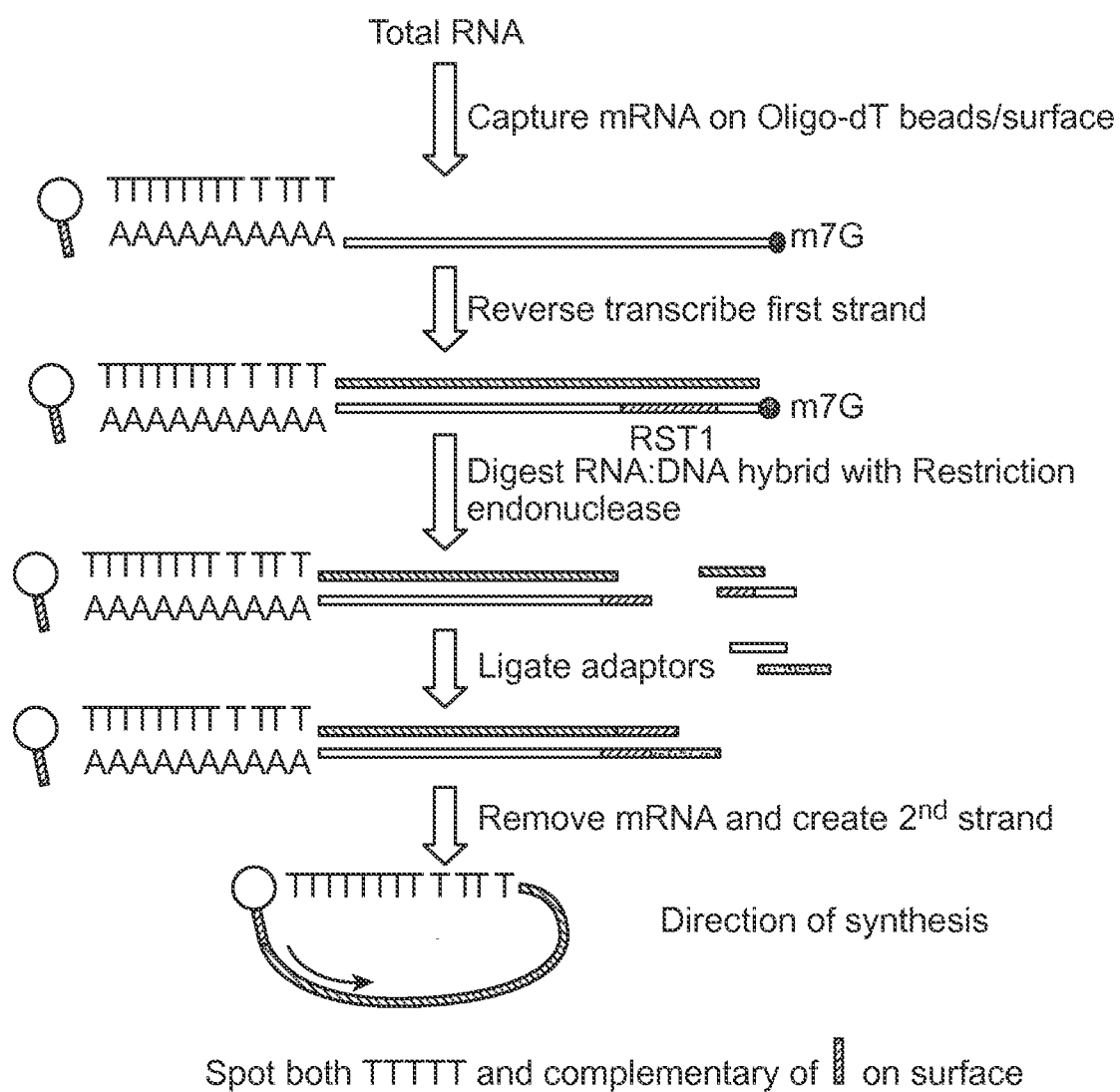


FIG. 1

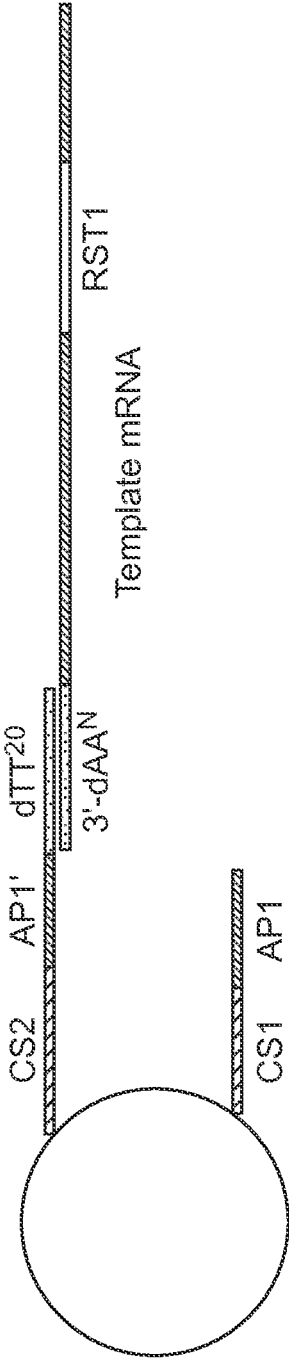


FIG. 2

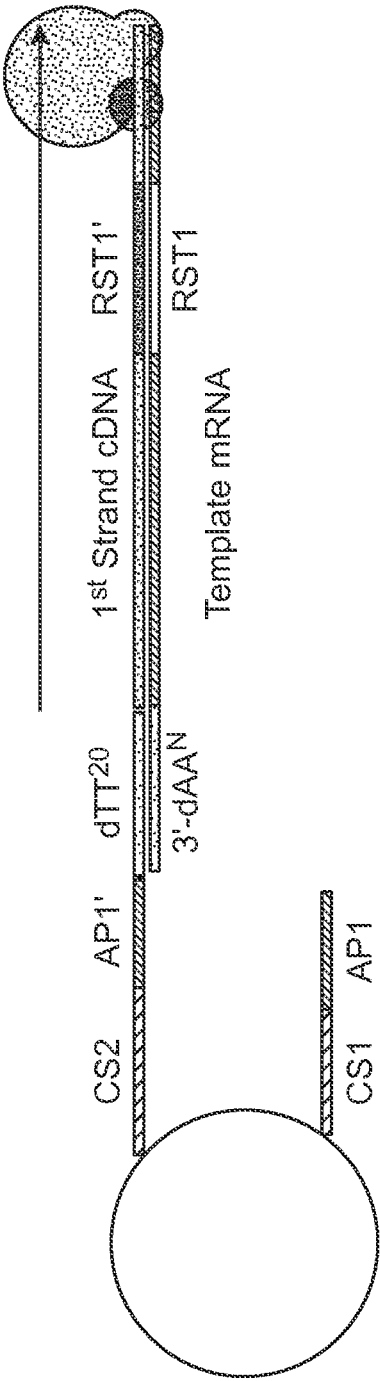


FIG. 3

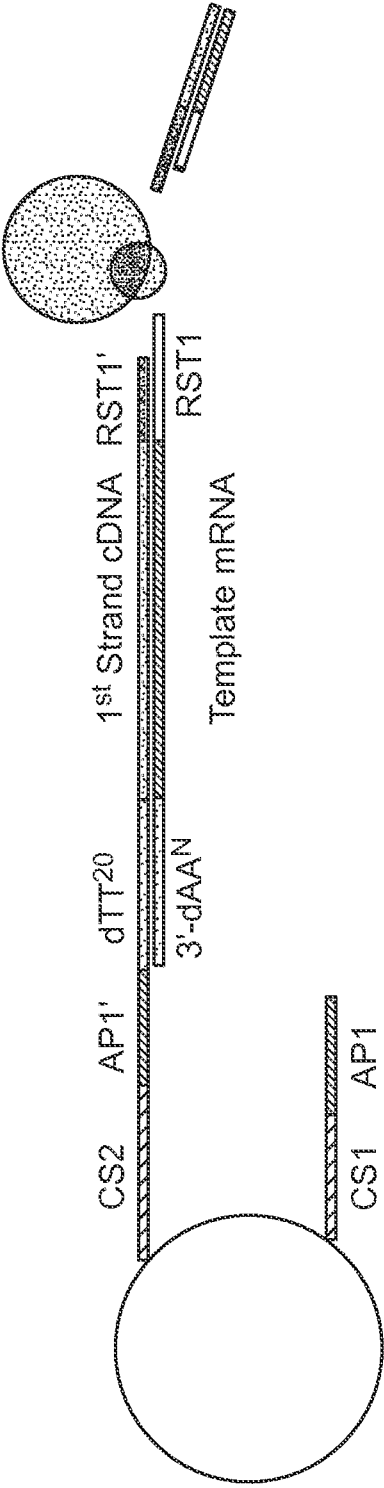


FIG. 4

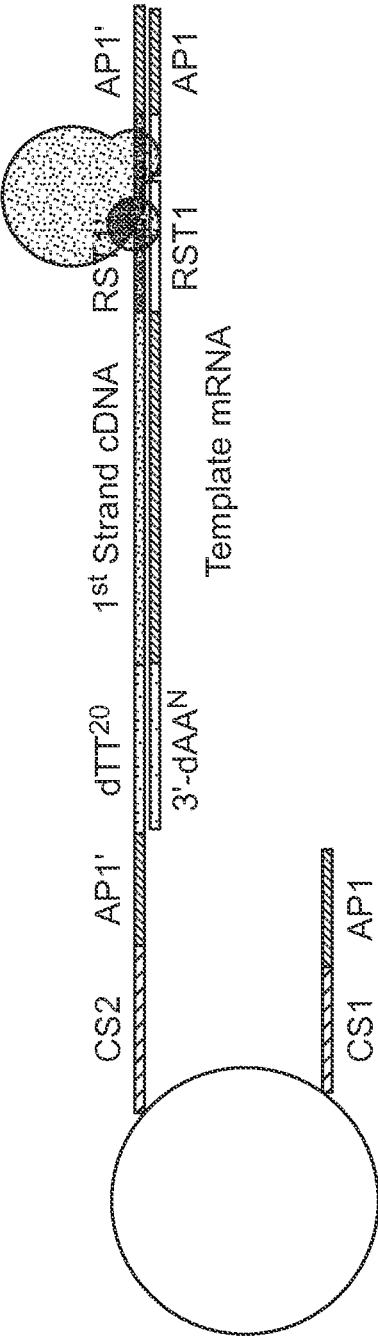


FIG. 5

