

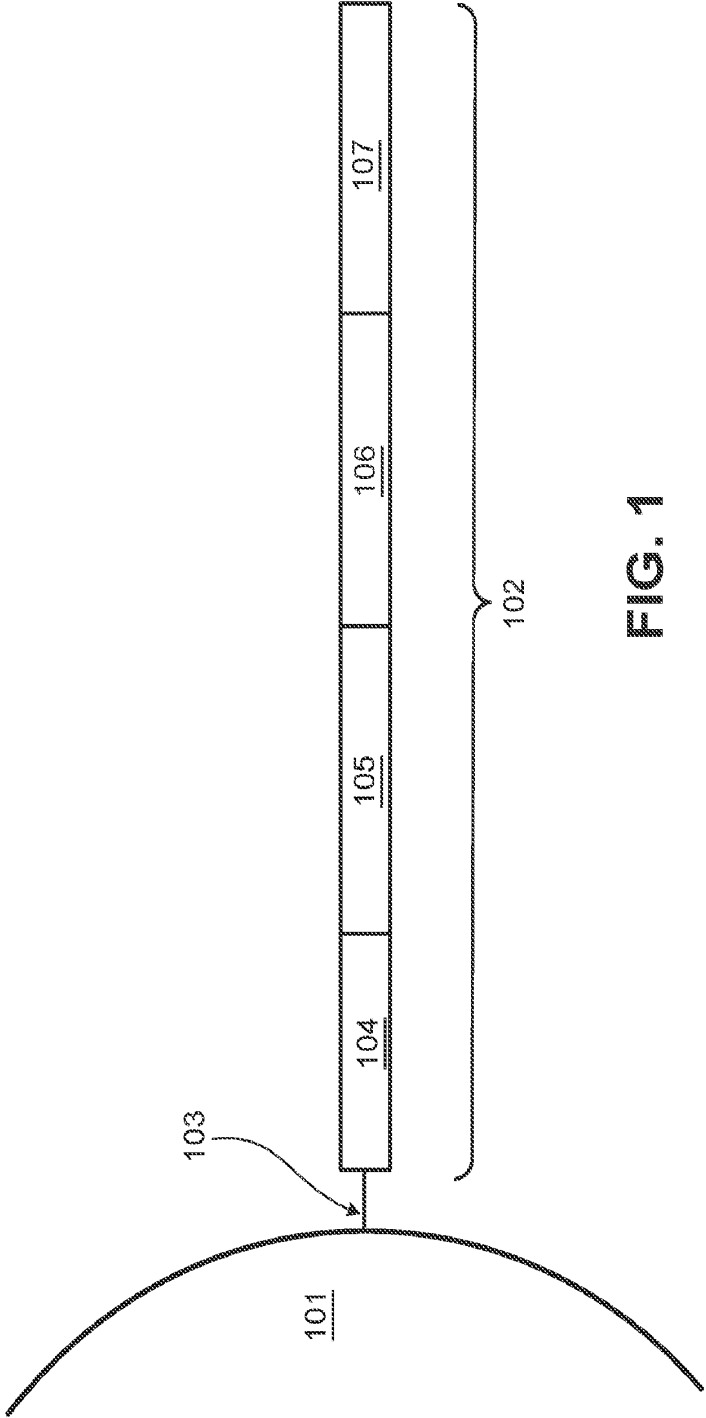
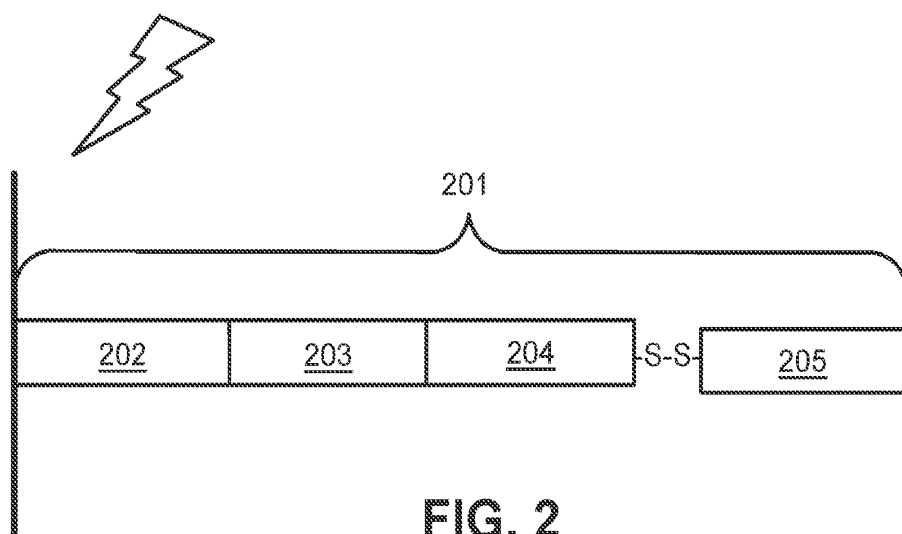


