

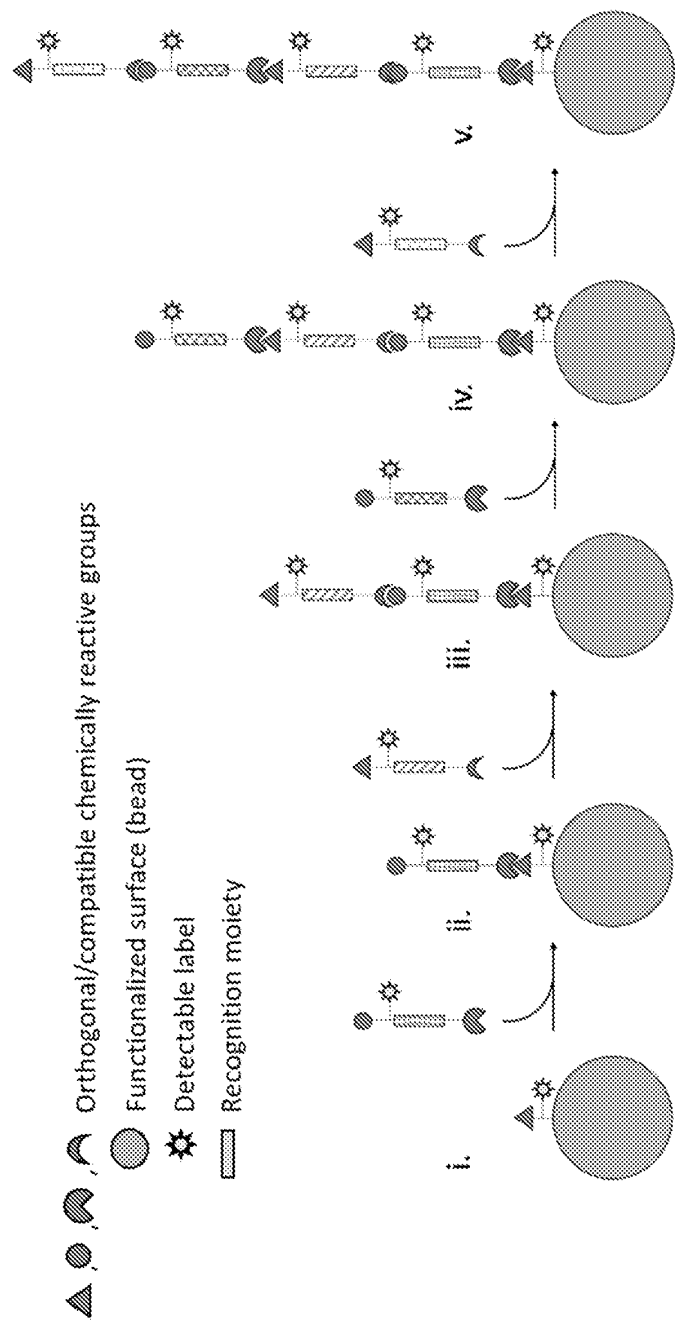


FIG. 1

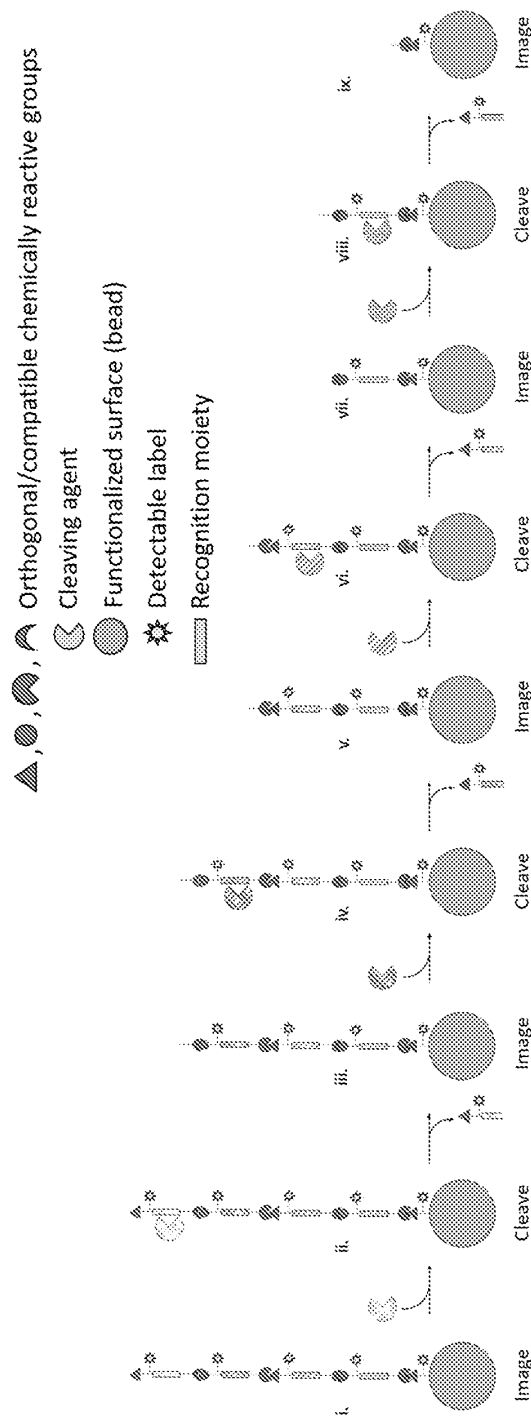