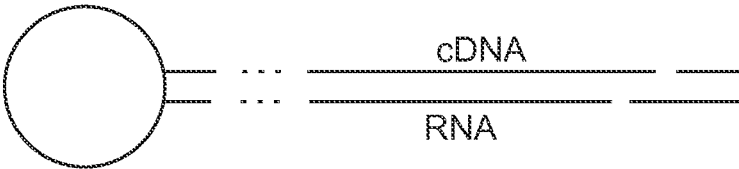


FIG. 6A

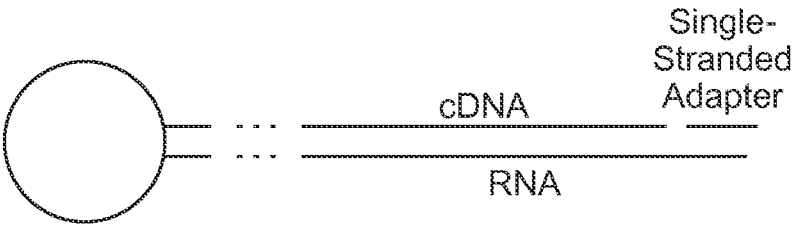


FIG. 6B

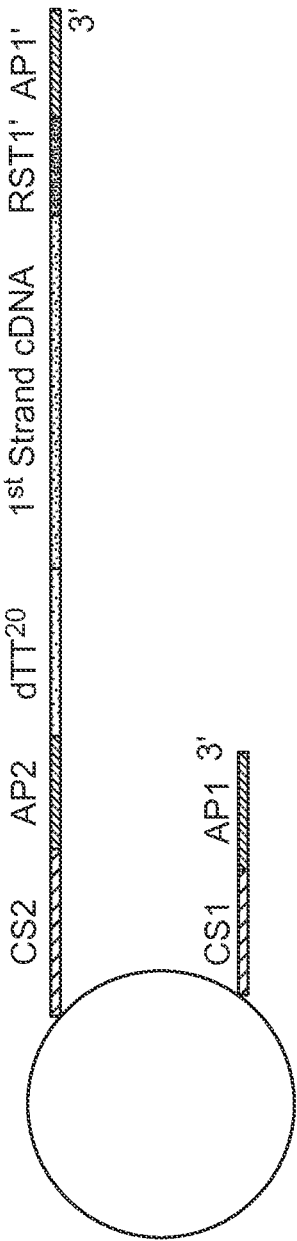


FIG. 7

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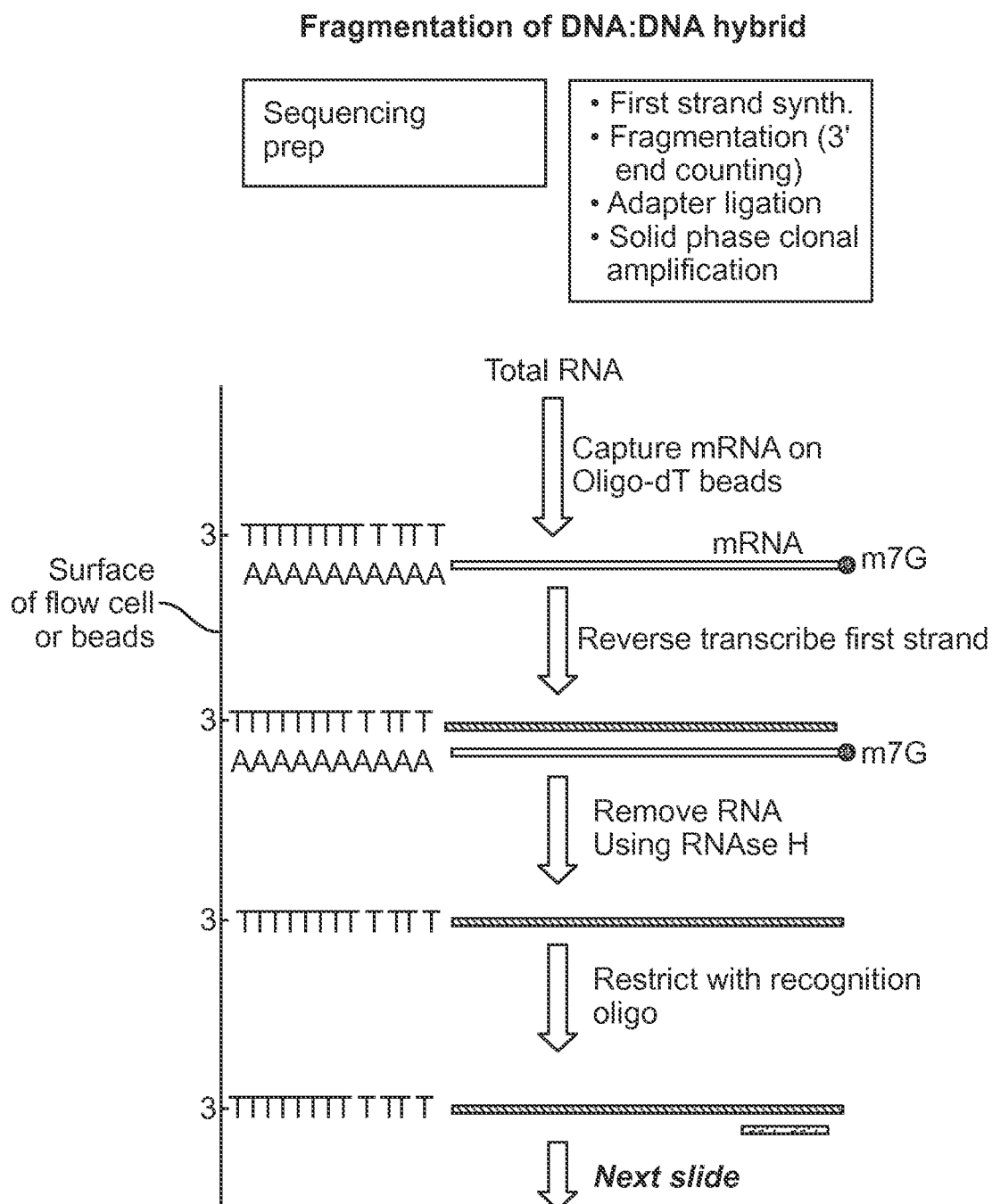