FIG. 1

**FIG. 2**

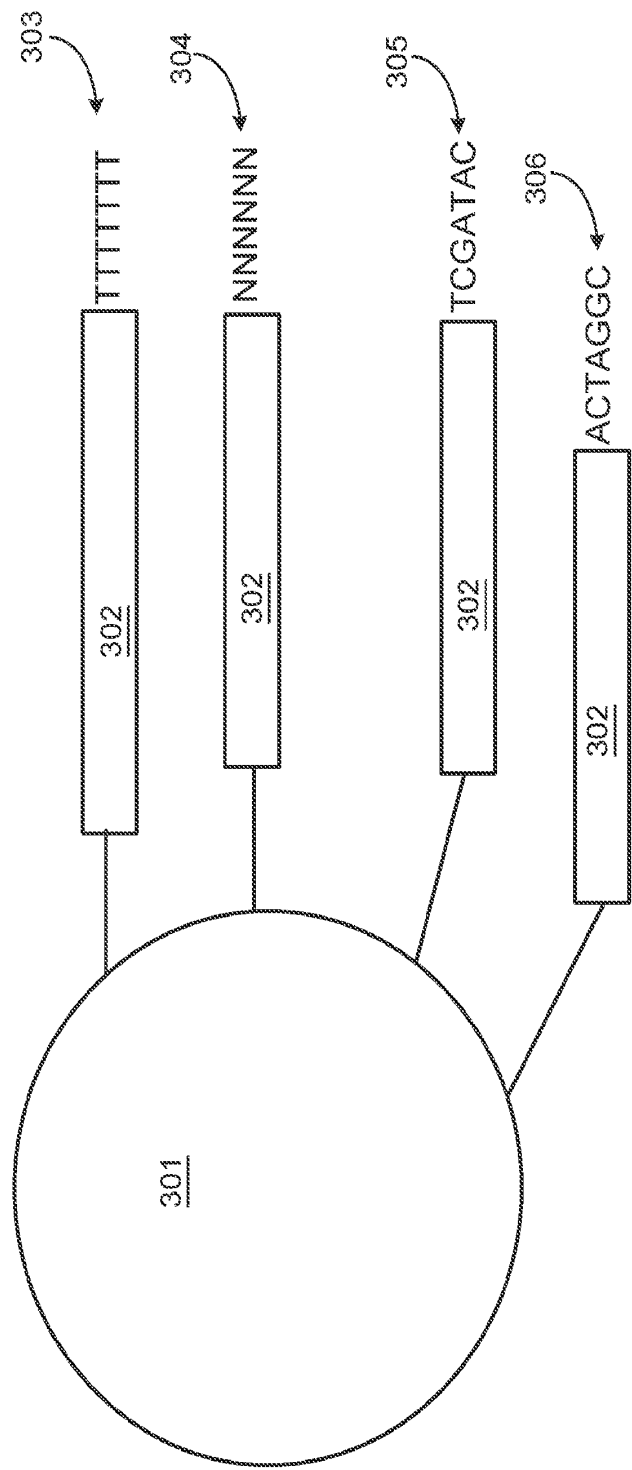


FIG. 3

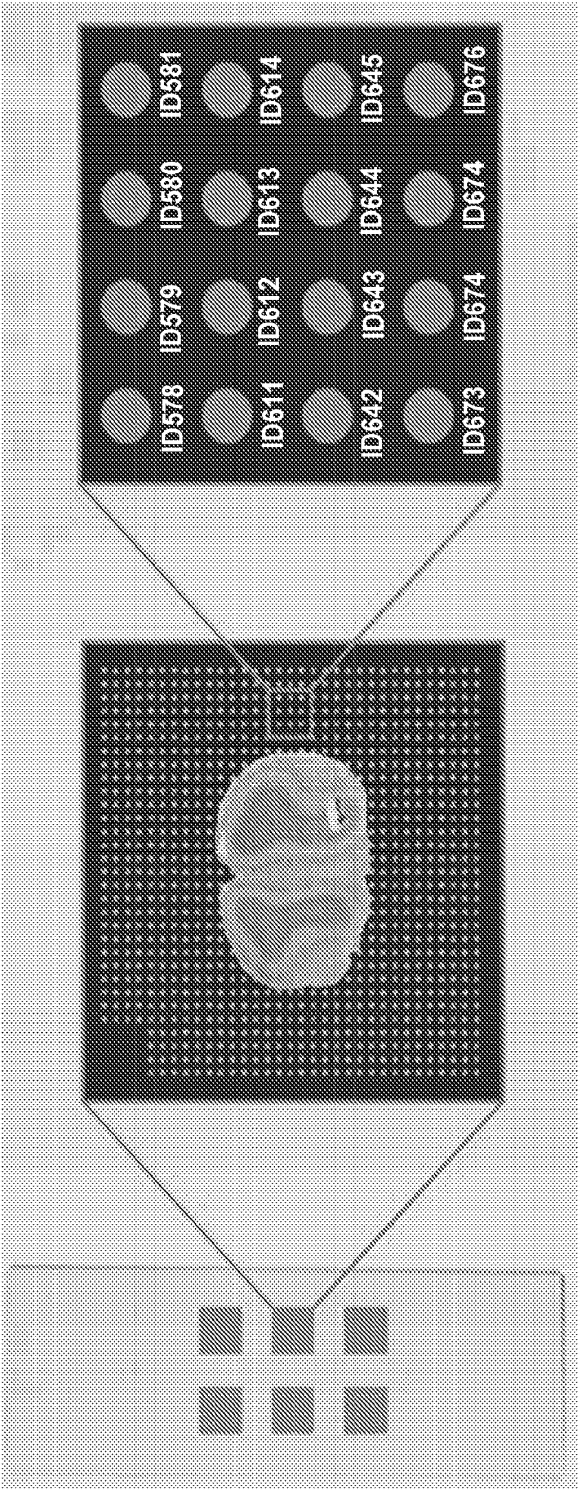


FIG. 4

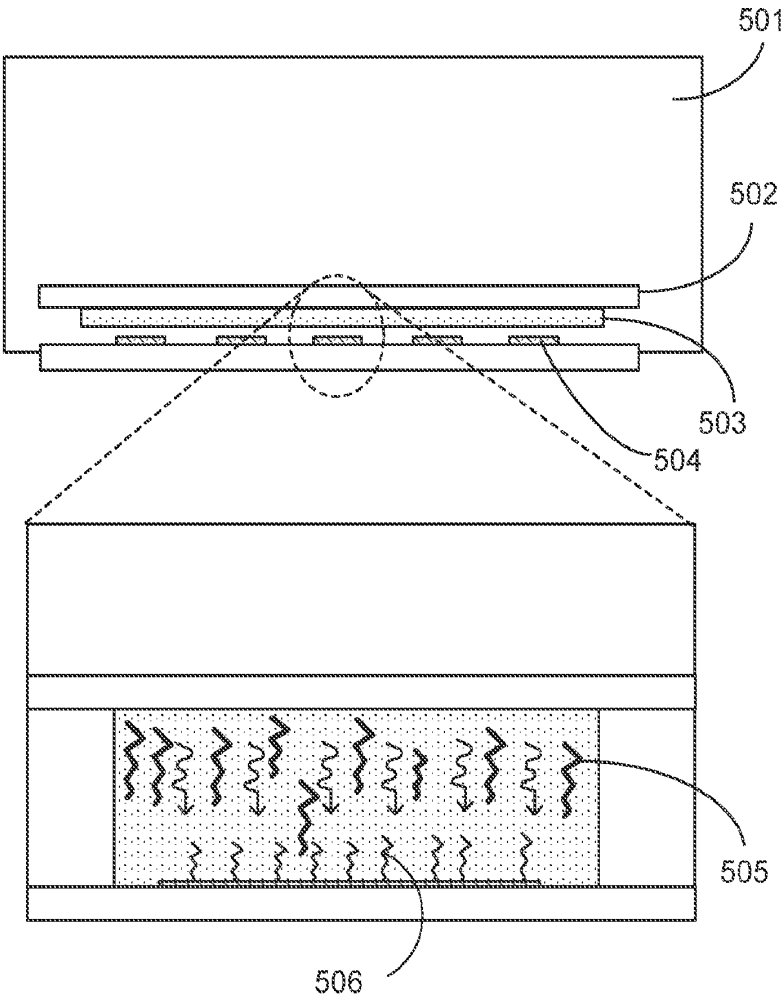
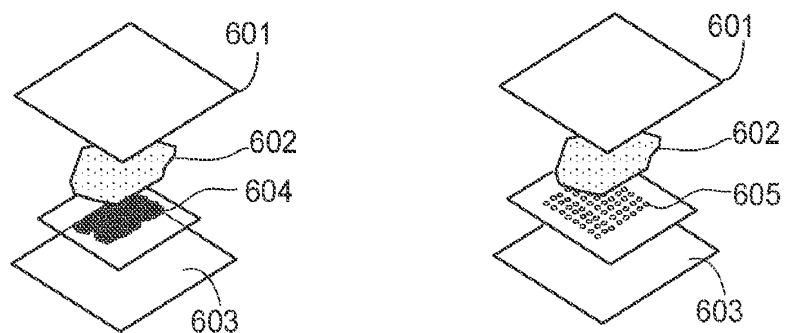
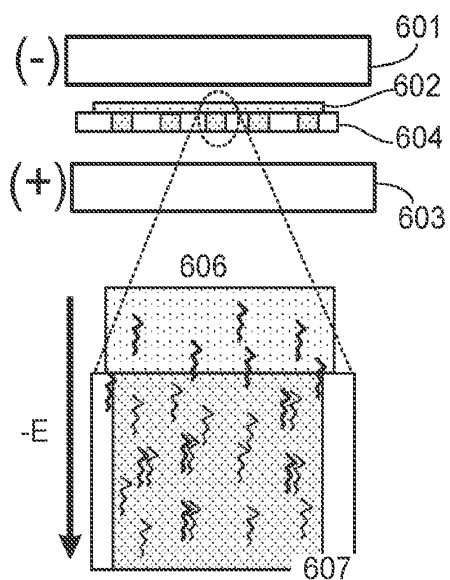