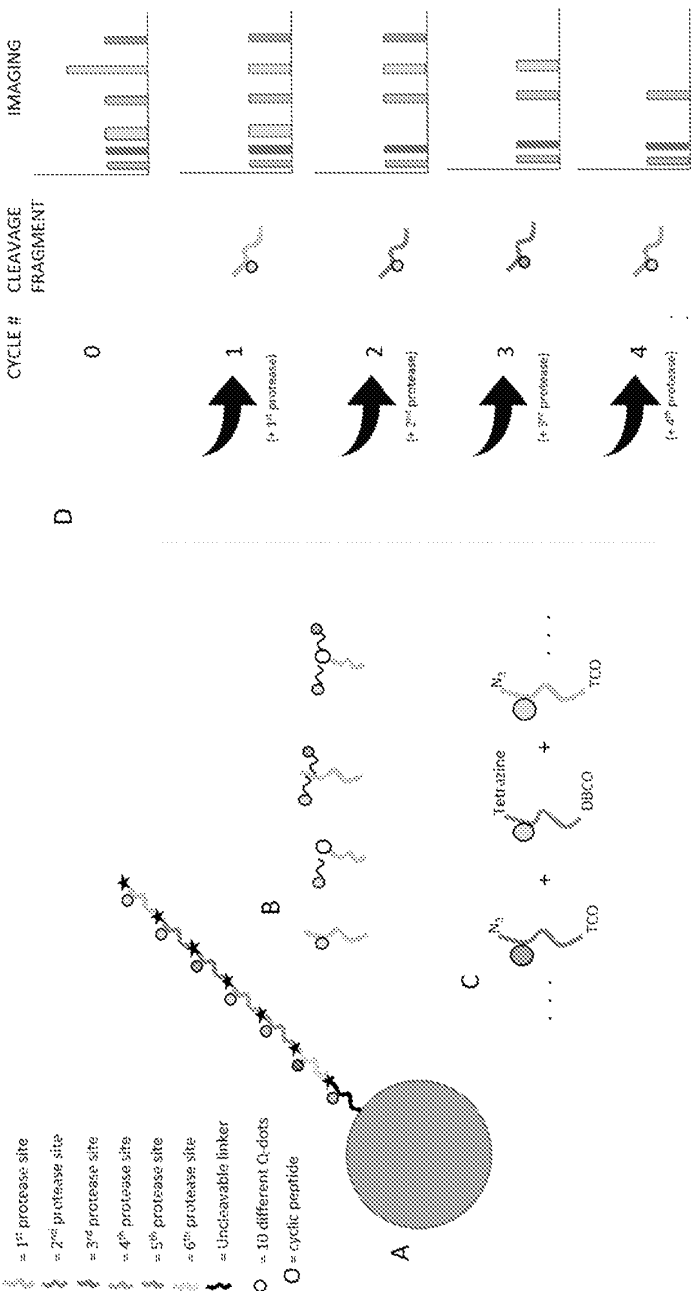
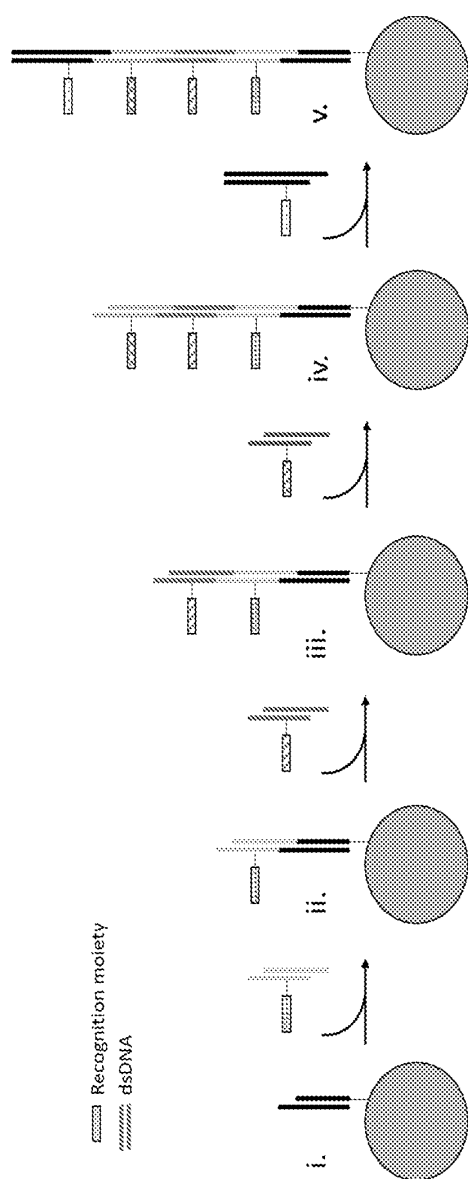


