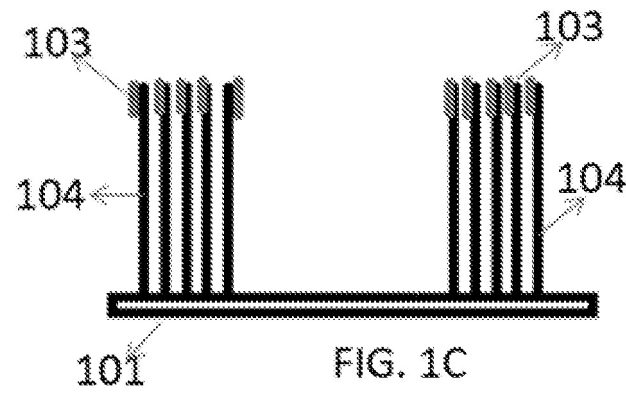
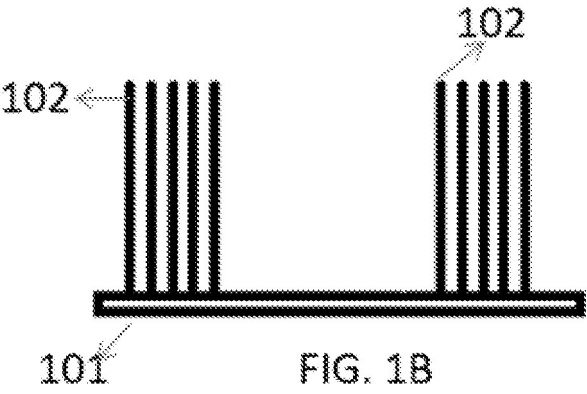
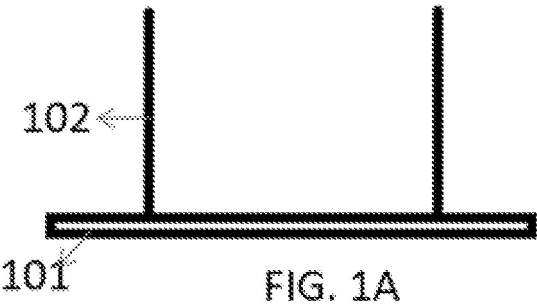
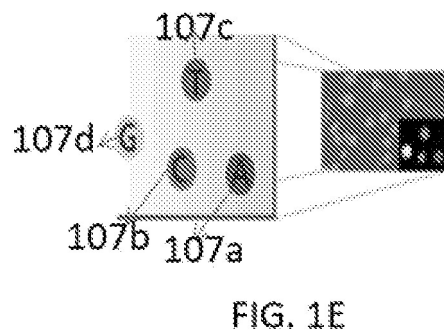
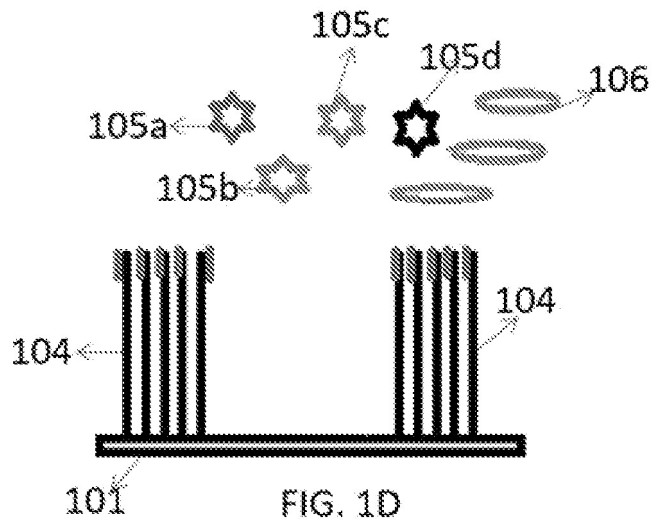