FIG. 5

**FIG. 6A****FIG. 6B**

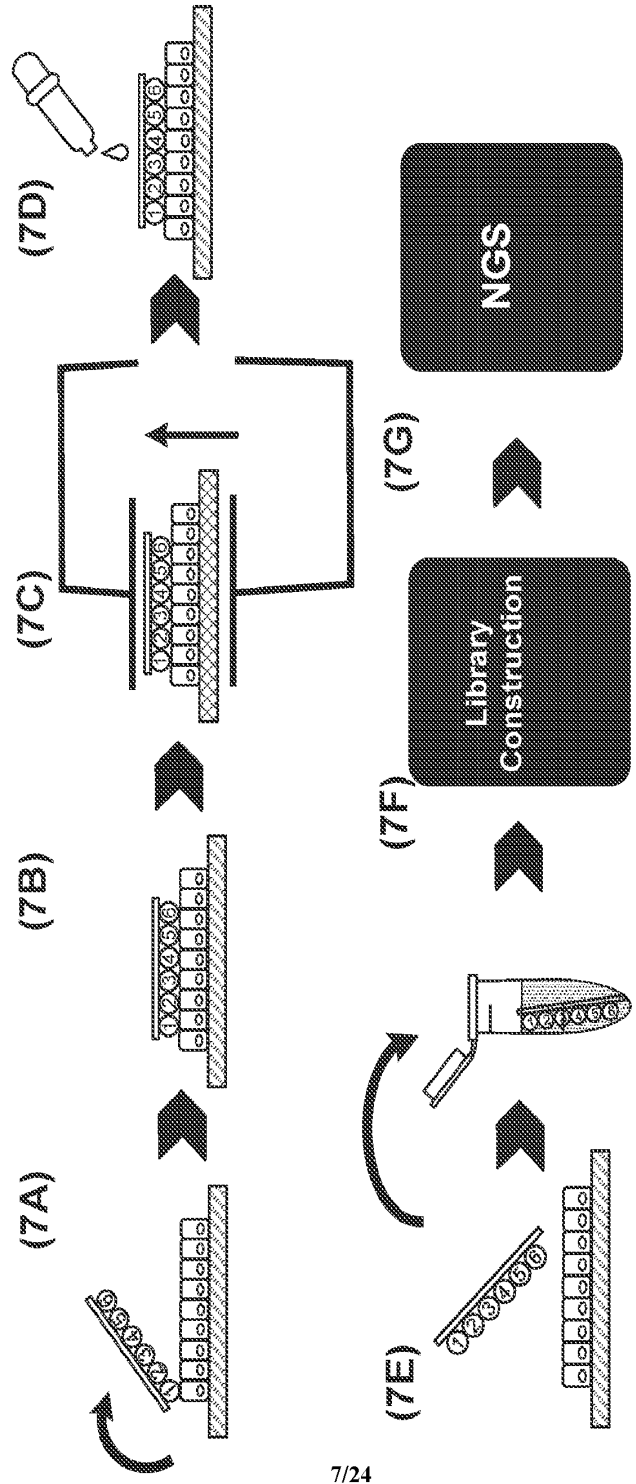


FIG. 7

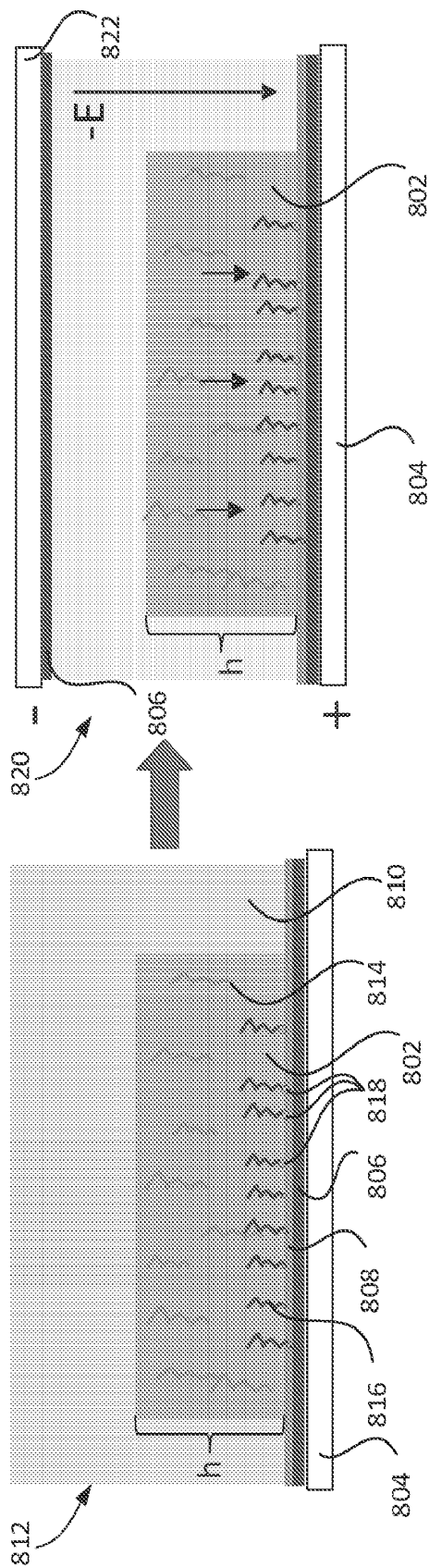


FIG. 8A

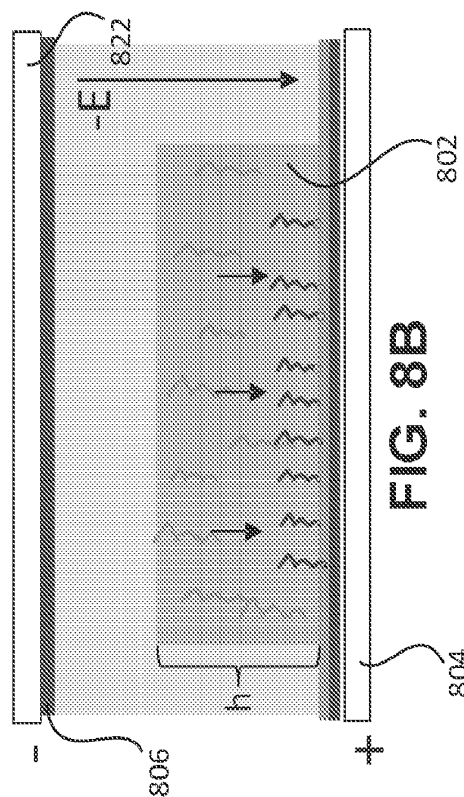


FIG. 8B

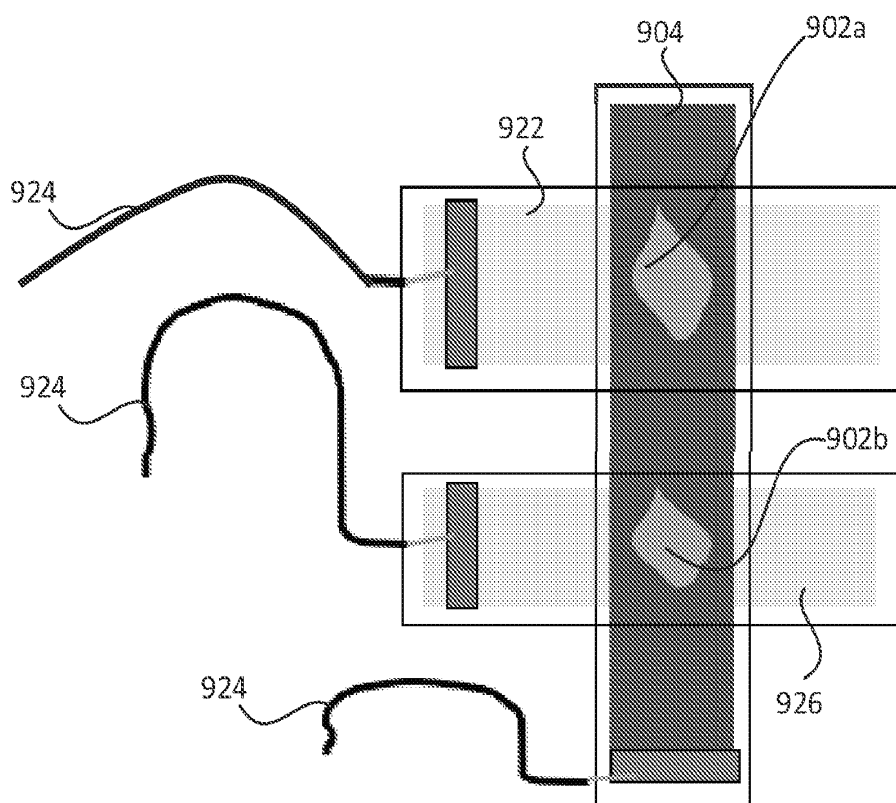
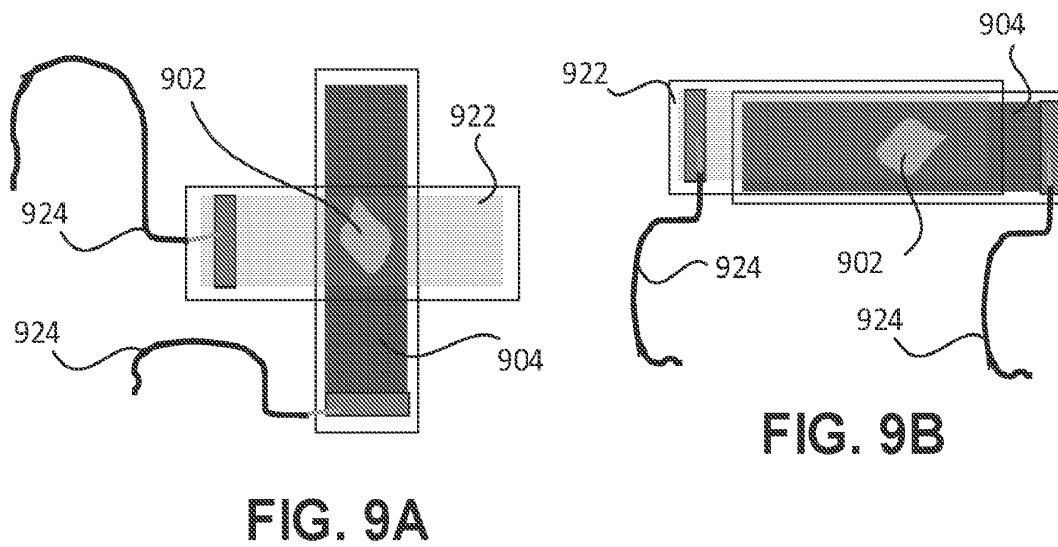