FIG. 8

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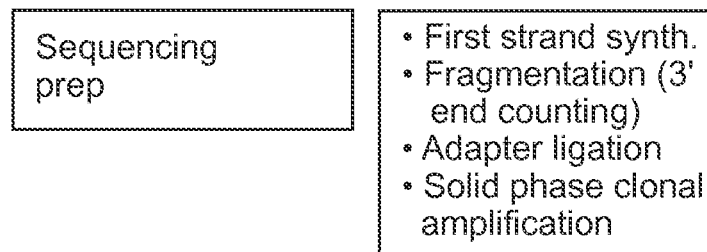
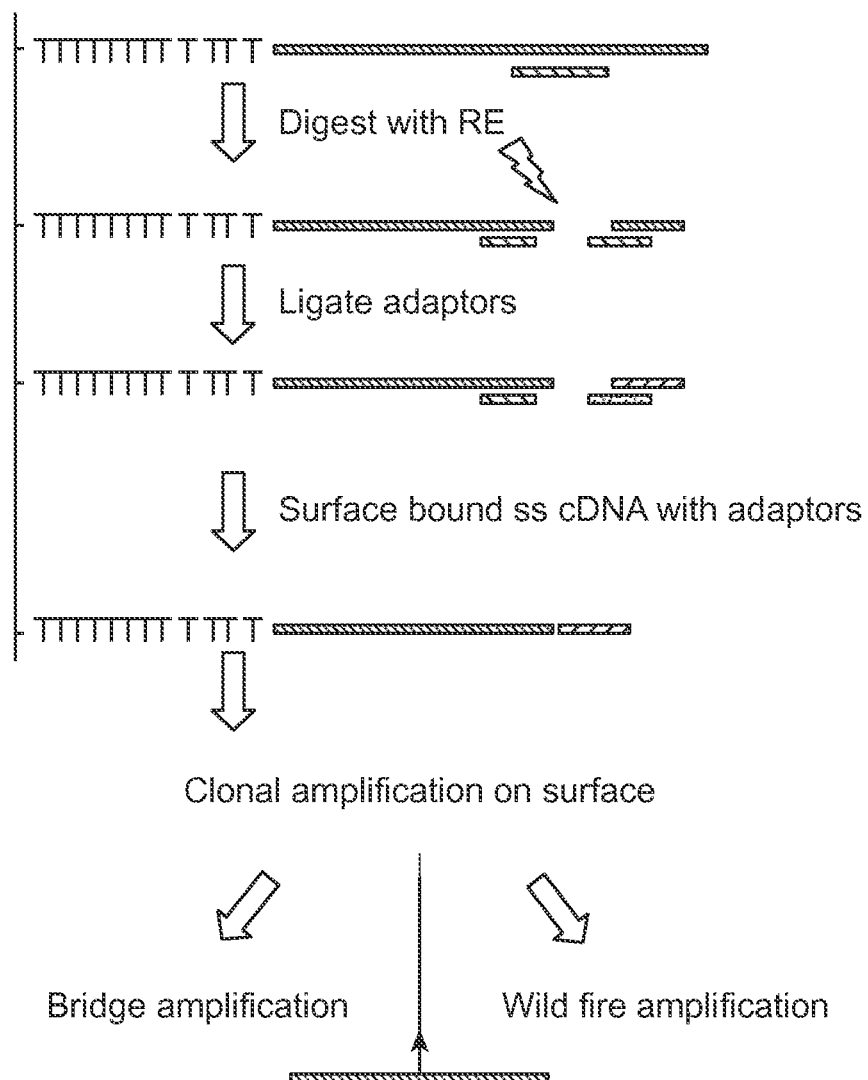
Contd: DNA:DNA hybrid