FIG. 2



**FIG. 4**

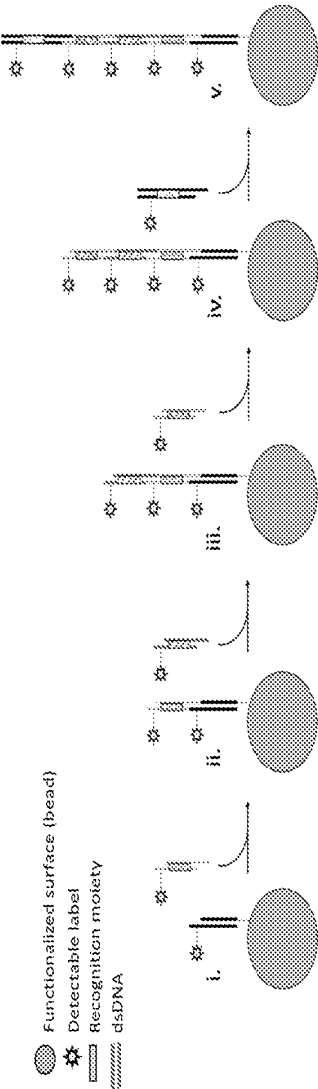


FIG 5

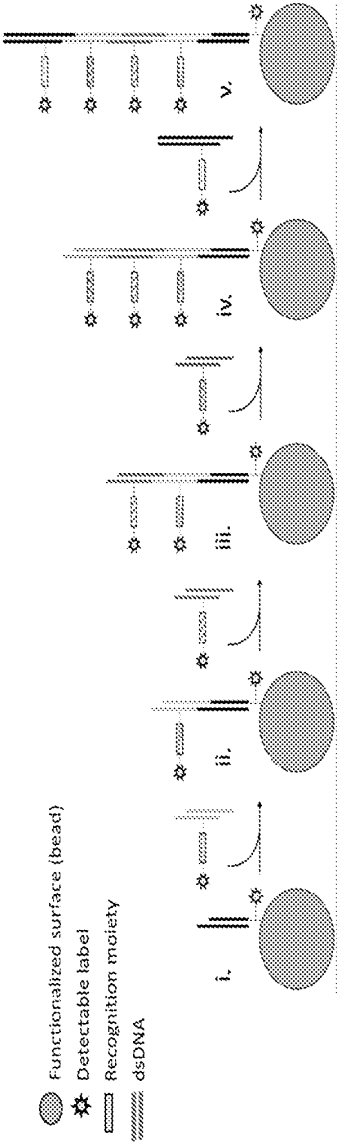


FIG 6

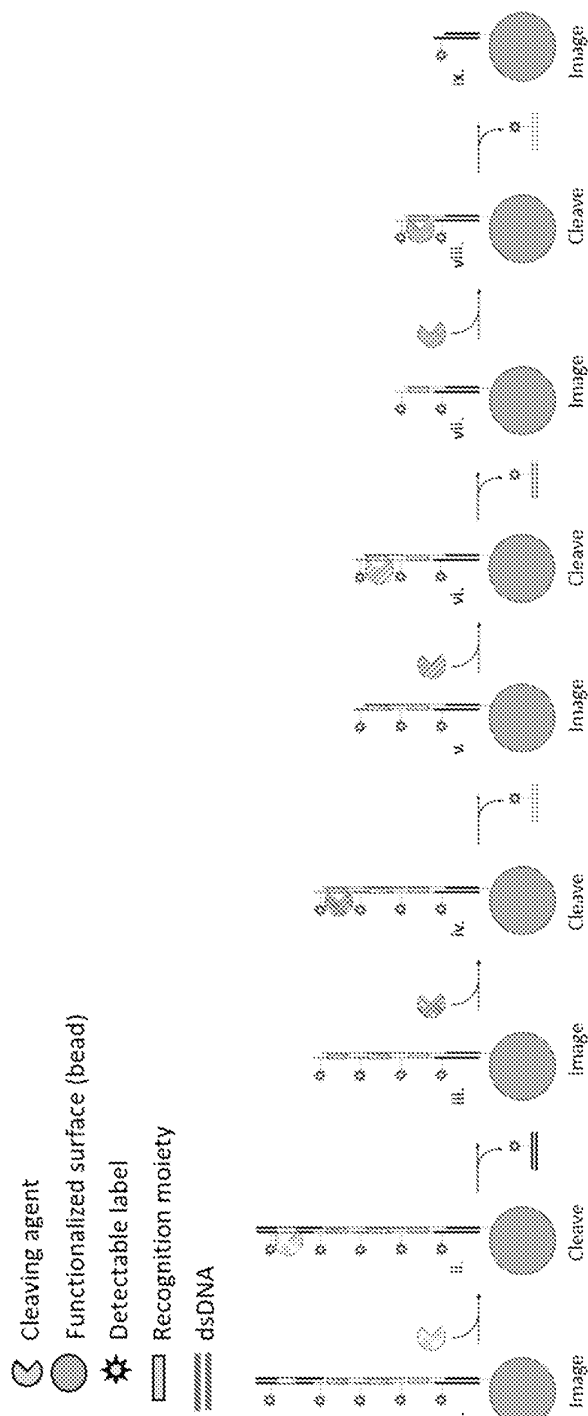


FIG. 7

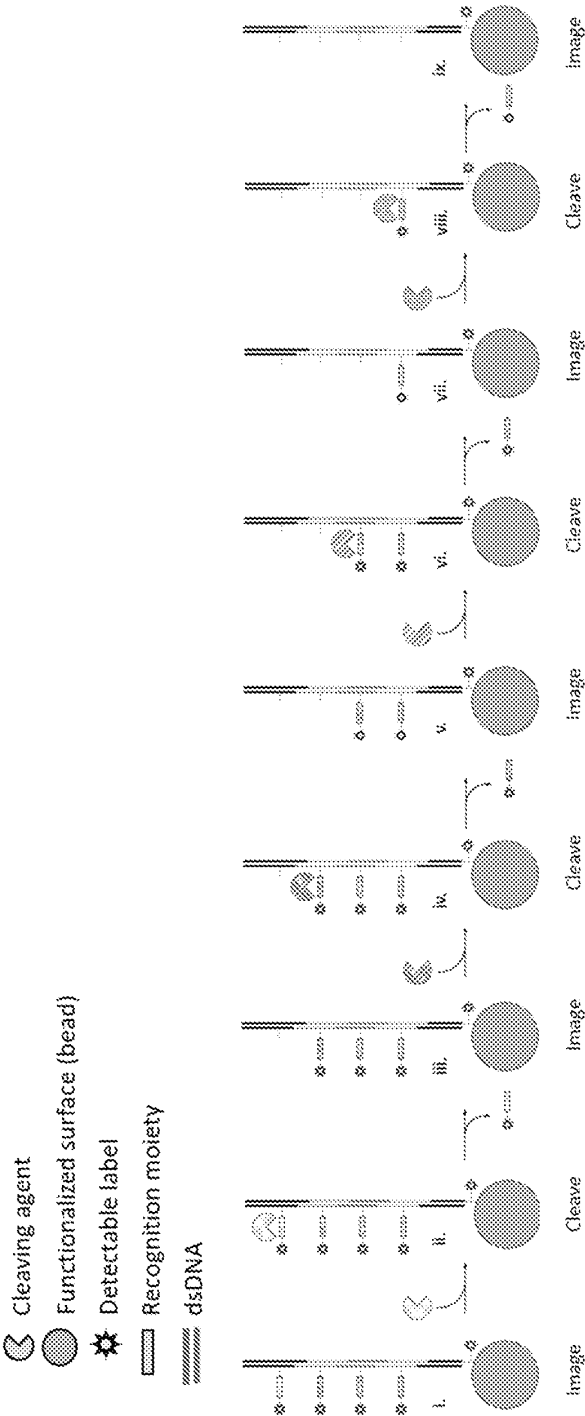


FIG. 8

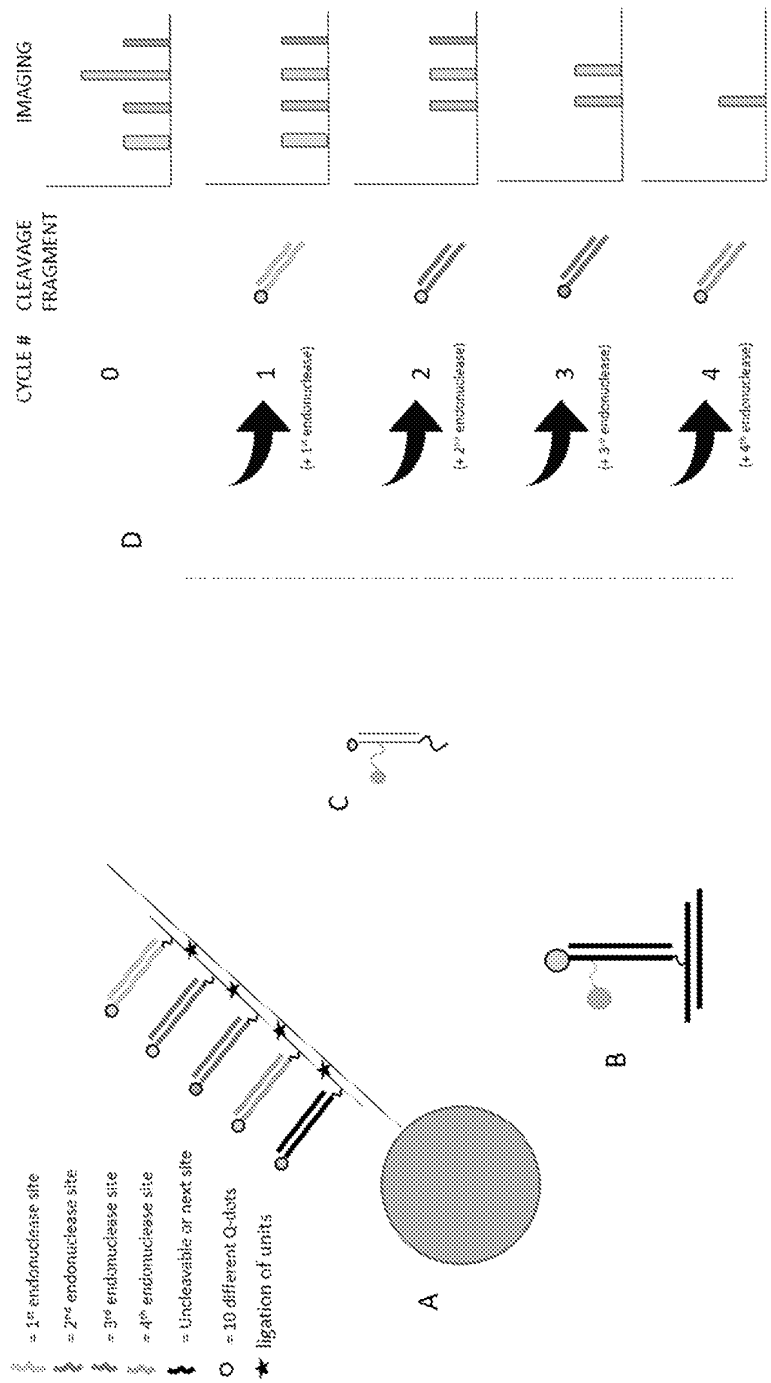


FIG. 9

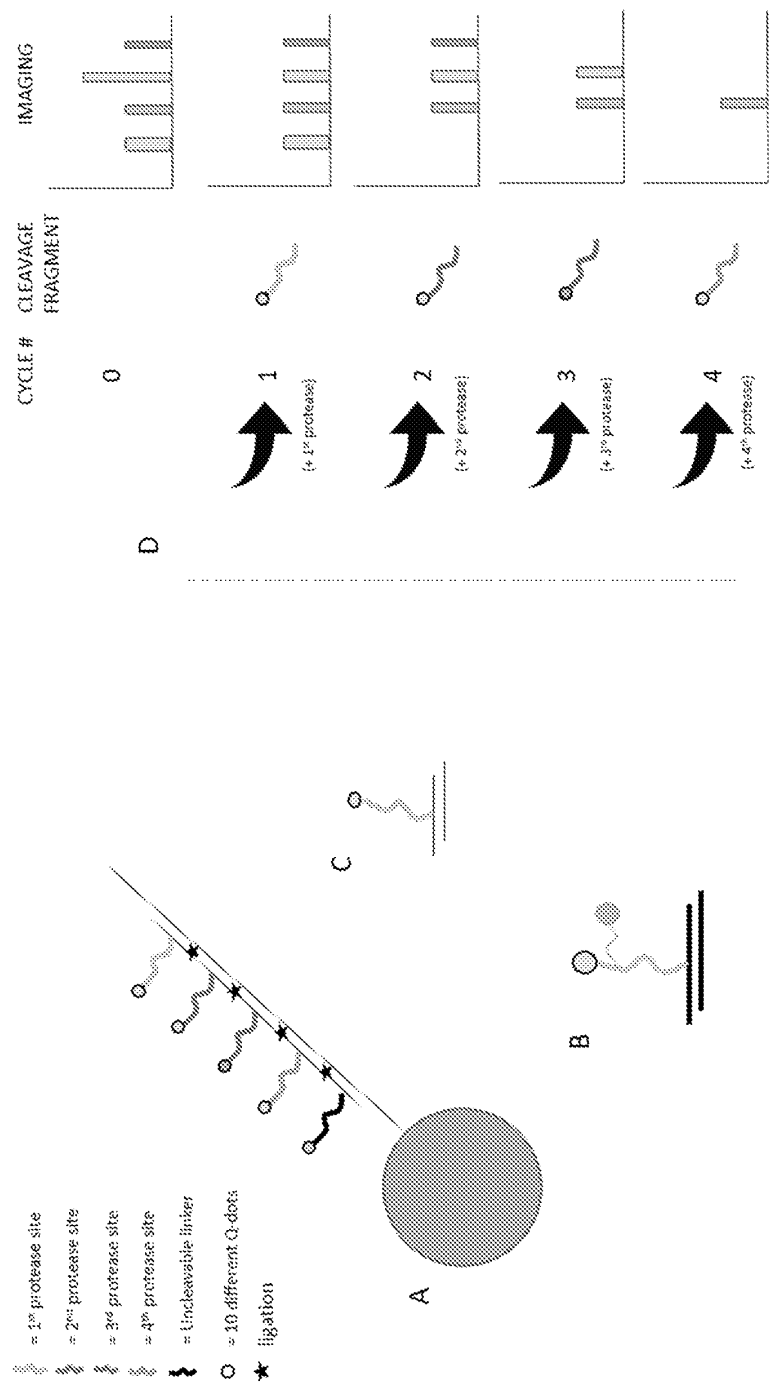