FIG. 9C

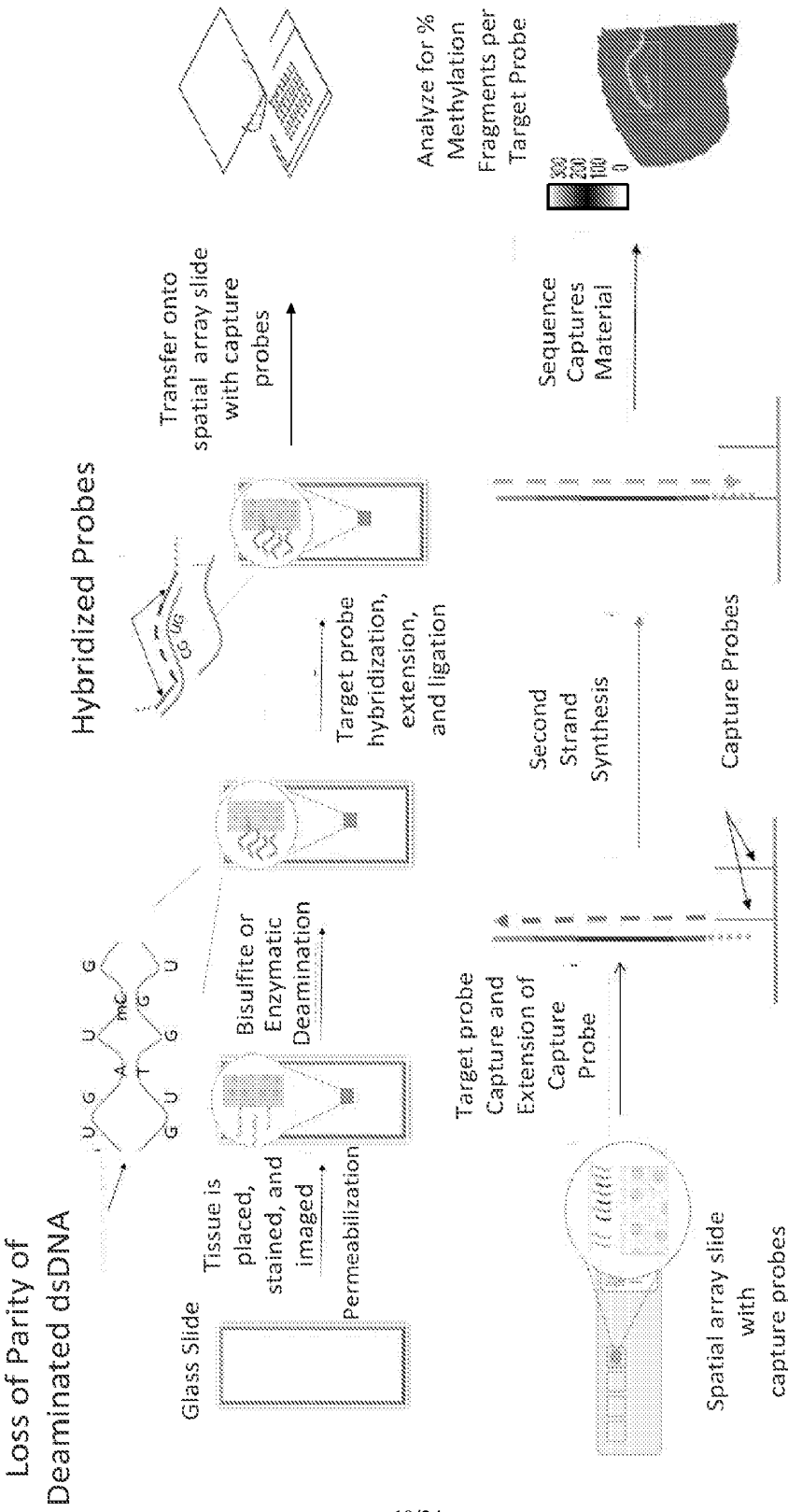


FIG. 10

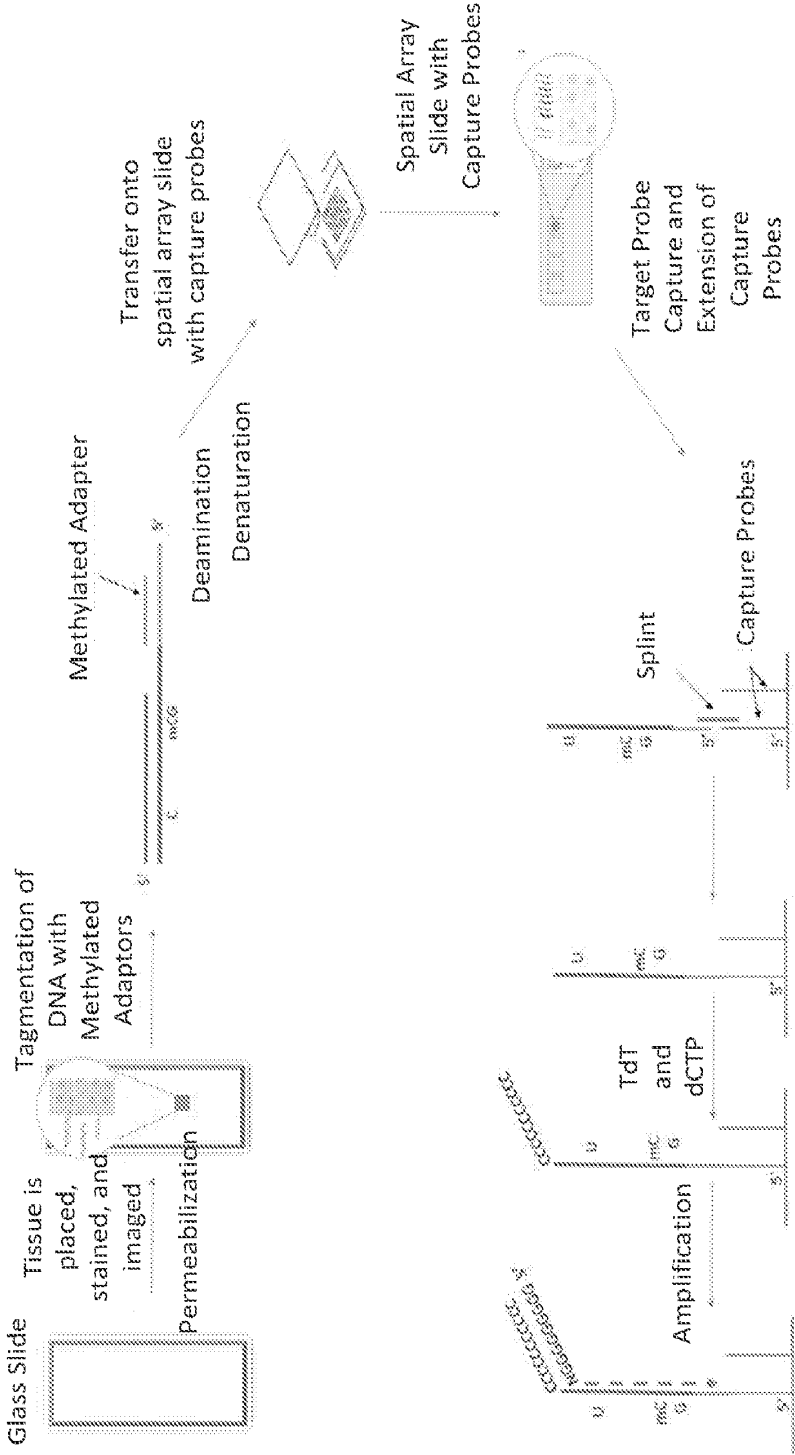


FIG. 11A

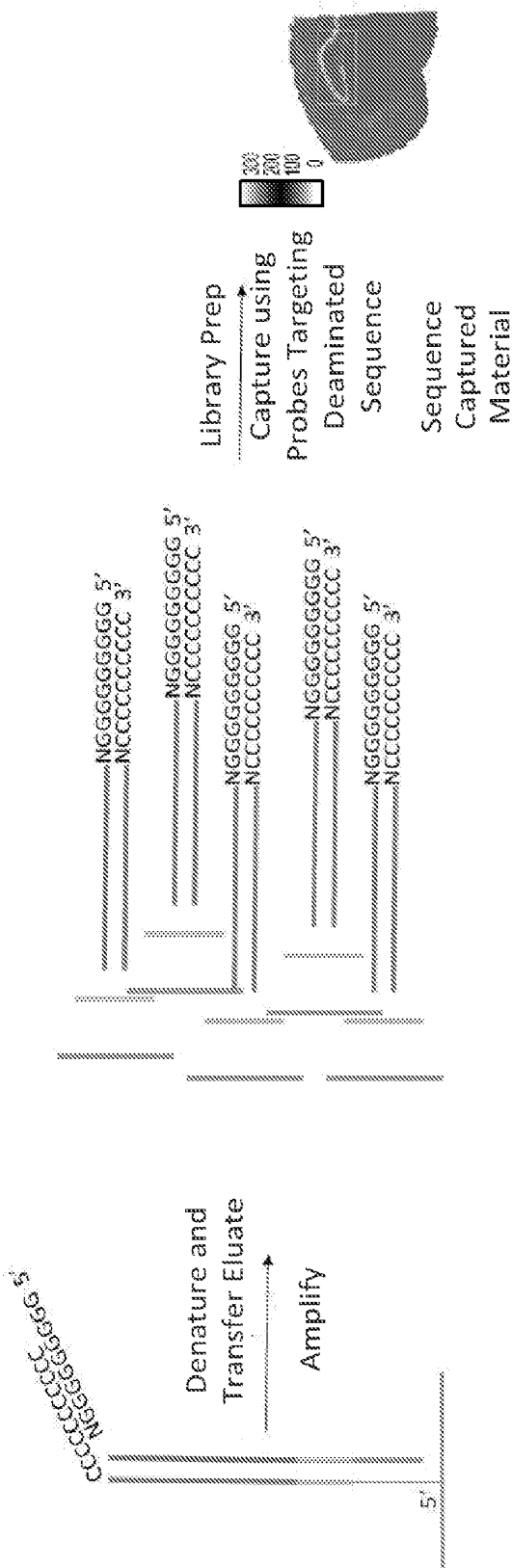


FIG. 11B

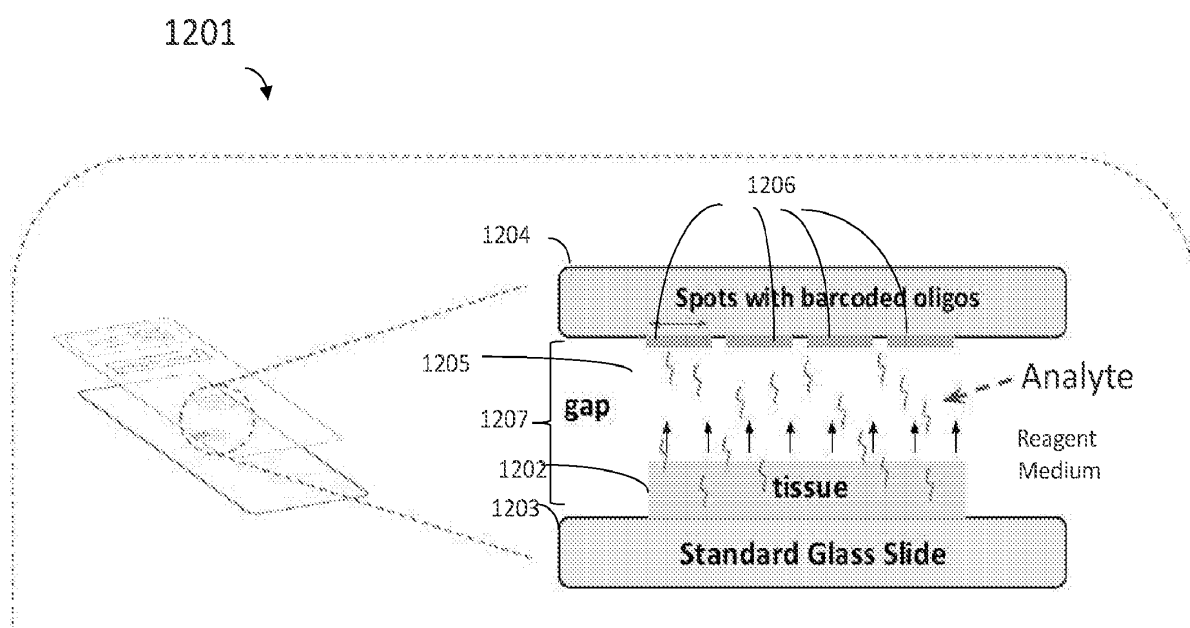


FIG. 12

Analysis ID	Sample	Description	Permeabilization time	mm10 Median genes per spot (30k raw reads per spot)	mm10 Median umi counts per spot (30k raw reads per spot)
1046321	Mouse Brain (FF)	Single-slide control	5 minutes	5194	17660
1046322				4592	13083
1046514		Permeabilization in two-slide assembly	1 minute	4072	14017
1046515				3758	13731