FIG. 9

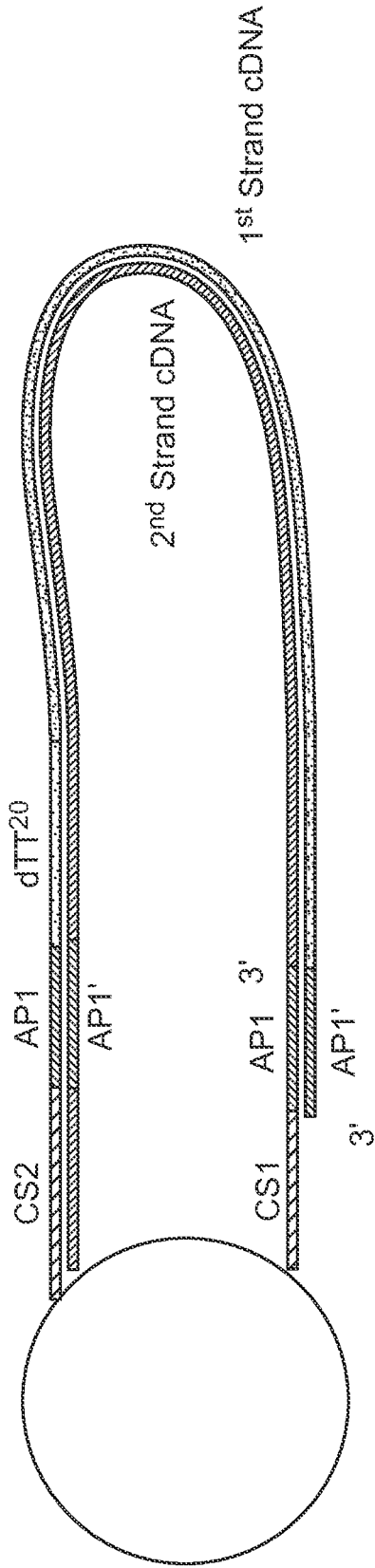


FIG. 10

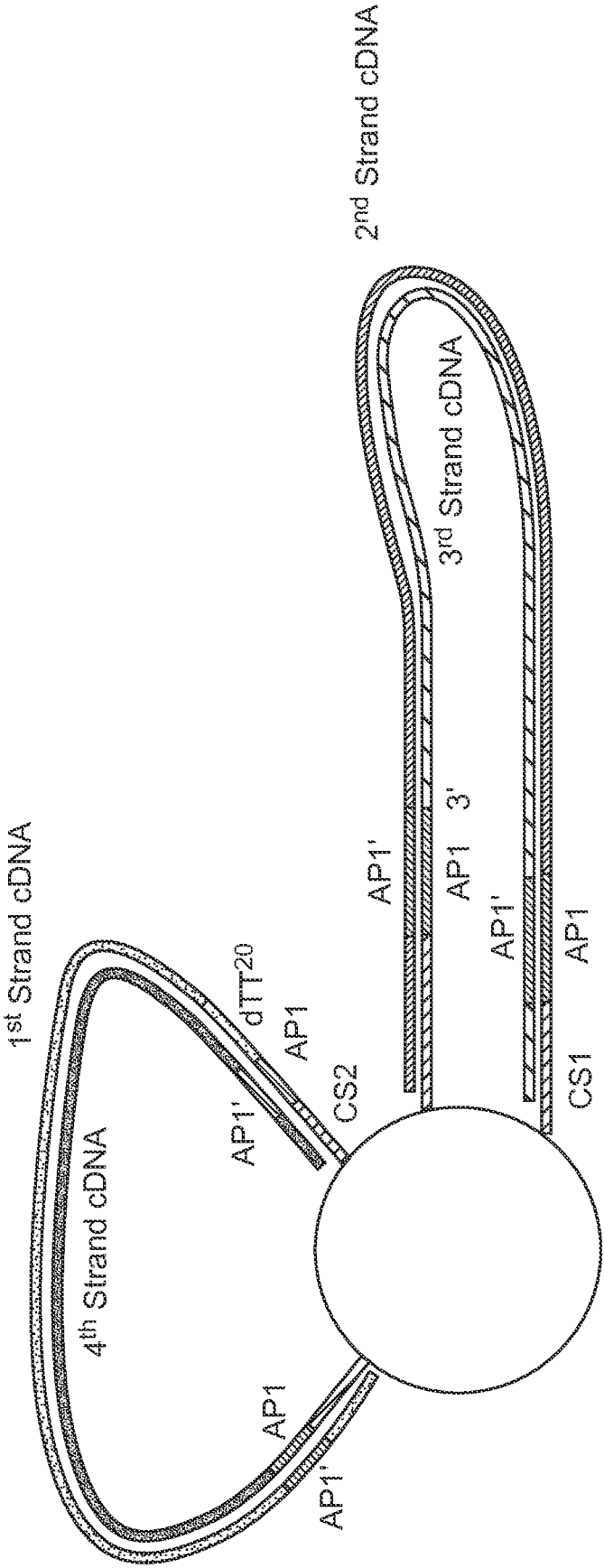


FIG. 11