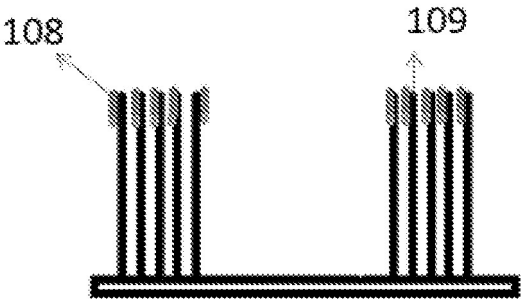


FIG. 1F

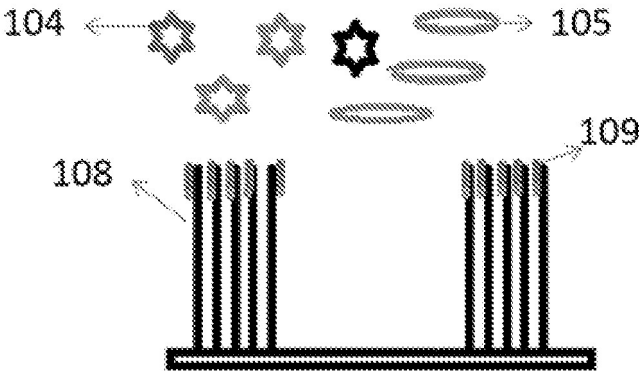


FIG. 1G