FIG. 10

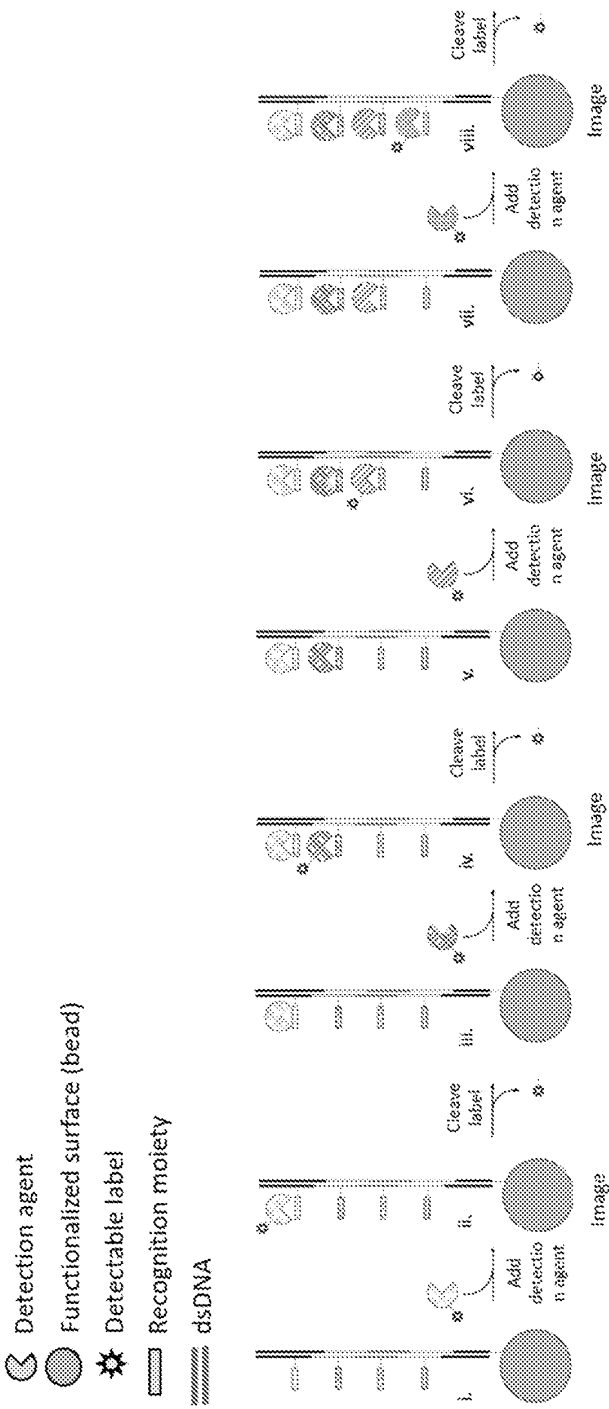


FIG. 11

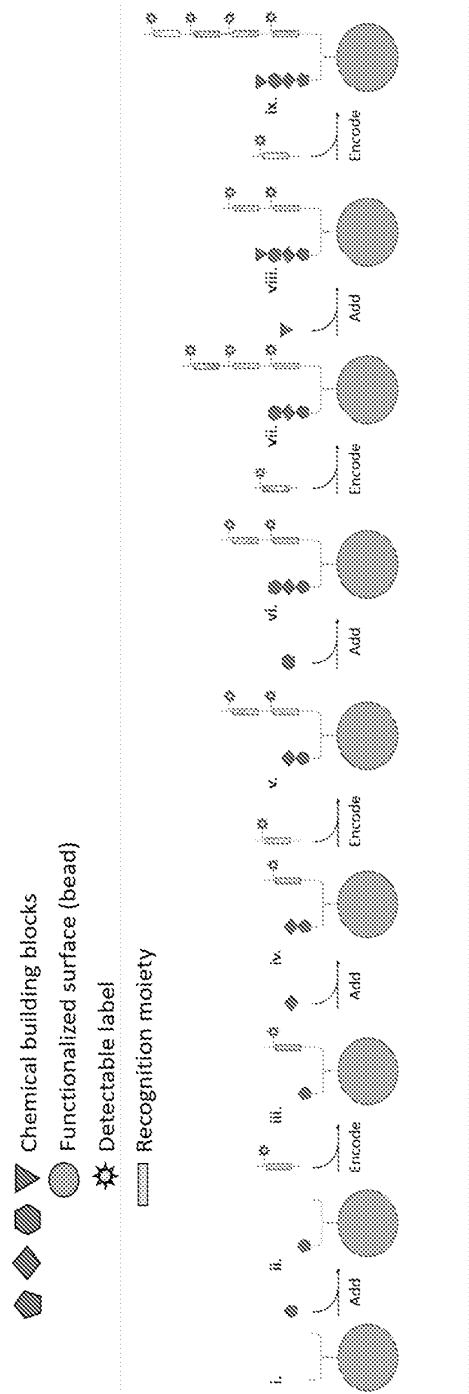


FIG. 12

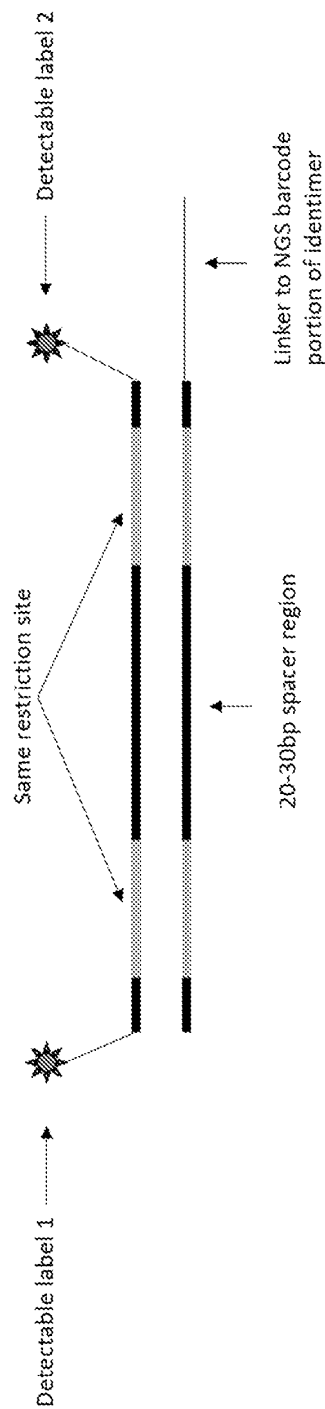


FIG. 14

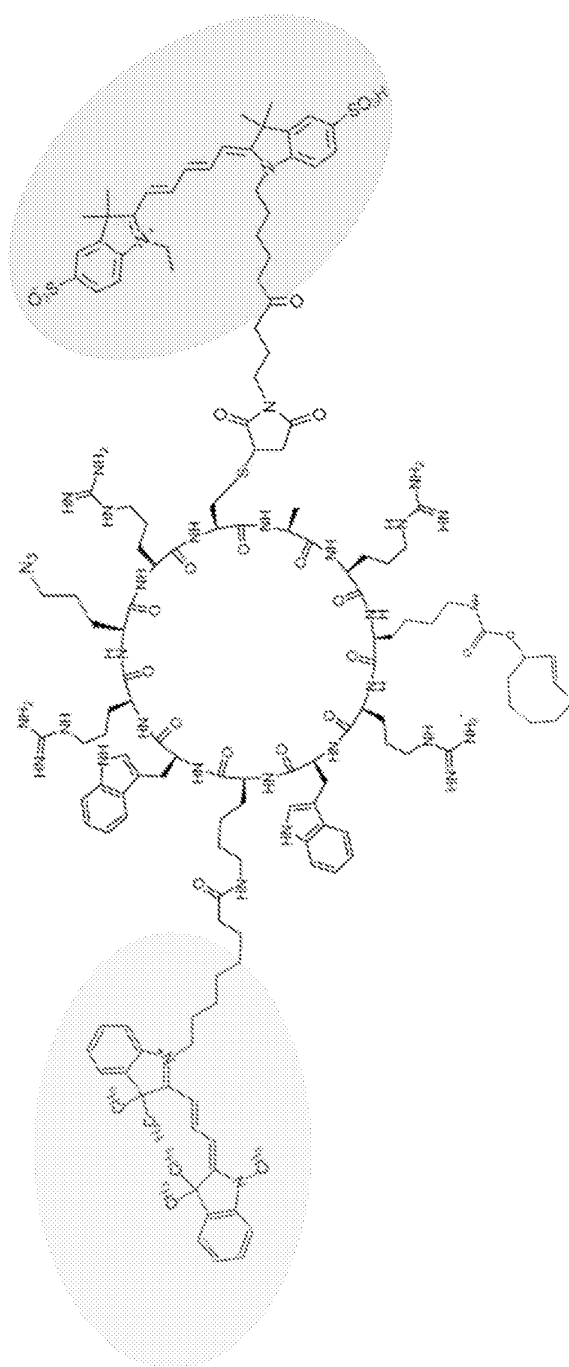


FIG. 15

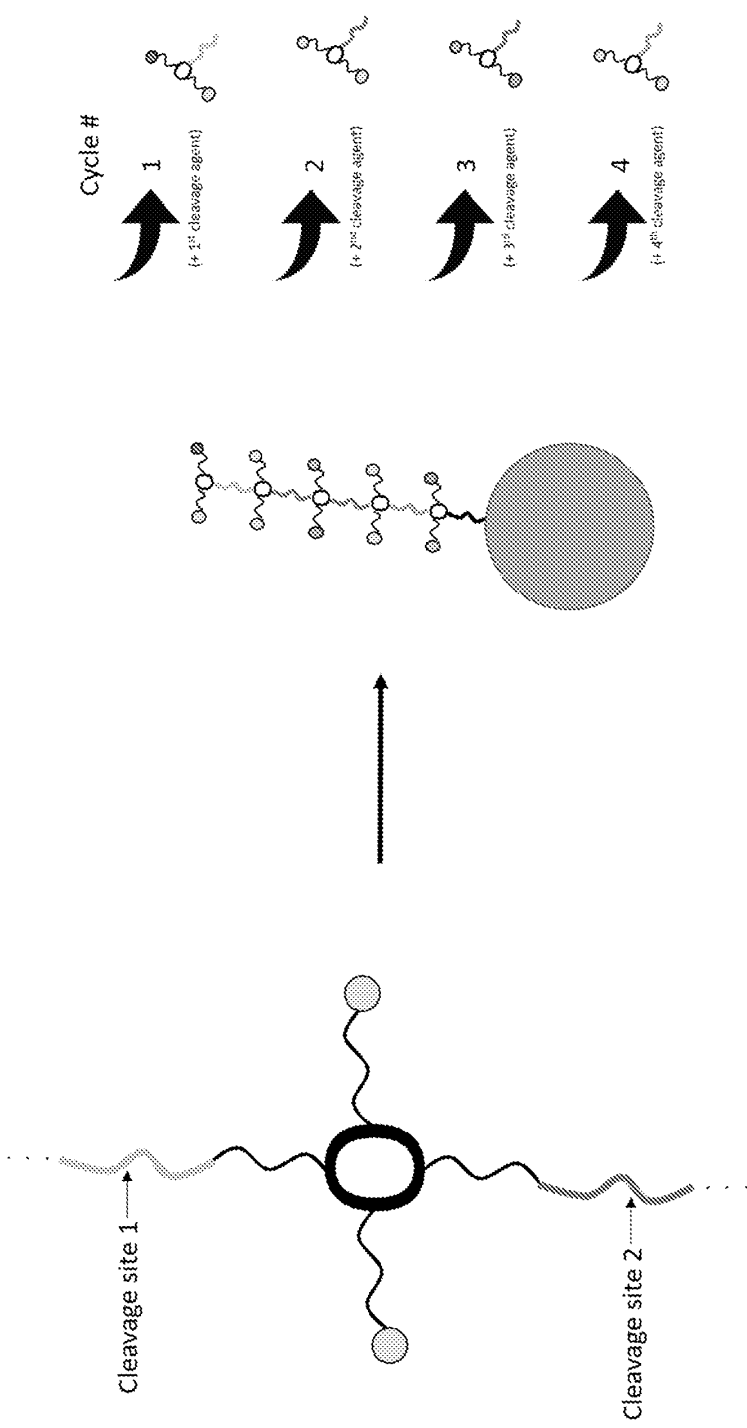


FIG. 16

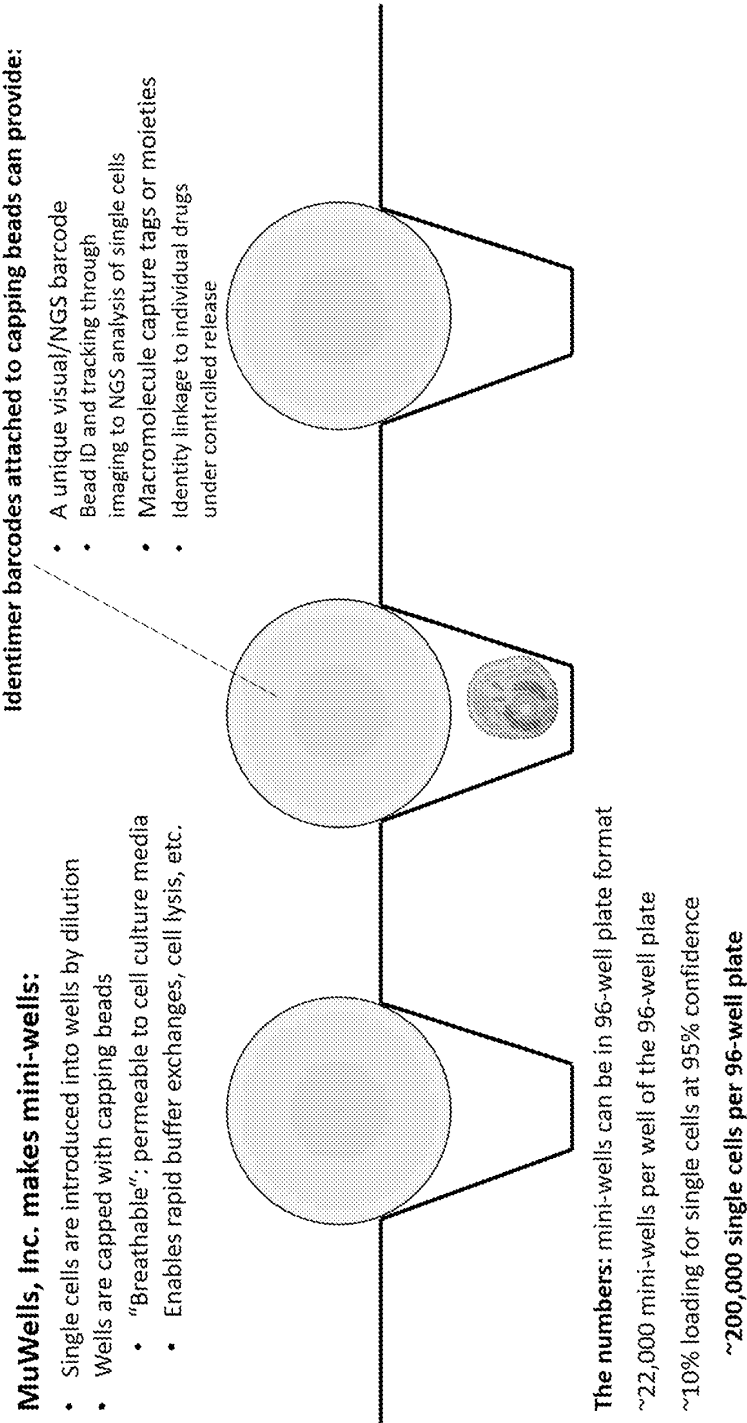