FIG. 13

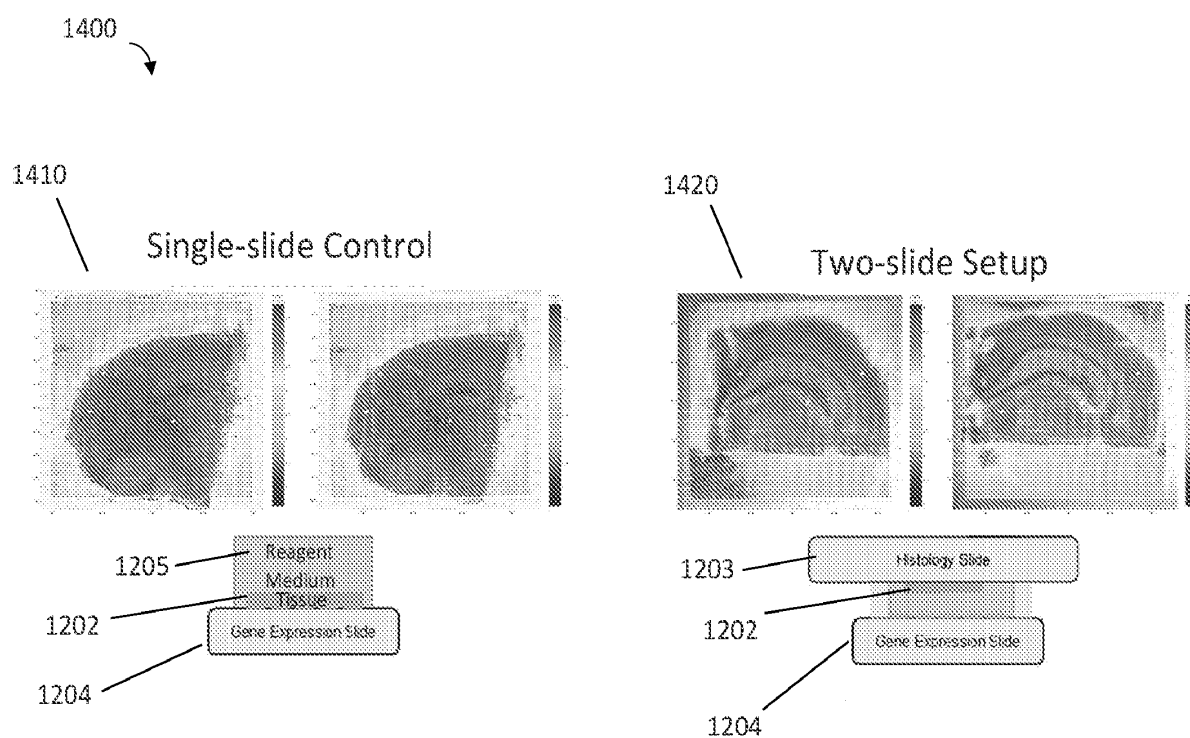


FIG. 14

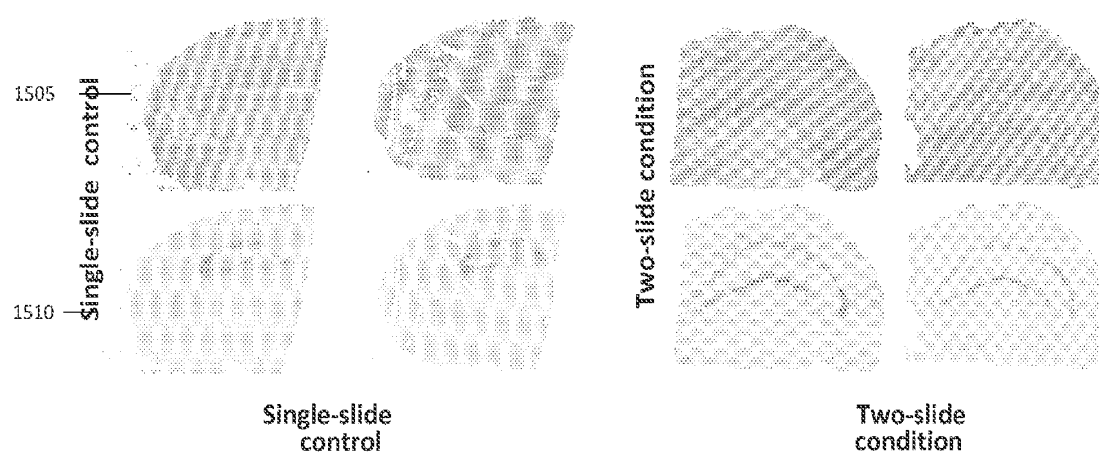


FIG. 15

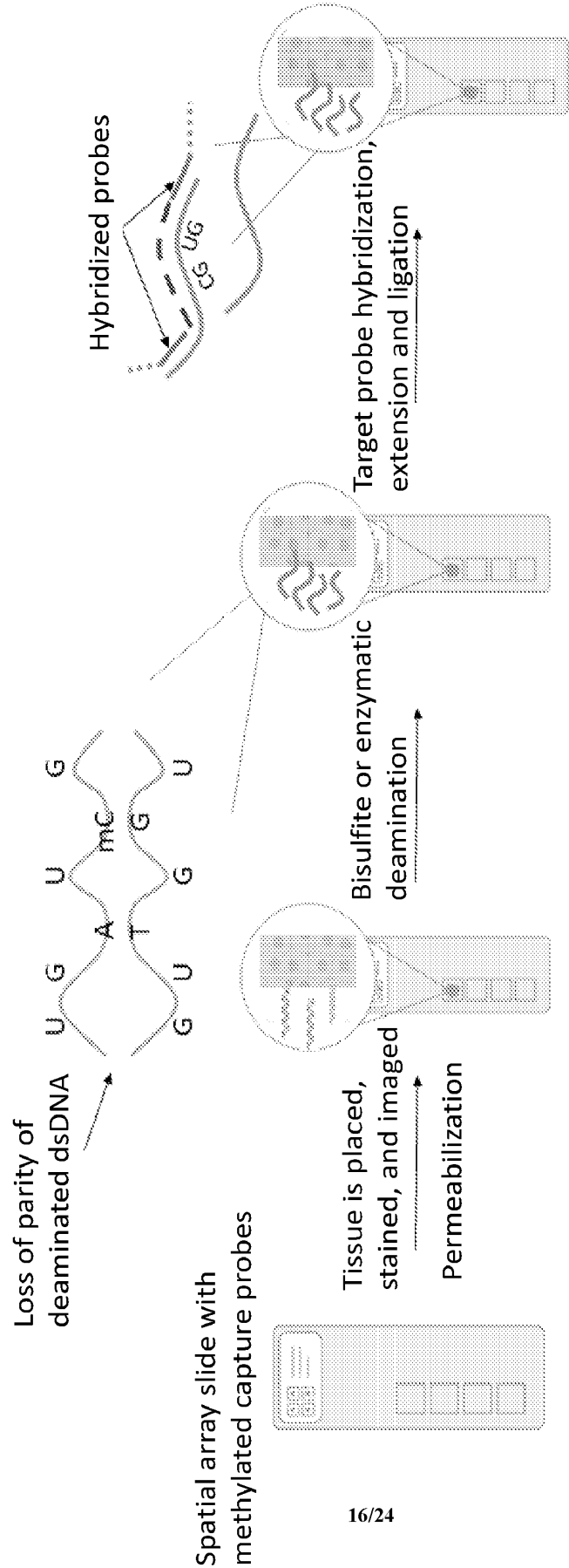


FIG. 16

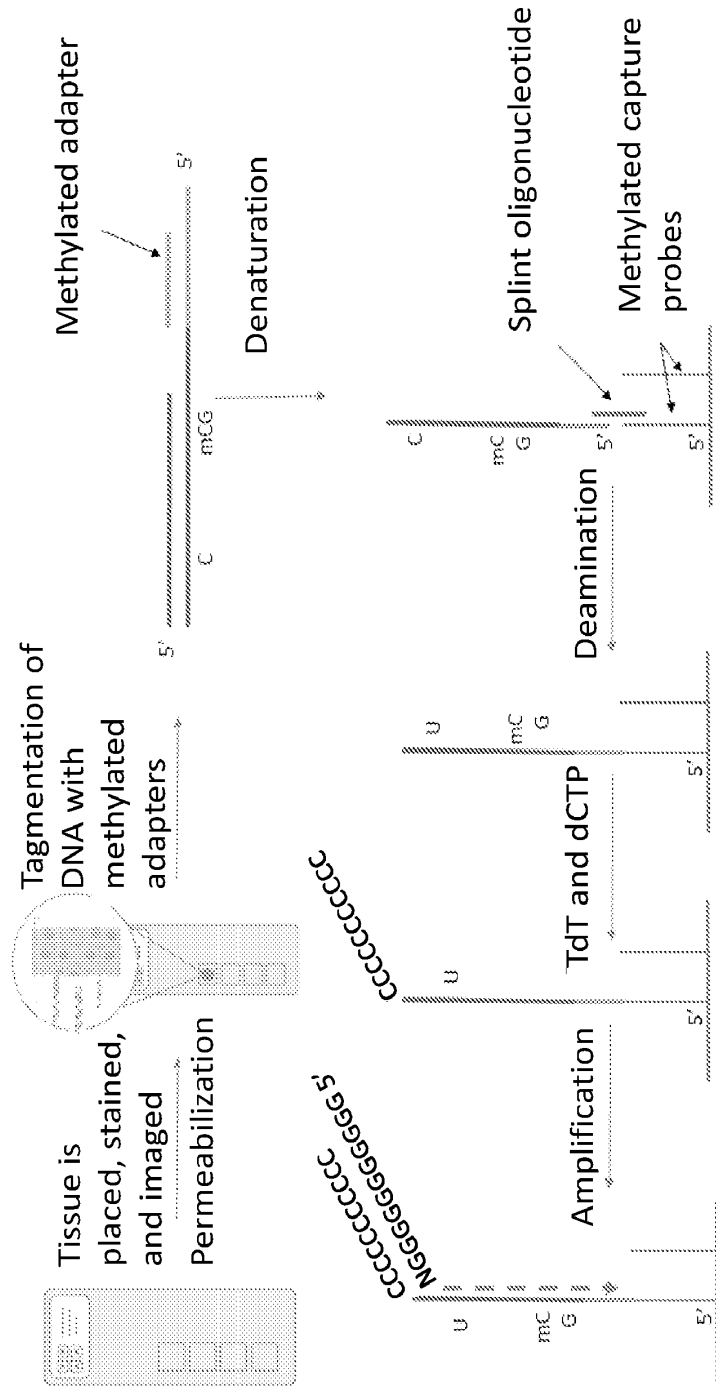