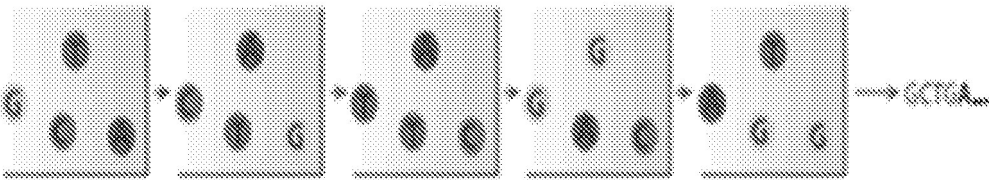


FIG. 1H

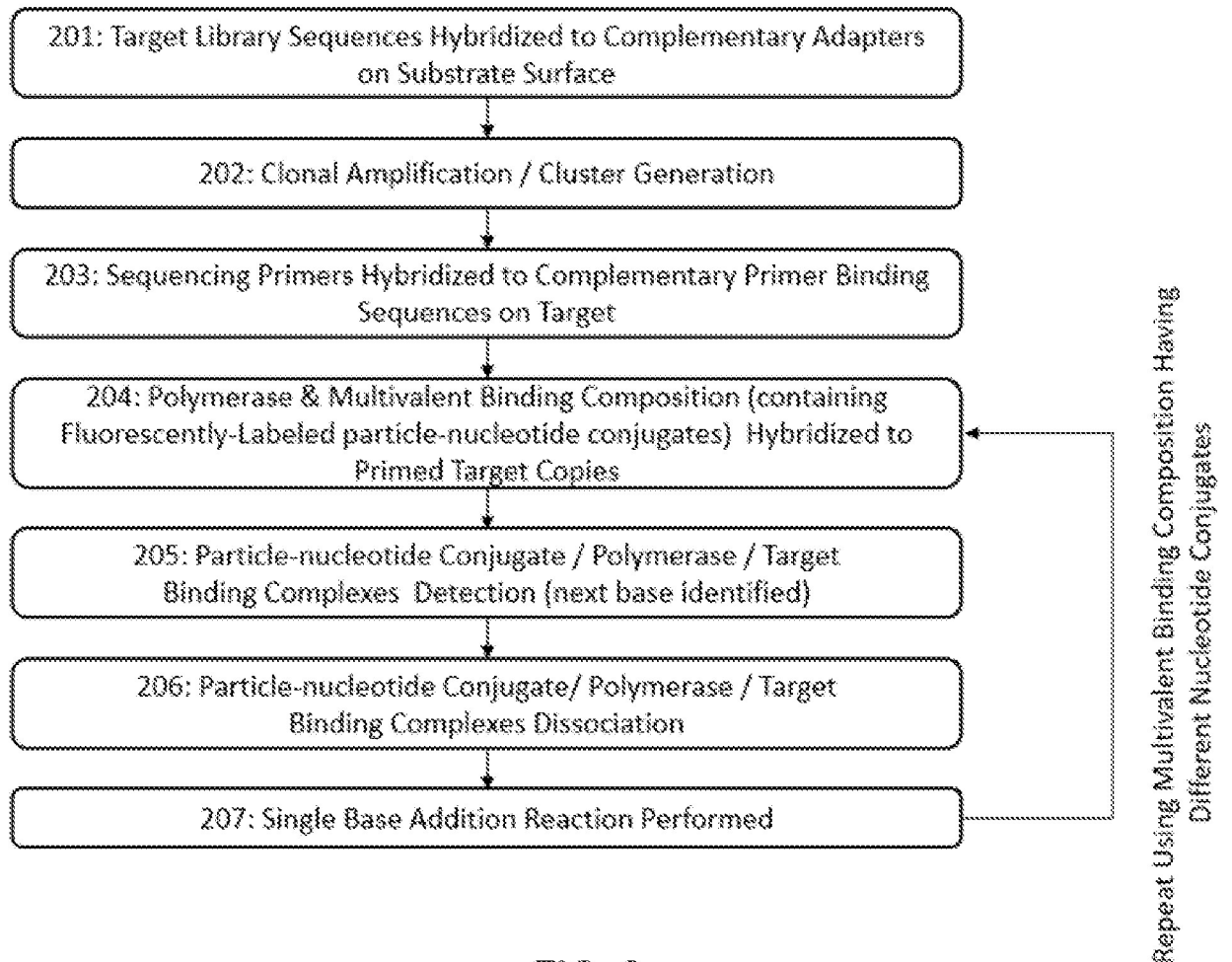
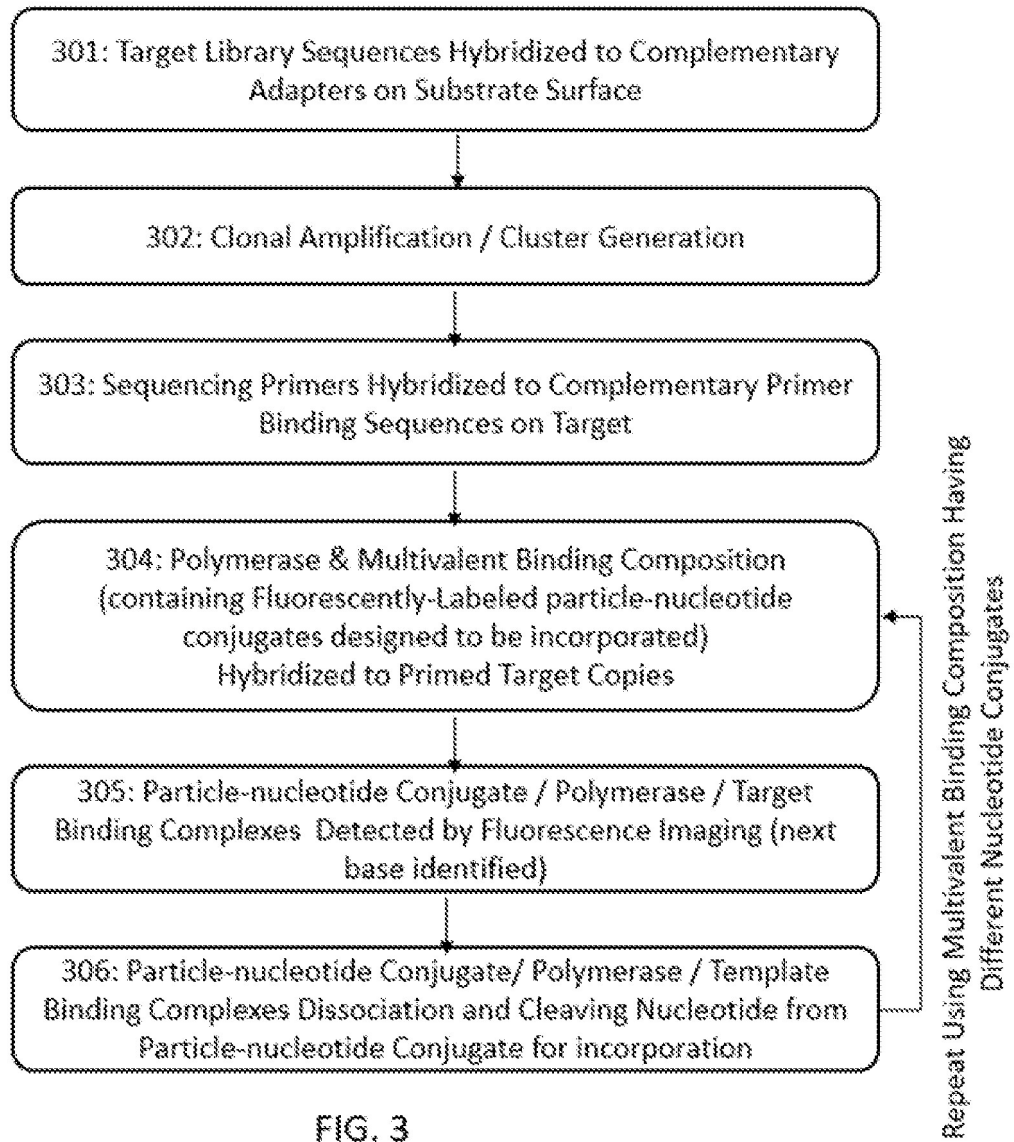