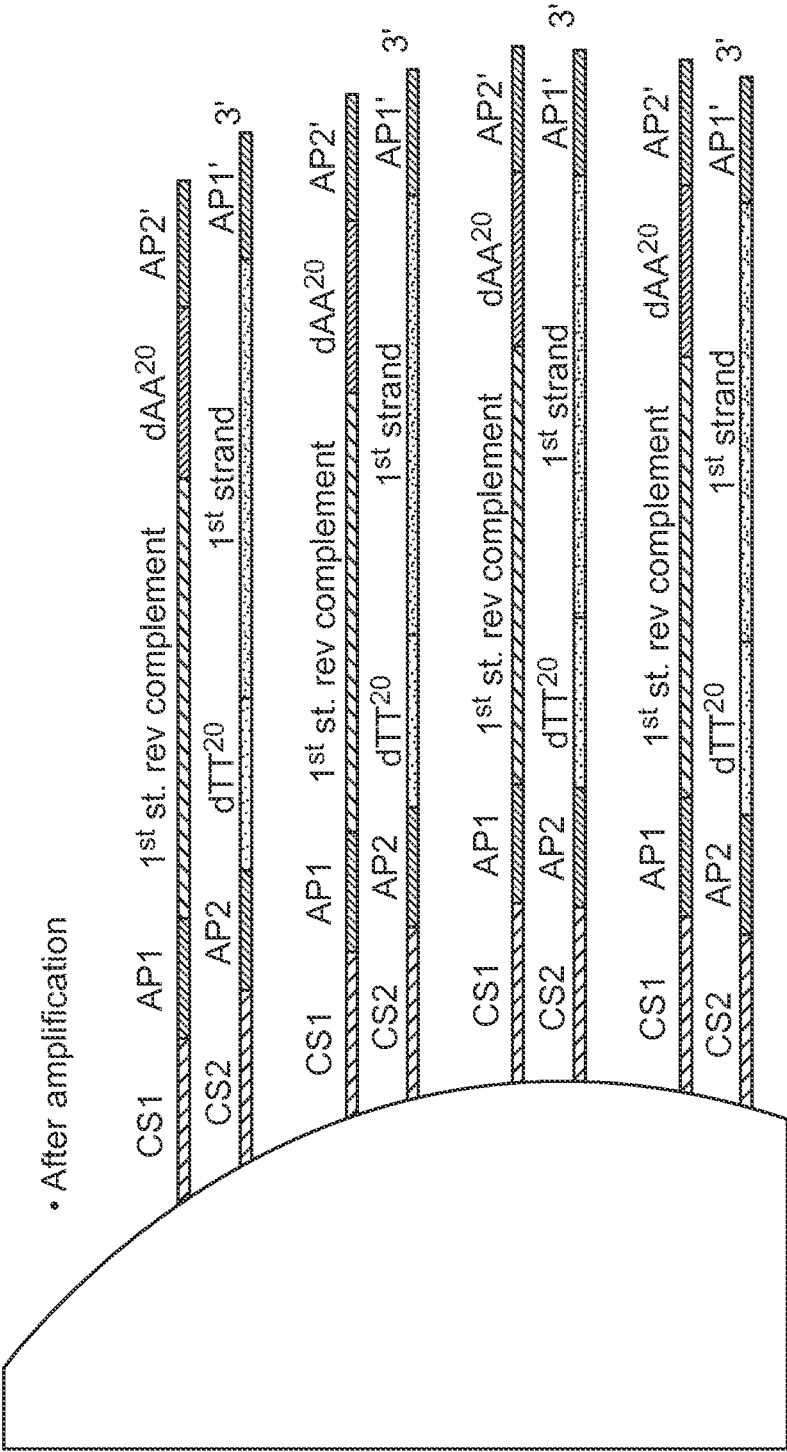


FIG. 12

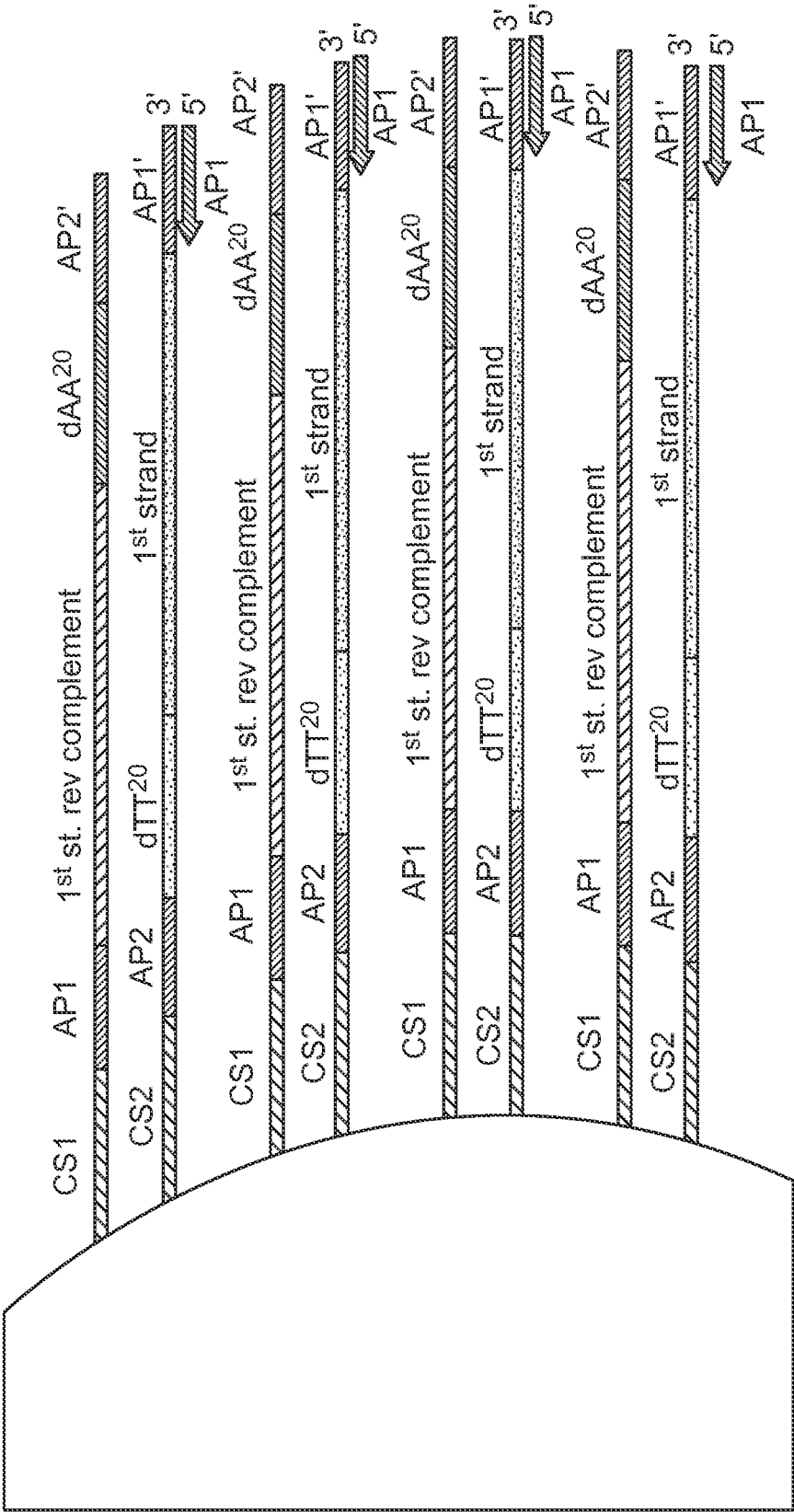
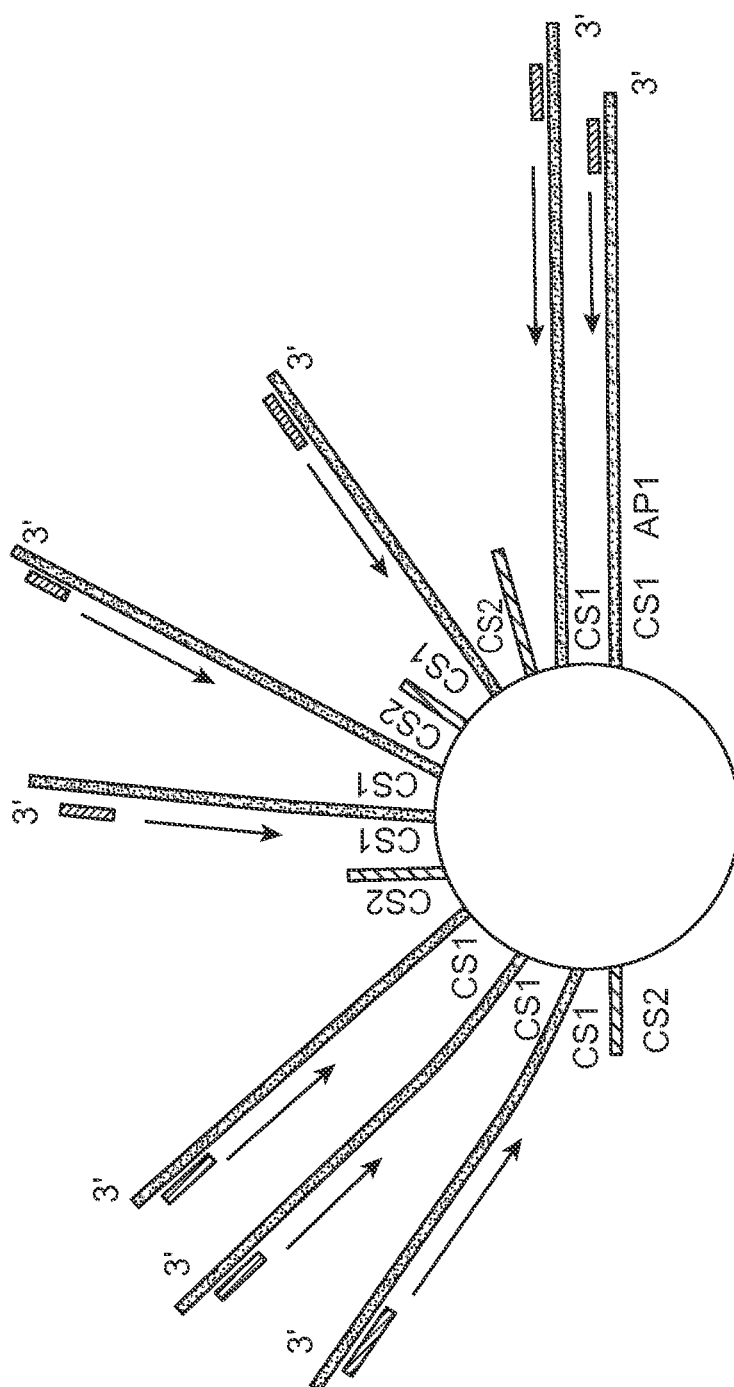