FIG. 17

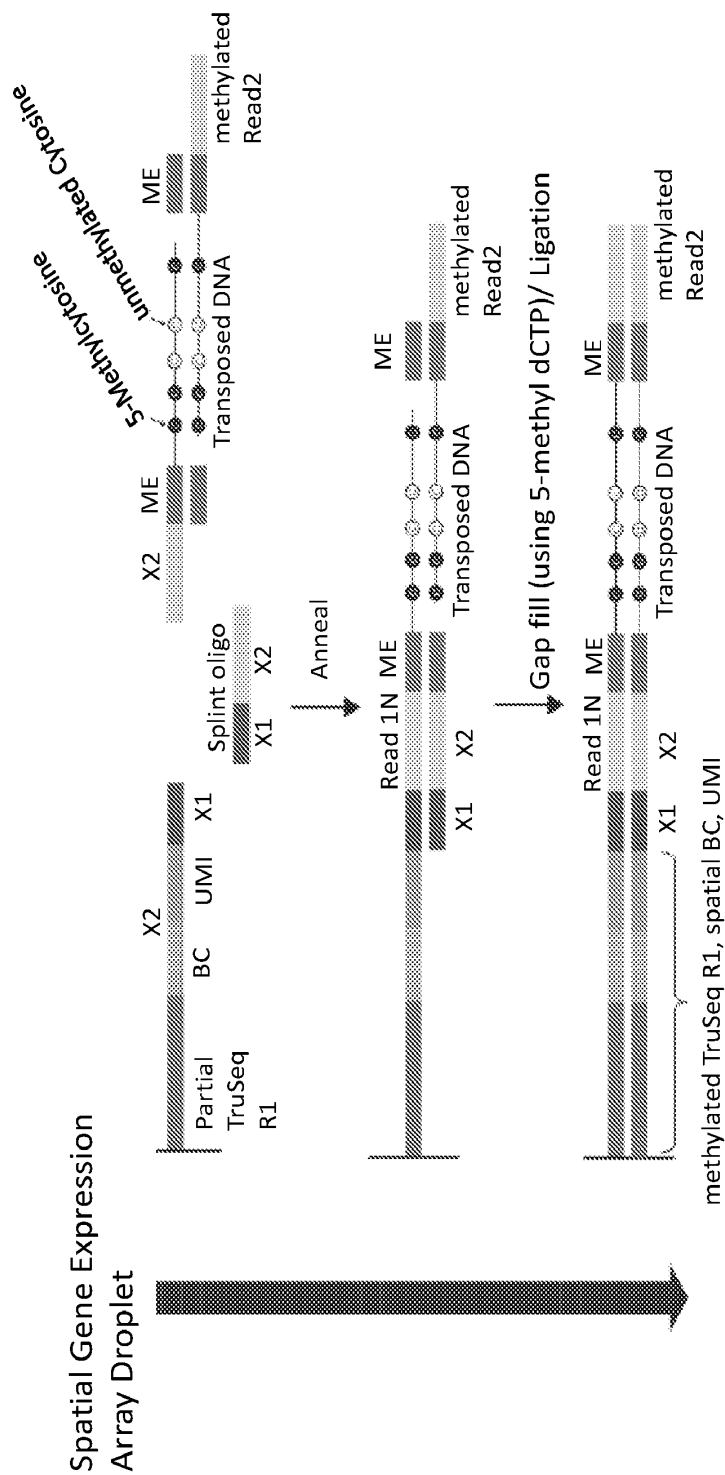


FIG. 18A

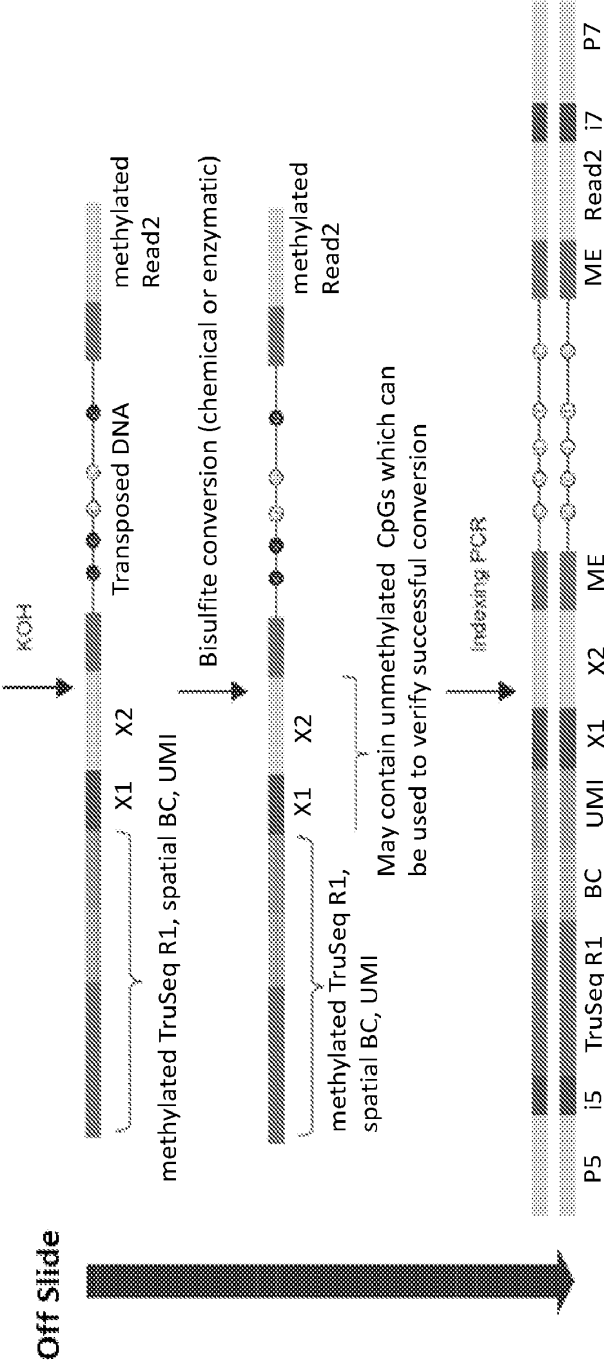


FIG. 18B

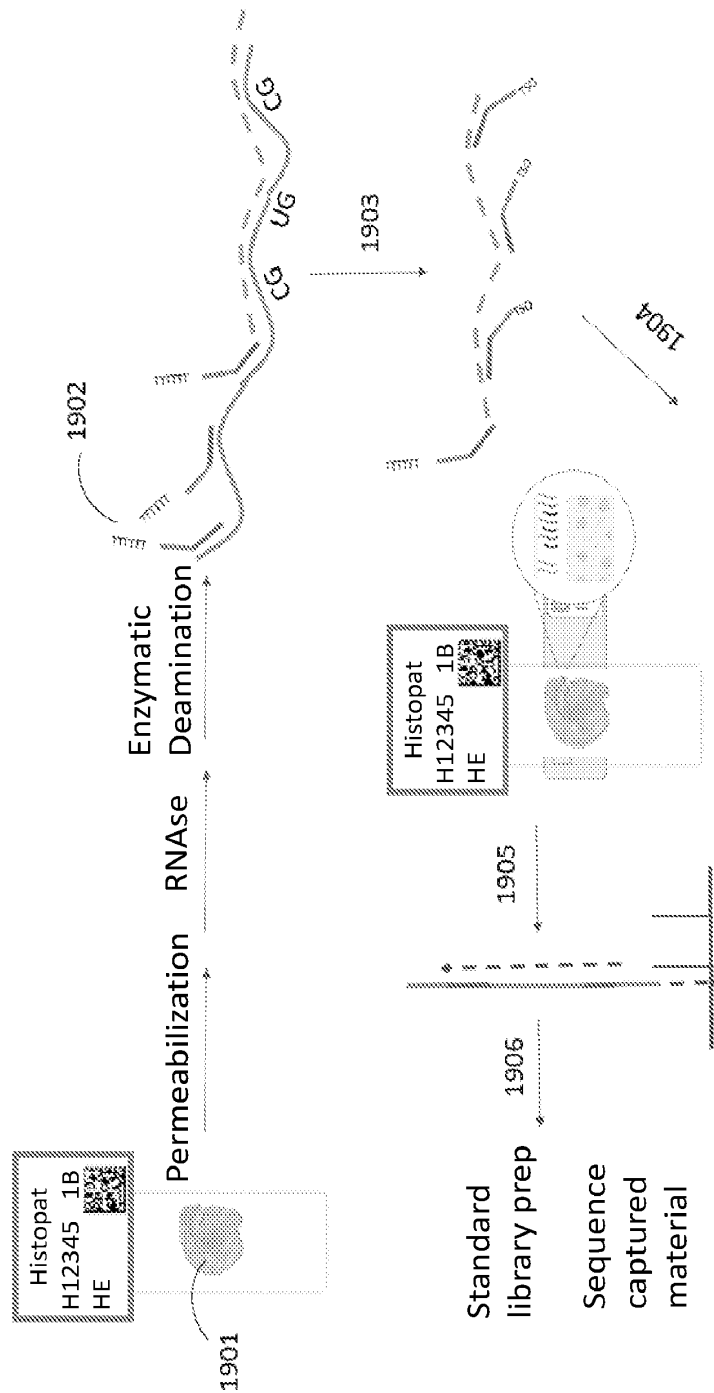


FIG. 19A