FIG. 2



6/16

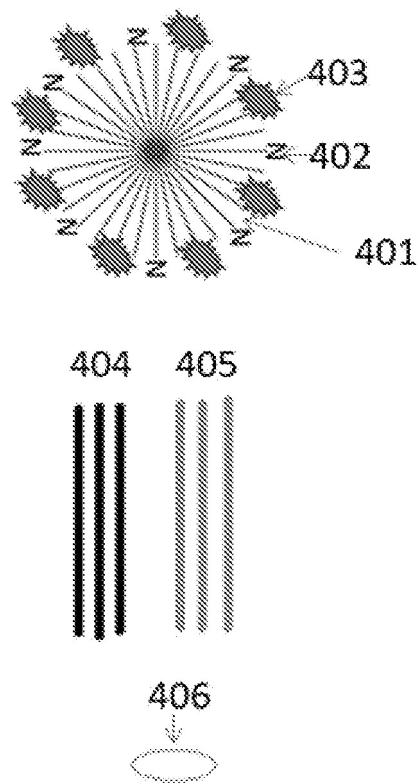


FIG. 4A

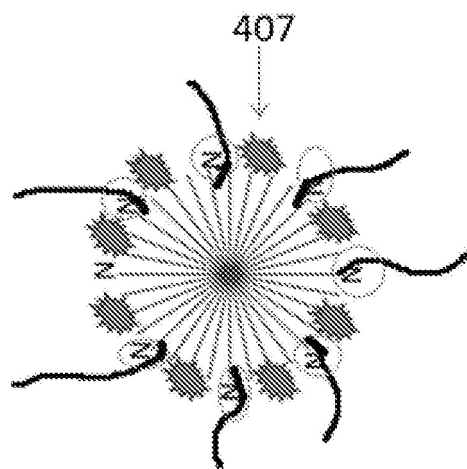
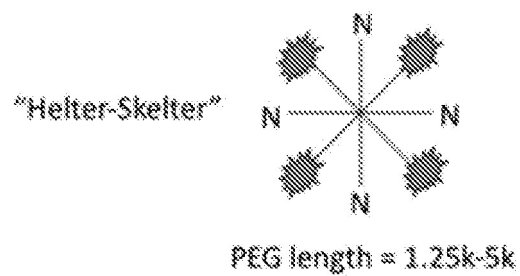
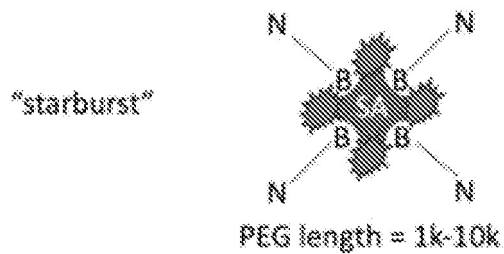


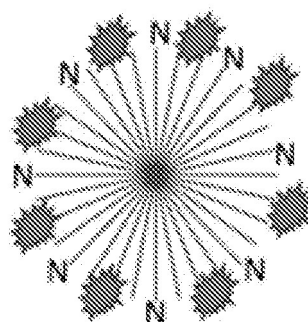
FIG. 4B

7/16

Class I
 Valency = 0-4
 Homogenous population with saturation

**FIG. 5A**

Class II
 Valency >4
 Homogenous population with Saturation



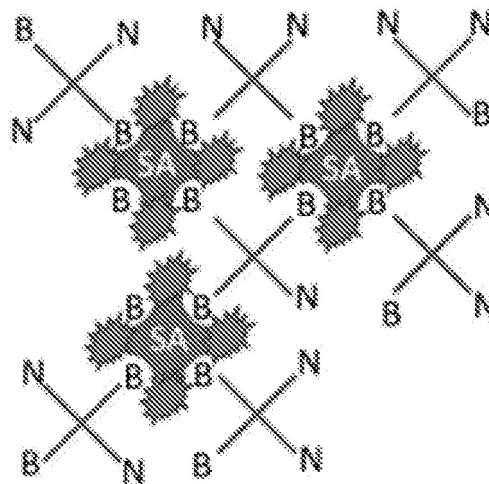
Dendrimer core 12,24,48,96 arms
 PEG length = 1K-10K

Other cores = dextrans, other polymers

FIG. 5B

8/16

Class III
Valency >4
Distribution of sizes based on construction



8arm PEG-NHS mixed with Biotin-NH₂
and dNTP-NH₂ then mixed with labeled
streptavidin