FIG. 17

FIG. 18

FND Id₁-biotin unlabeled

/5BiotinTEG/ATTATTTTATTAGCTAGTACGCTACGACGTC

FND Id₁ complementary

/5Phos/[TGCAG]GACGTCGTAGCGTACTAGC/3AmMC6T/

FND Id₂ unlabeled HindIII

/5Phos/[CTGCA]CGACTGC{AAGCTT}GATACTAGCA

FND Id₂ complementary

/5Phos/[ACACT]TGC/iAmMC6T/AGTATC{AAGCTT}GCAGTCG

FND Id₃ unlabeled SpeI

/5Phos/[AGTGT]CGACTGCACTAGTGATACTAGCA

FND Id₃ complementary

/5Phos/[TATGC]TGC/iAmMC6T/AGTATC{ACTAGT}GCAGTCG

FND Id₄ unlabeled XhoI

/5Phos/[GCATA]CGACTGC{CTCGAG}GATACTAGCA

FND Id₄ complementary

/5Phos/[ATGGA]TGC/iAmMC6T/AGTATC{CTCGAG}GCAGTCG

FND Id₅ unlabeled NotI

/5Phos/[TCCAT]CGACT{GCGGCCGC}GATACTAGCA

FND Id₅ complementary

/5AmMC6T/GCTAGTATC{GCGGCCGC}AGTCG

- Notes:

- “[]” bracket format groupings indicate [nucleotides] forming sticky-ends and the associated [ligating agent]
- “{ }” bracket format groupings indicate {nucleotides} forming a restriction site and the associated {cleaving agent}