FIG. 13



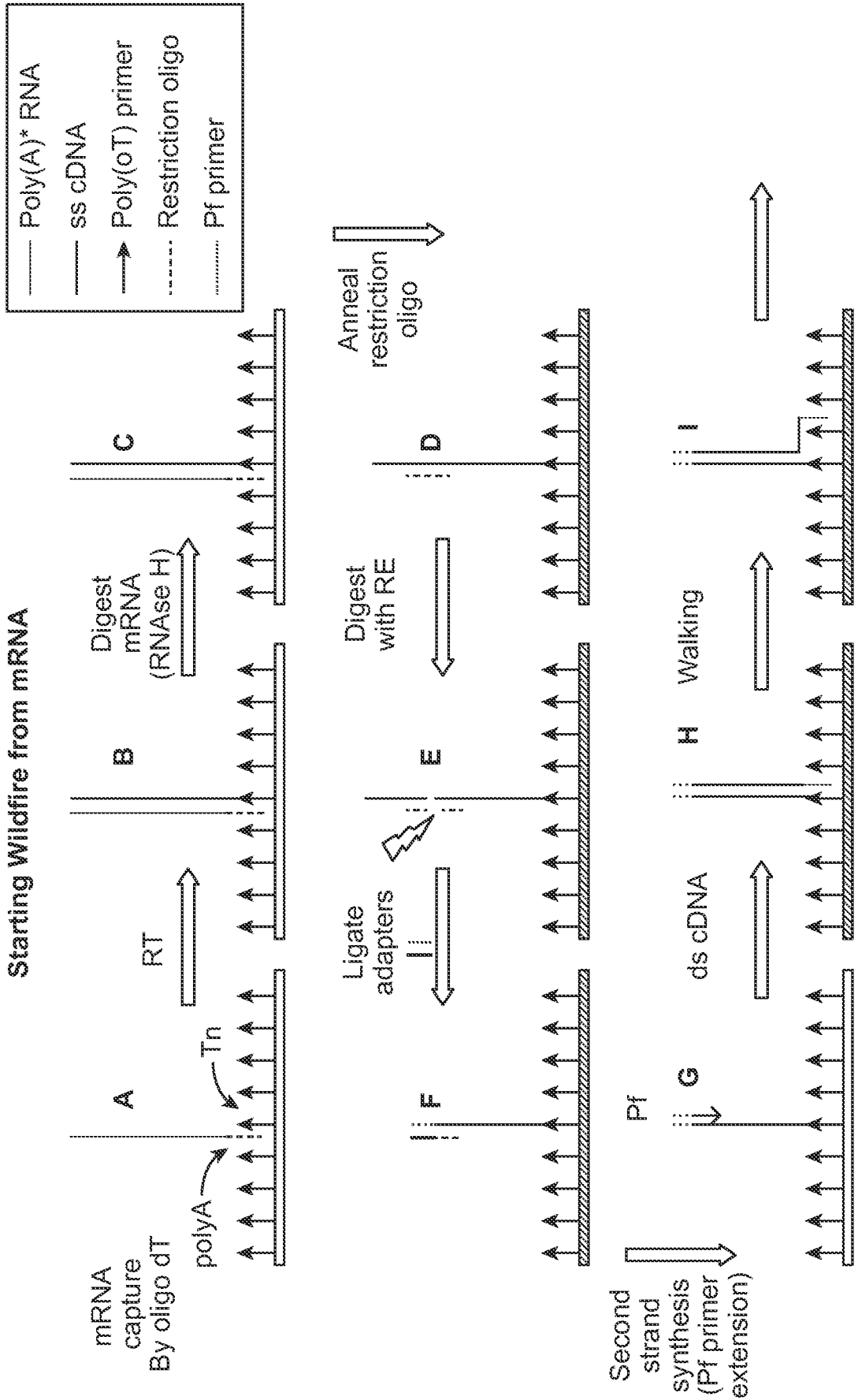


FIG. 15

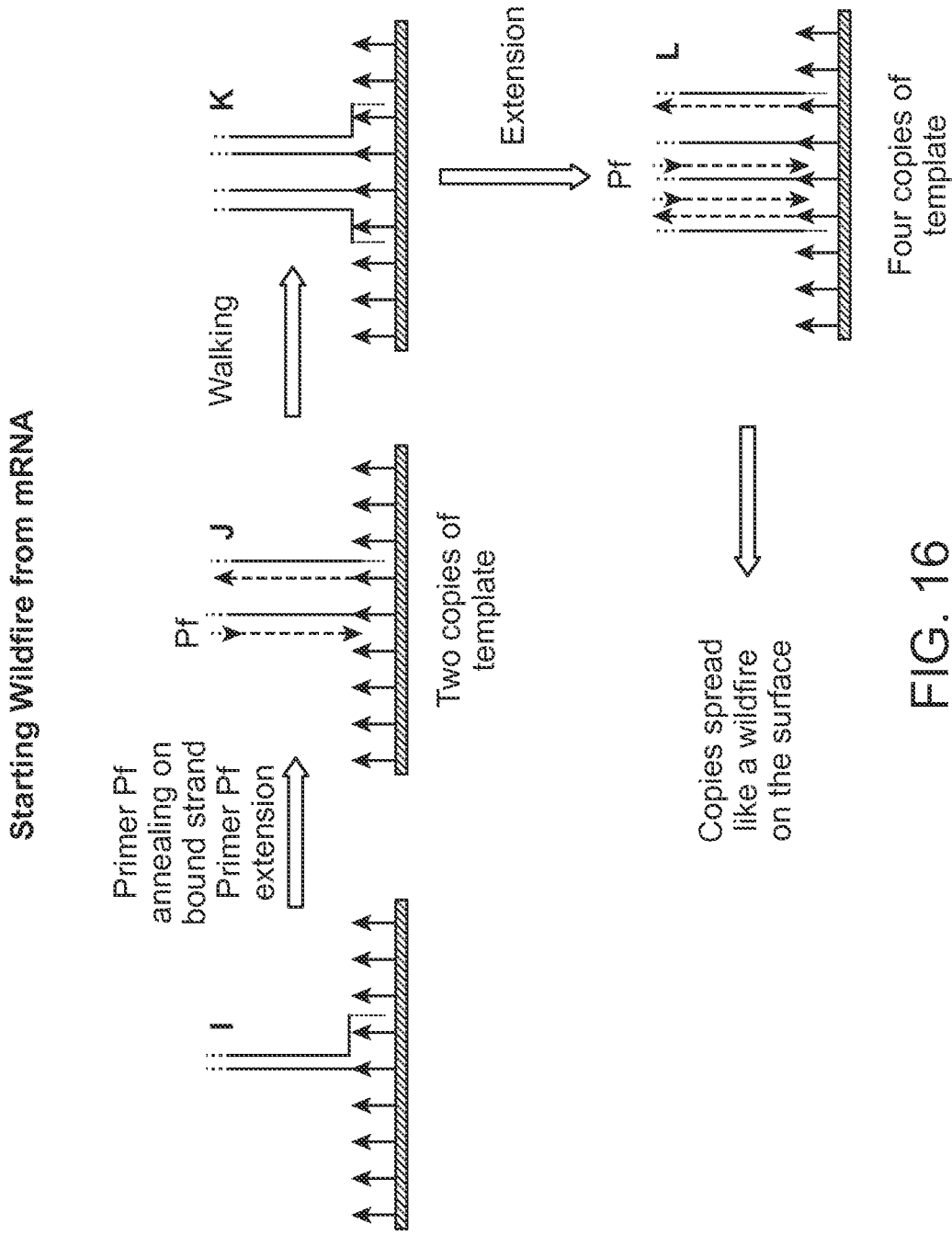


FIG. 16

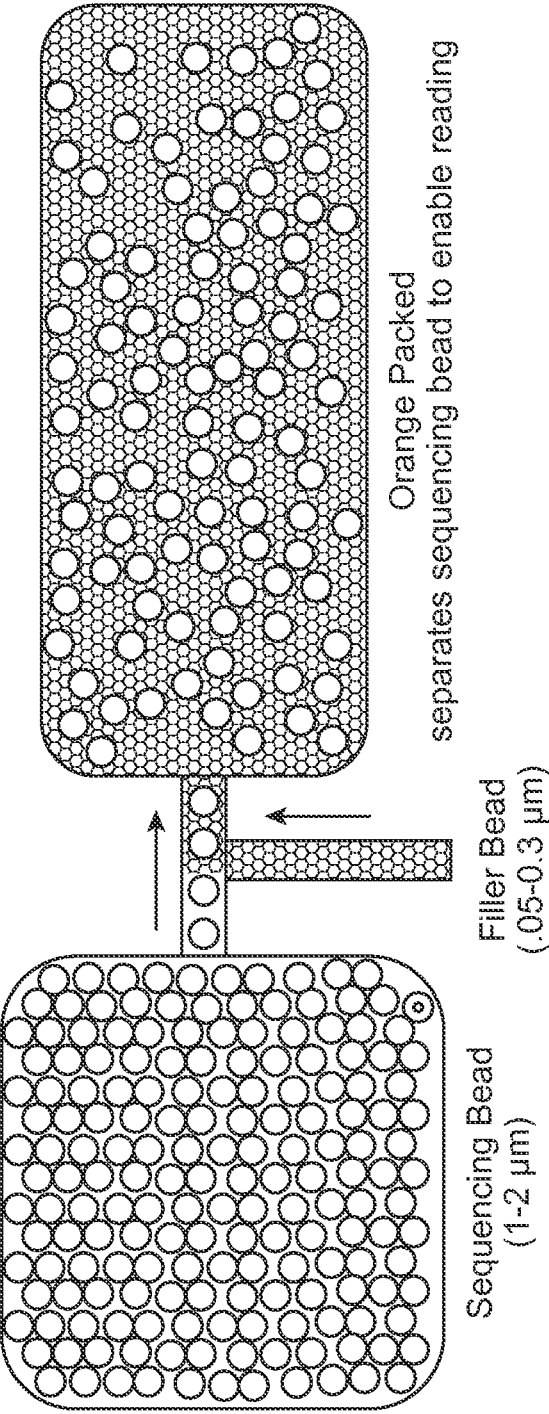


FIG. 17

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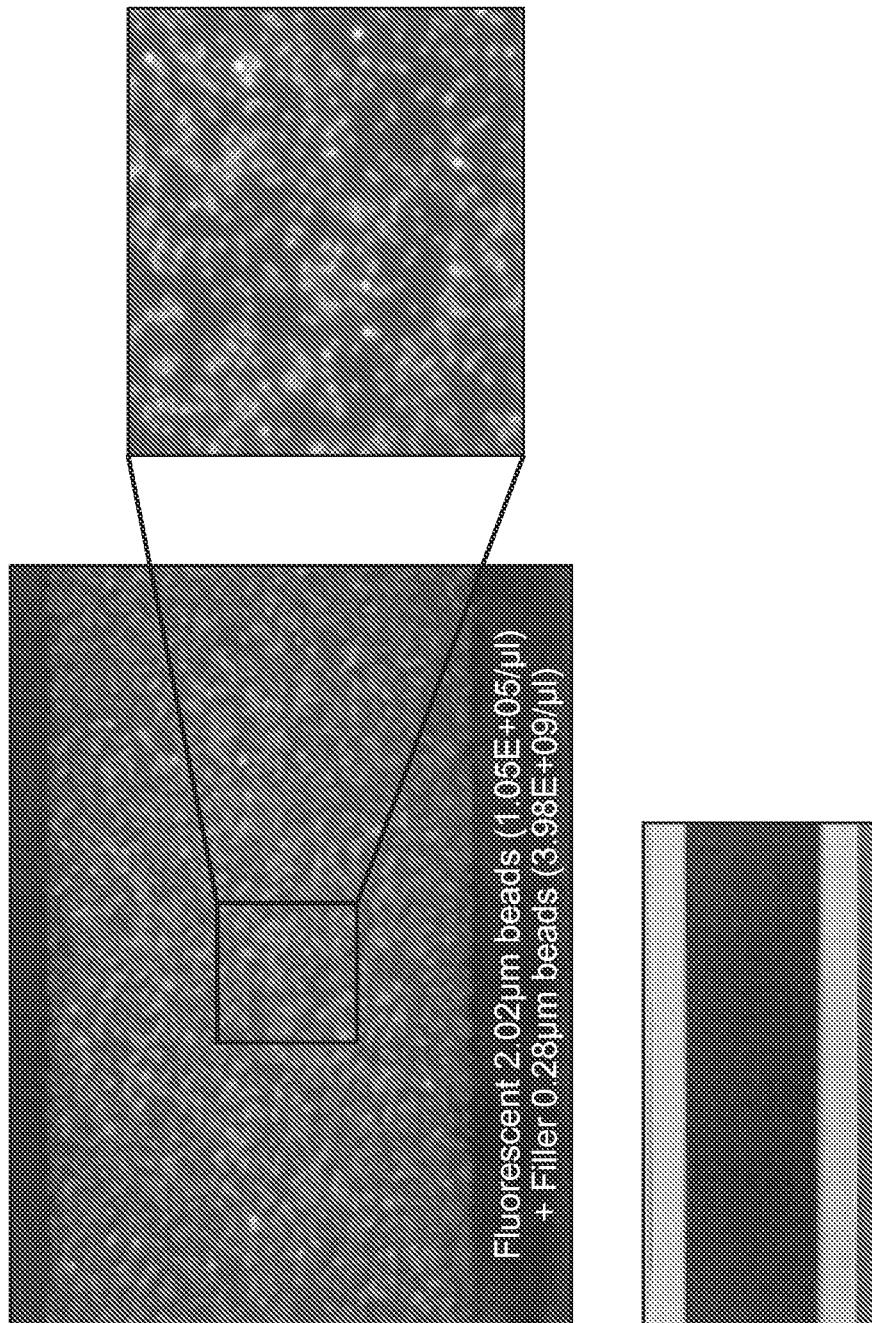