FIG. 5C

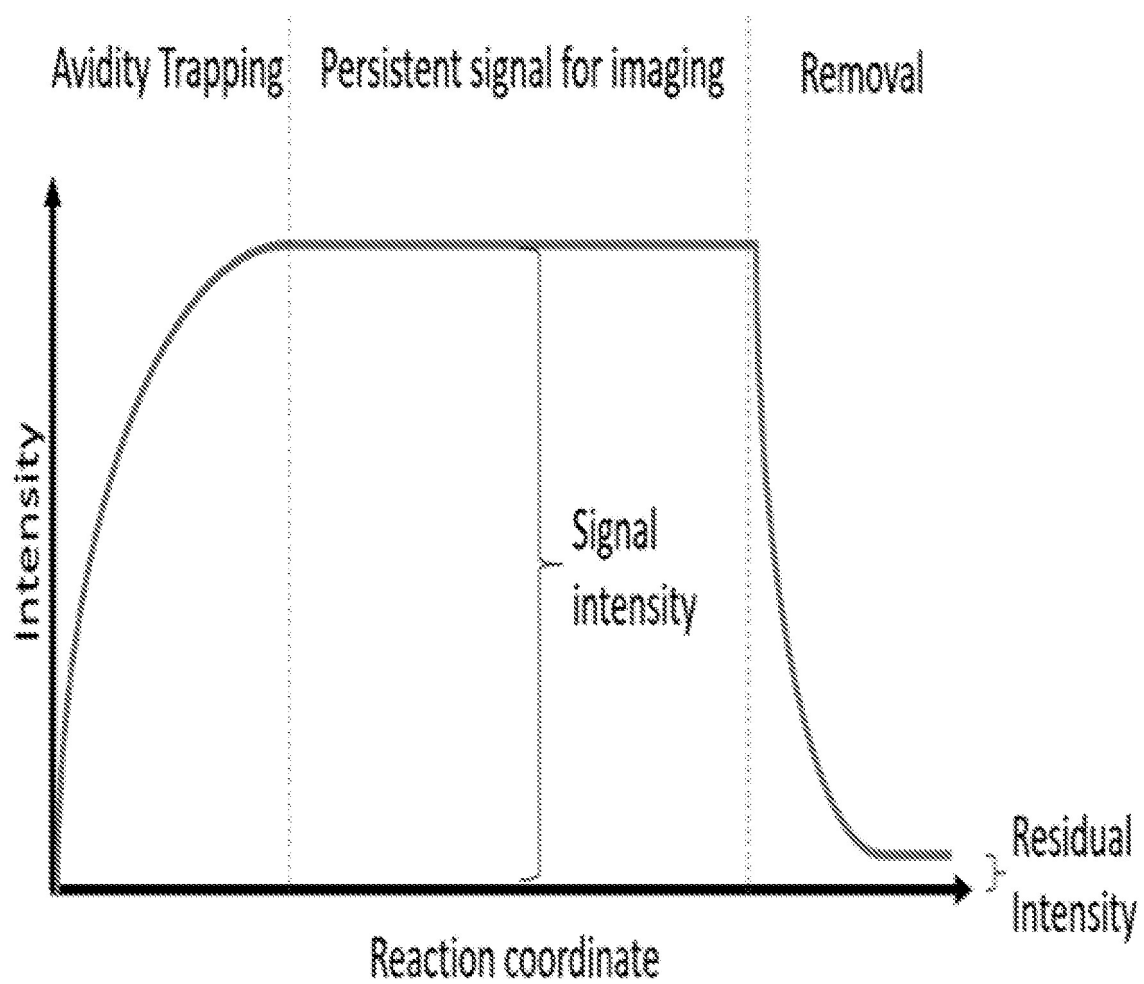
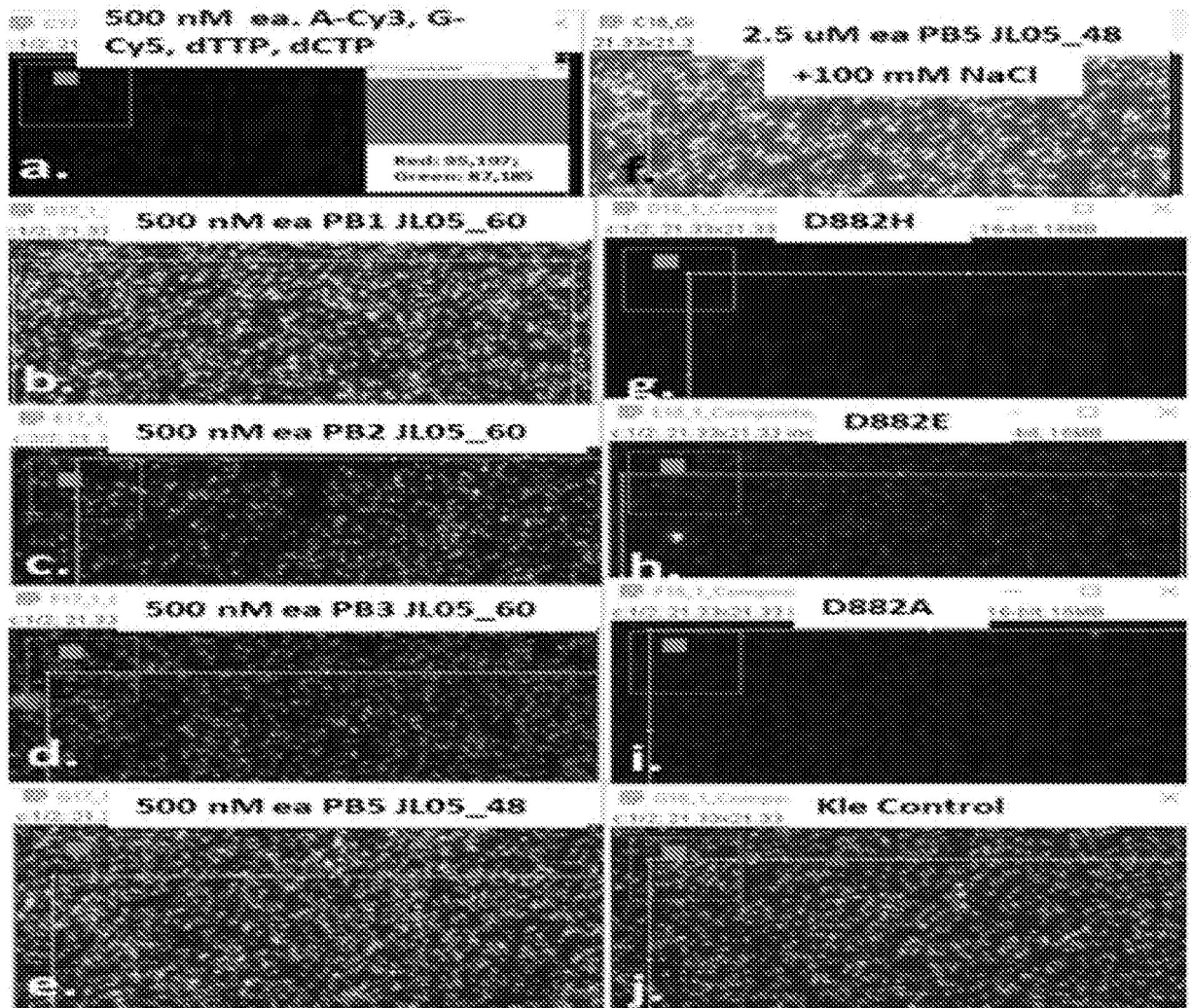