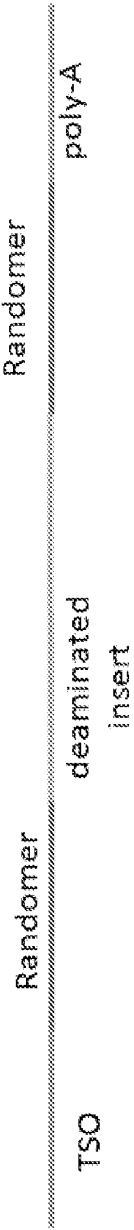


FIG. 19B

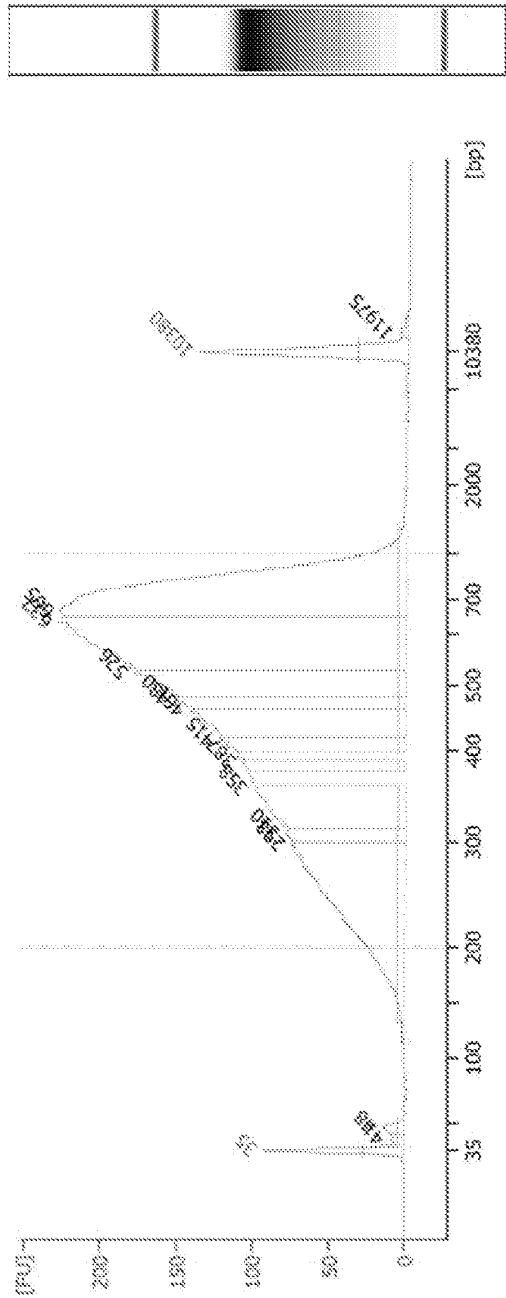


FIG. 20

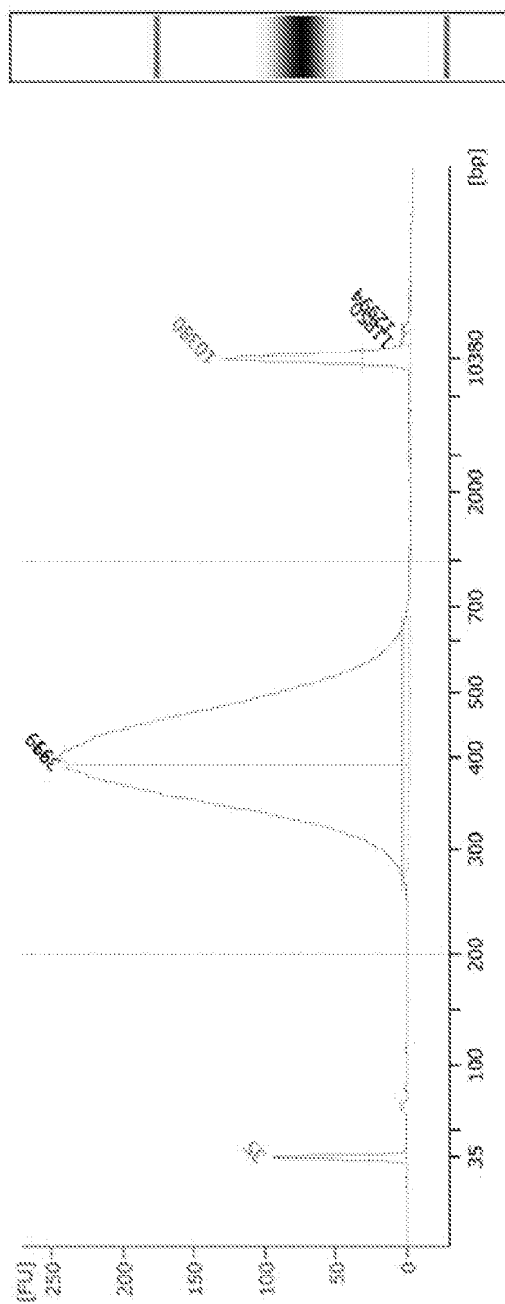


FIG. 21

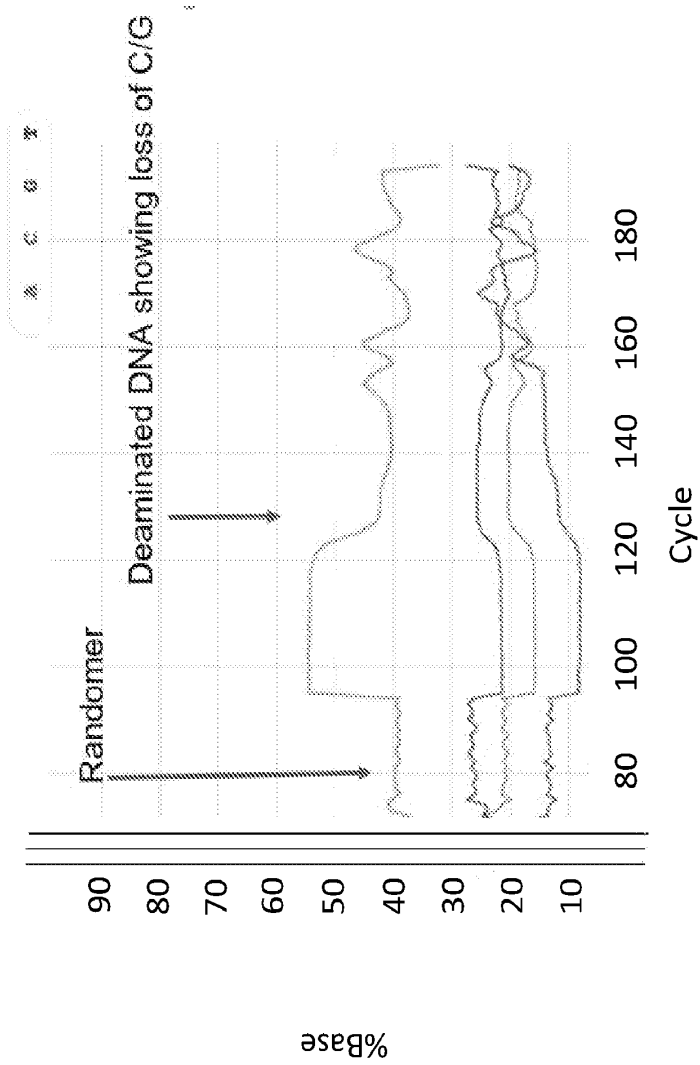


FIG. 22