FIG. 18

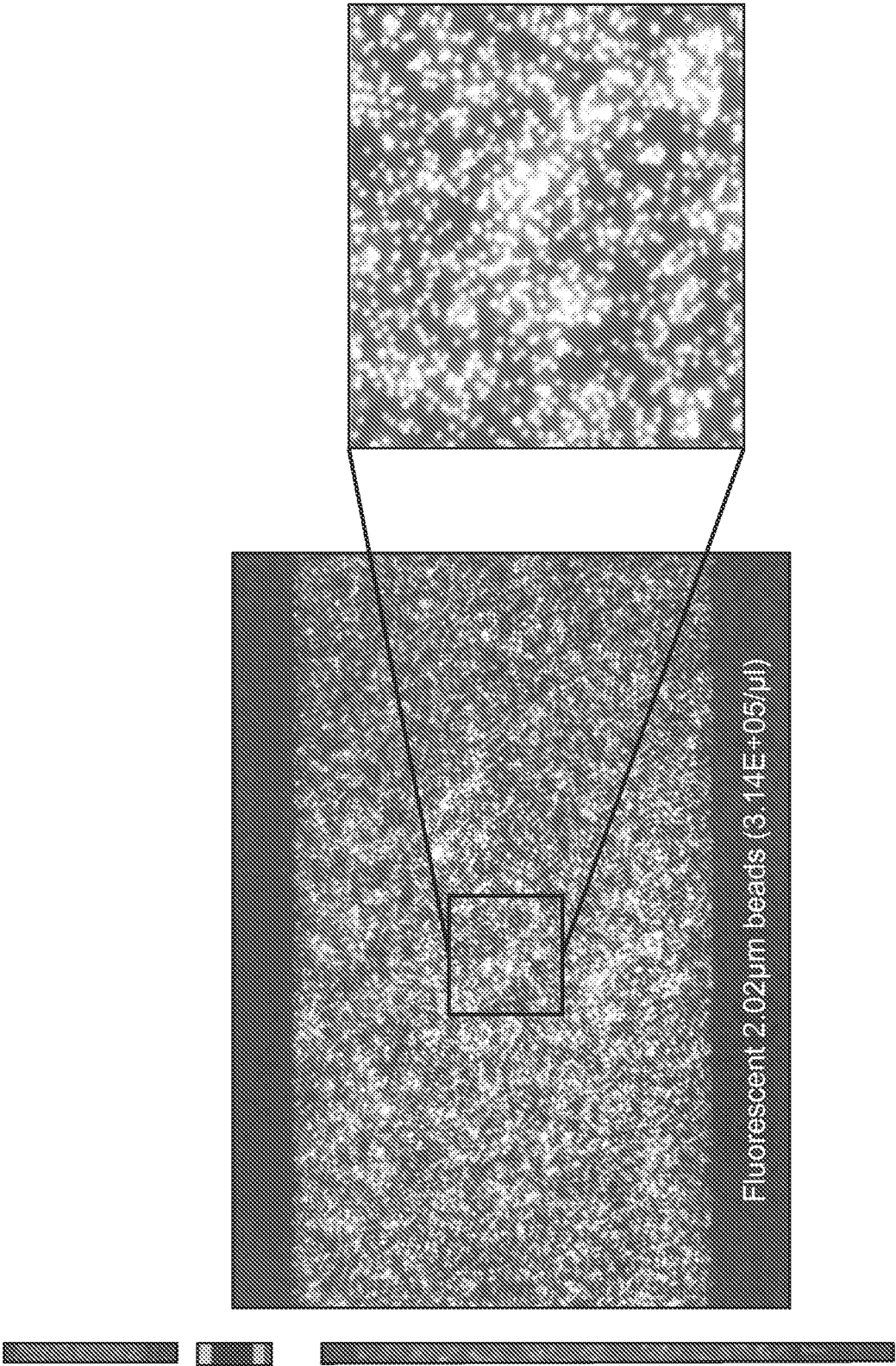


FIG. 19

Chemistry Process Integration

Bead based Sequencing Chemistry could facilitate on-chip integration

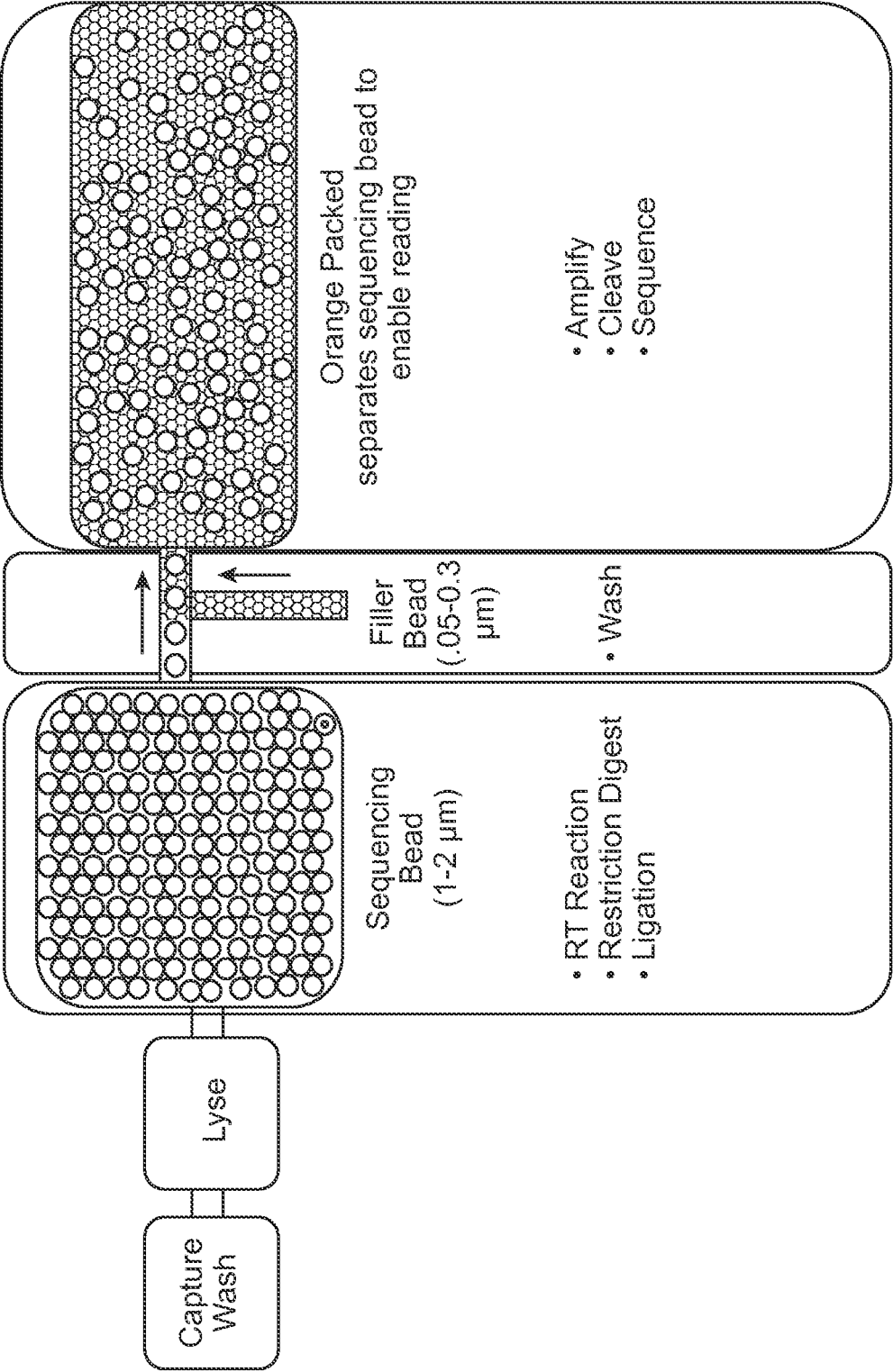


FIG. 20

mRNA capture

Surface functionalization POC

	Chemistry	Surface treatment	5' oligo modification	Cross-linker/Activator
1	Isothiocyanate	Aminopropyl-tri ethoxy silane	Amine	1,4 Phenylene diisothiocyanate
2	Epoxide	Epoxy silane	Amine	None
3	Thiol	Aminopropyl-tri ethoxy silane	Thiol	s-MBS (m-maleimidobenzoyl-N-hydroxysuccinimide ester)
4	Phosphorothioate	Derivatized acrylamide gel: BRAPA (N-5-bromoacetamidylpentyl) acrylamide X	Phosphorothioate (PS)	None
		X 2% acrylamide gel with BRAPA, TEMED, & potassium persulfate		