FIG. 6



FIGS. 7A-7J

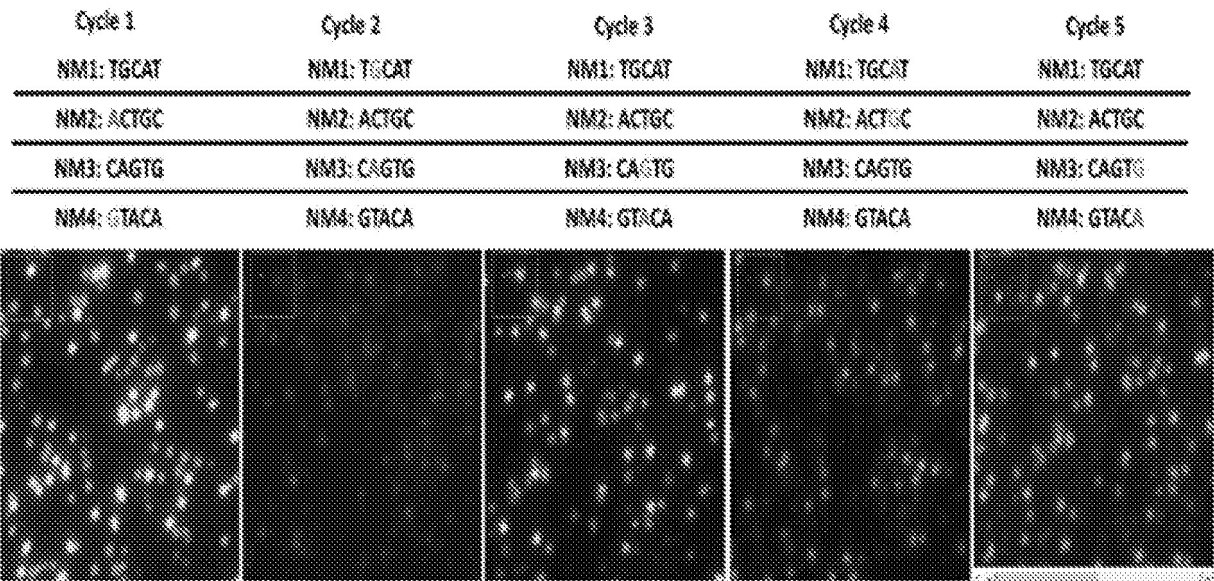
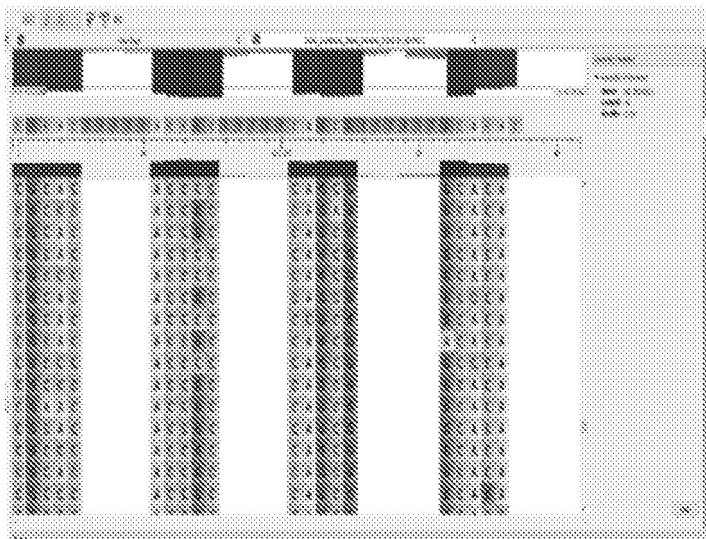


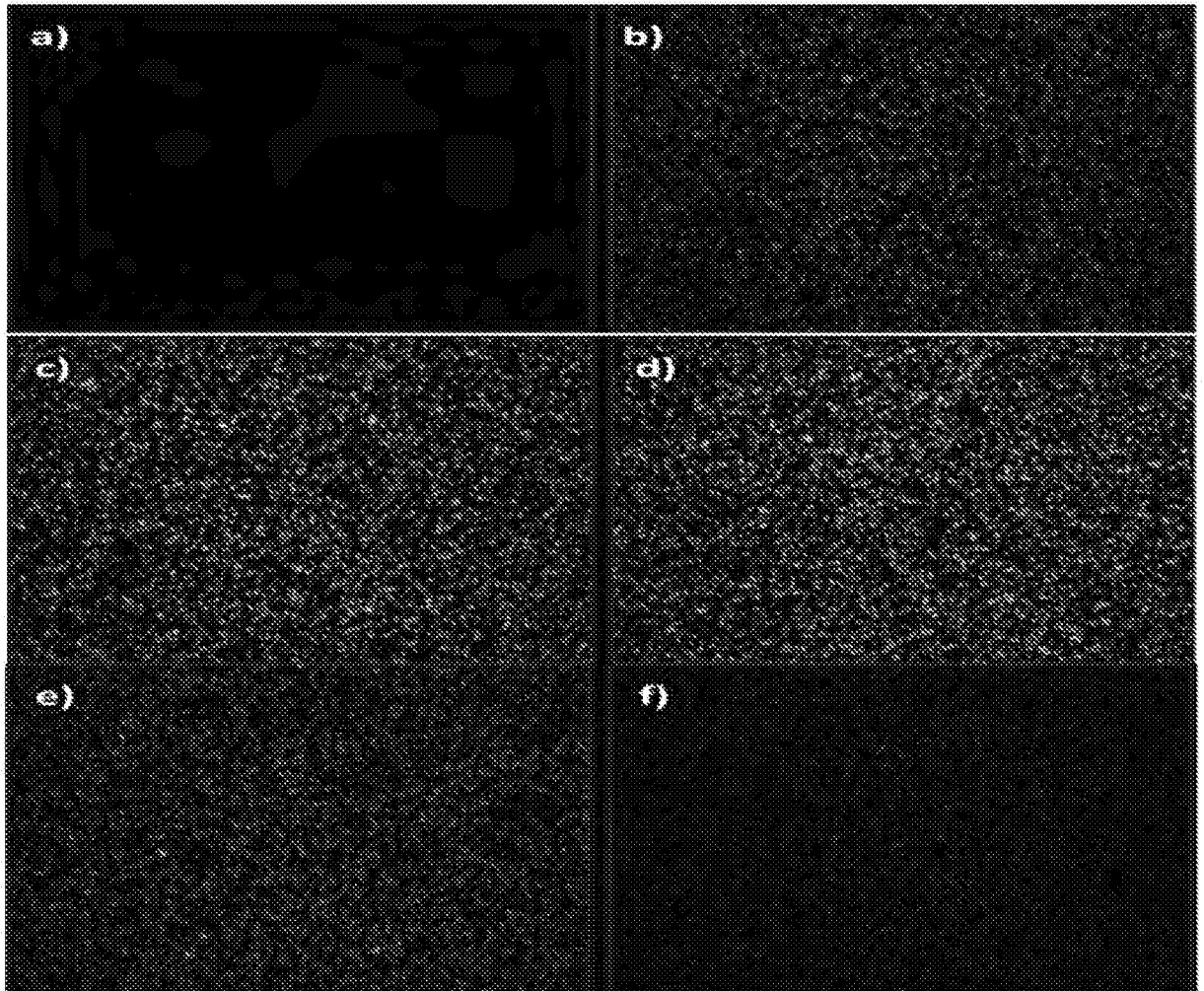
FIG. 8A

- 5 Cycles:
- G: Cy3 (Green)
- A: Cy5 (Red)
- C: dark bases (both C & T)



Expected Seq	#
CGCAC	1484
ACCGC	1466
CAGCG	1515
GCACA	1320
# correct	5785
total reads	10508
#read in FOV	9238
% correct	0.626218
allow 1 error	8727
%mapped	0.83051