FIG. 21

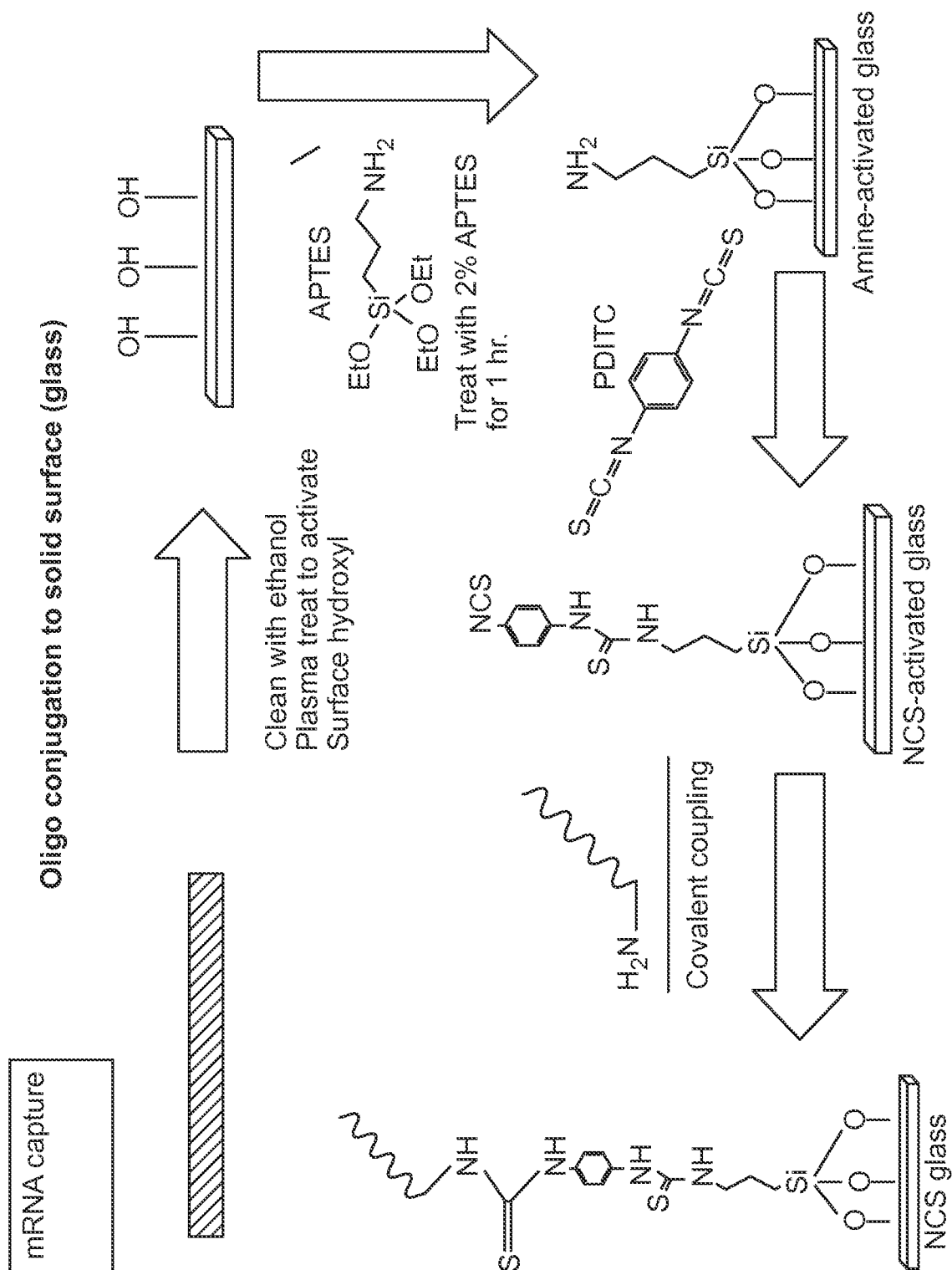


FIG. 22

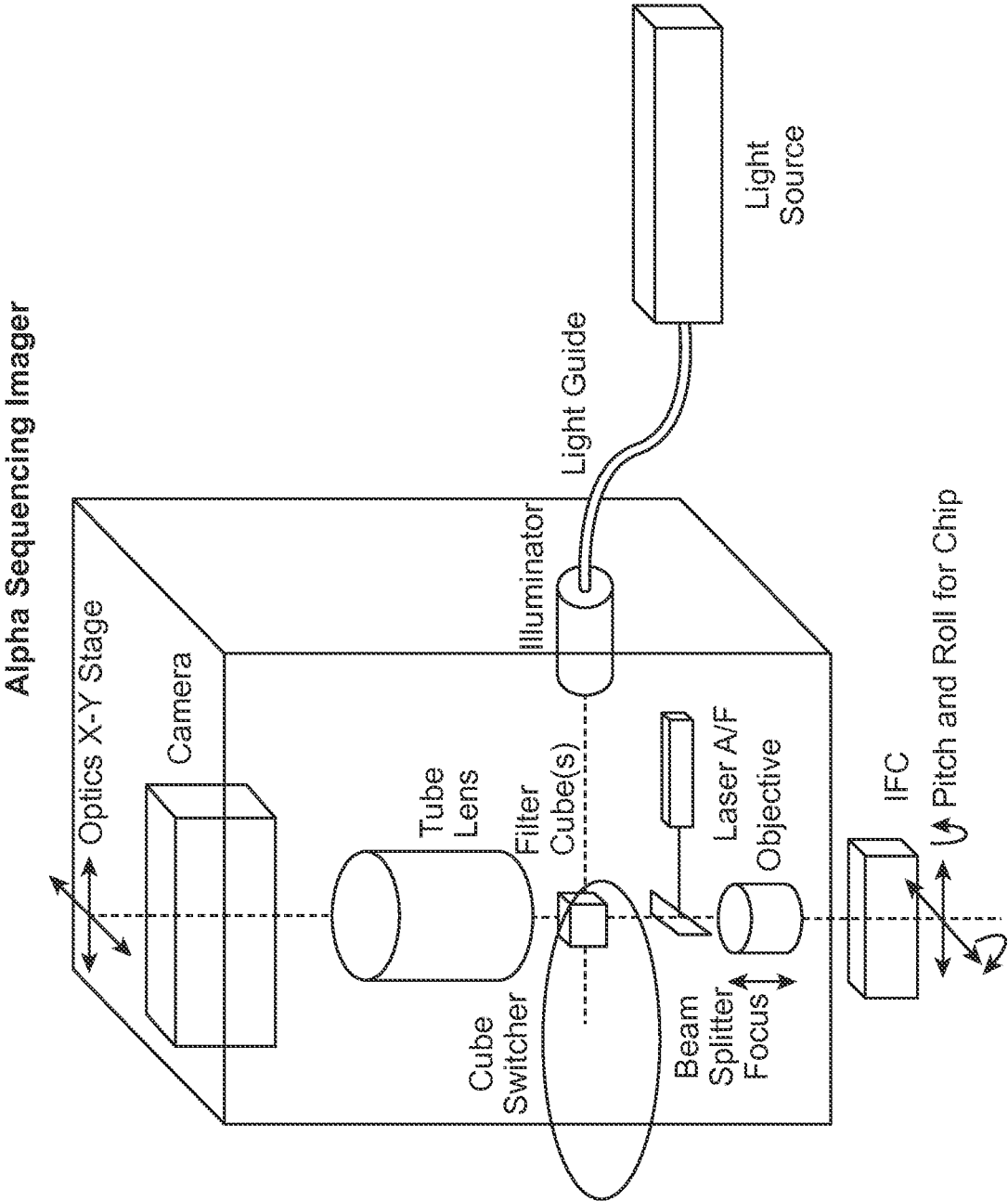


FIG. 23