FIG.8B



FIGS. 9A-9F



FIG. 9G

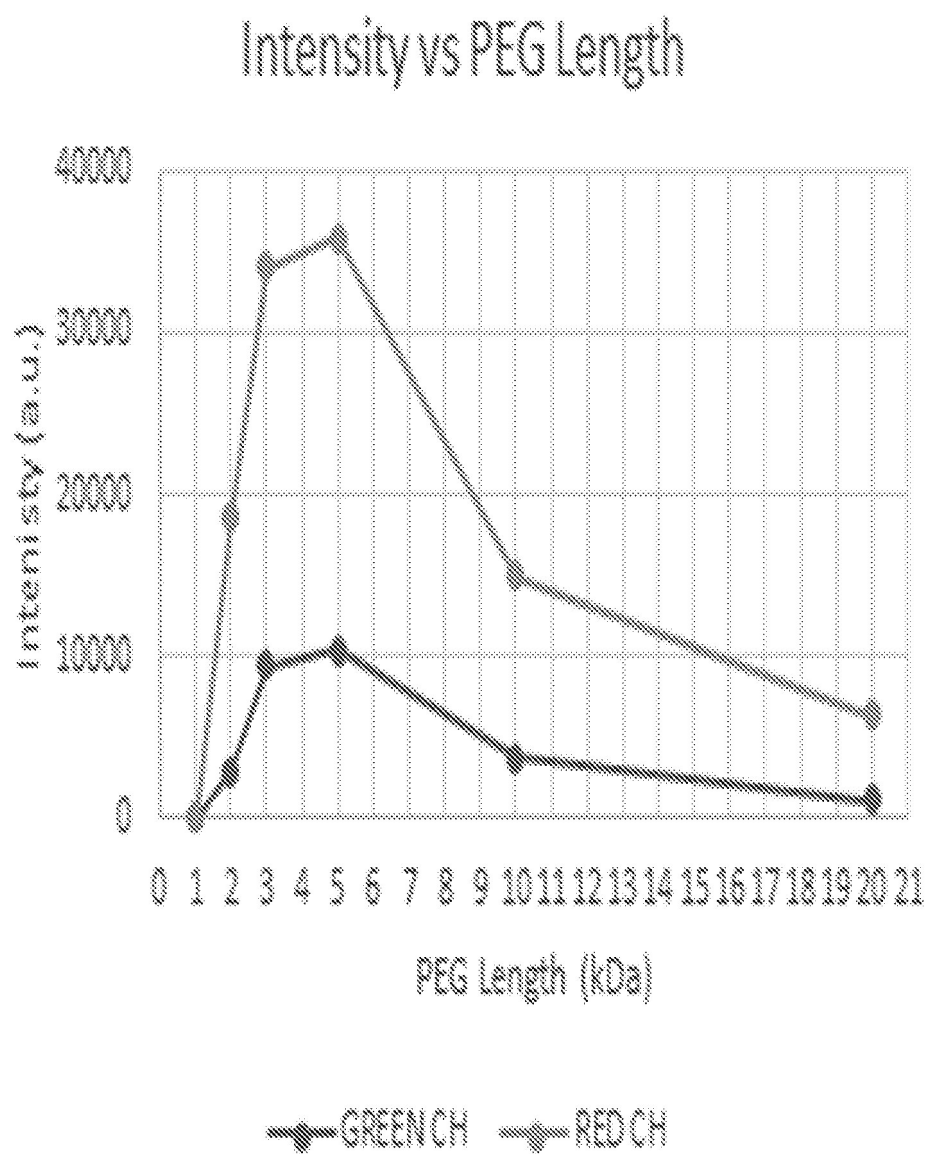


FIG. 10

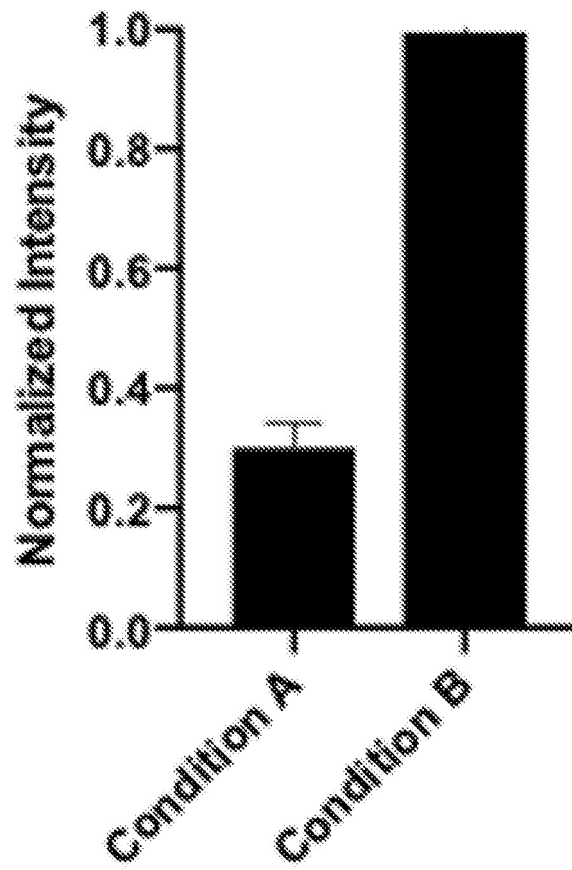


FIG.11

FIG.12A

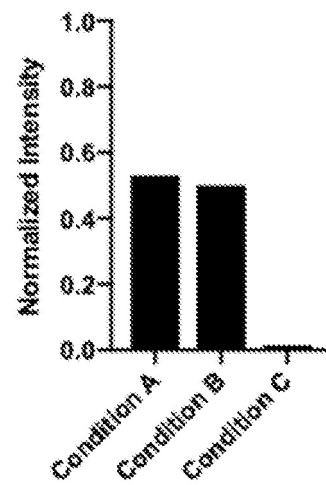


FIG.12B