FIG. 19A

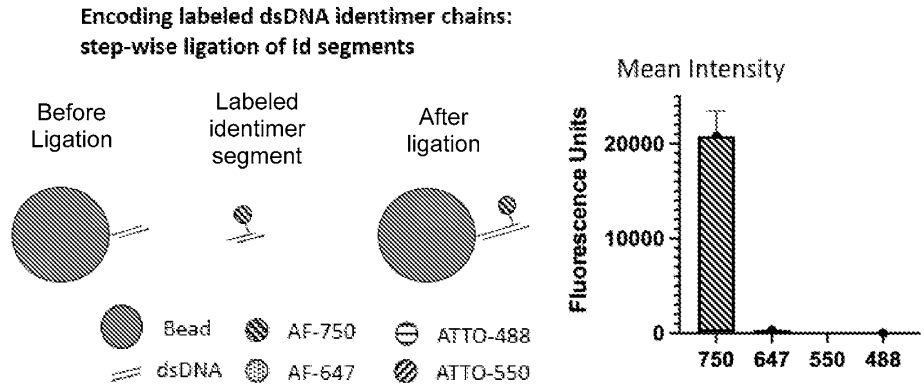


FIG. 19B

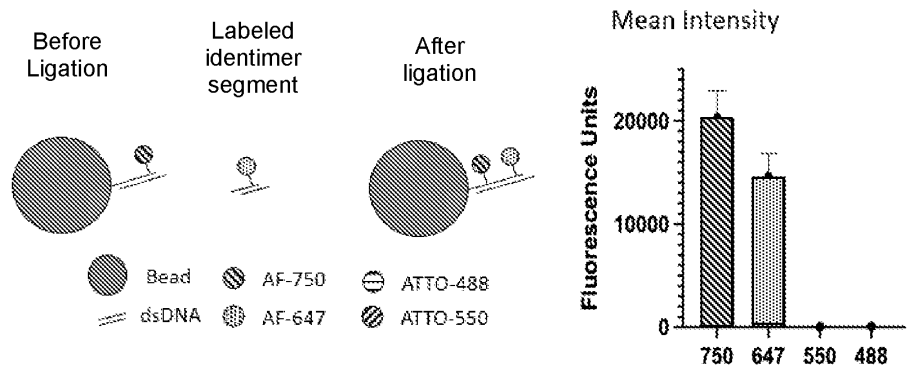


FIG. 19C

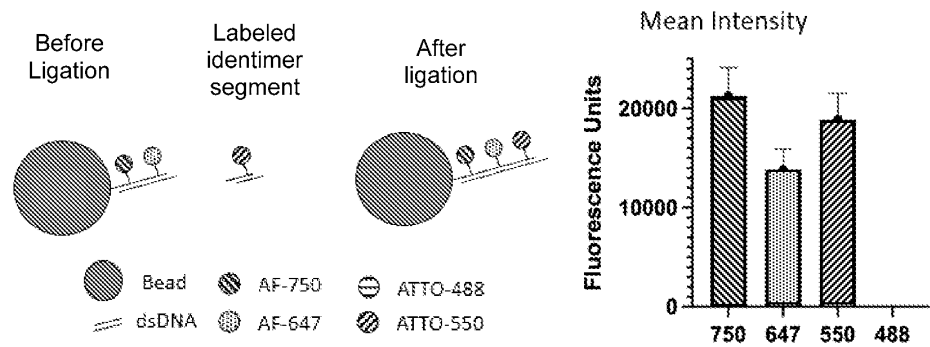


FIG. 19D

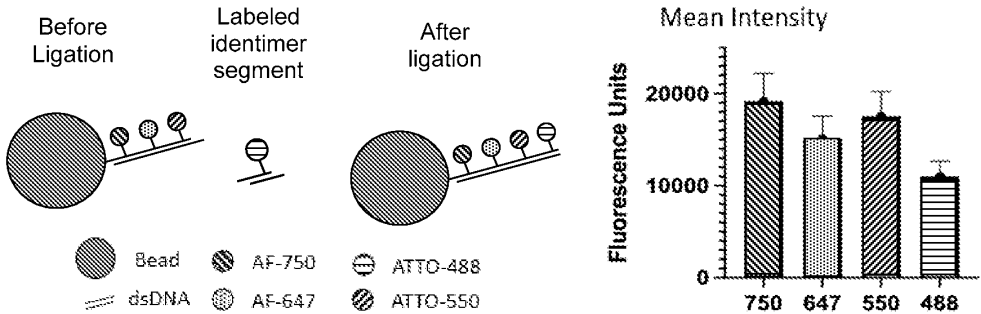


FIG. 20A

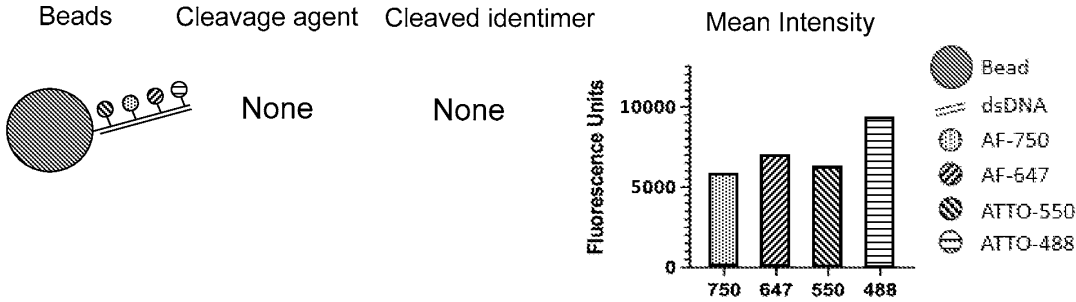


FIG. 20B

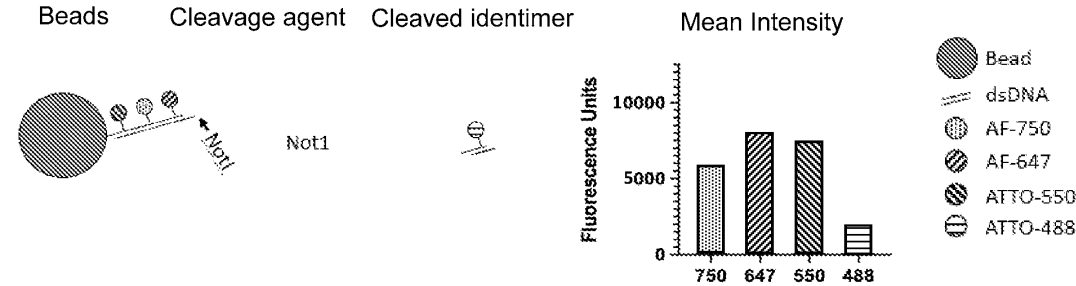


FIG. 20C

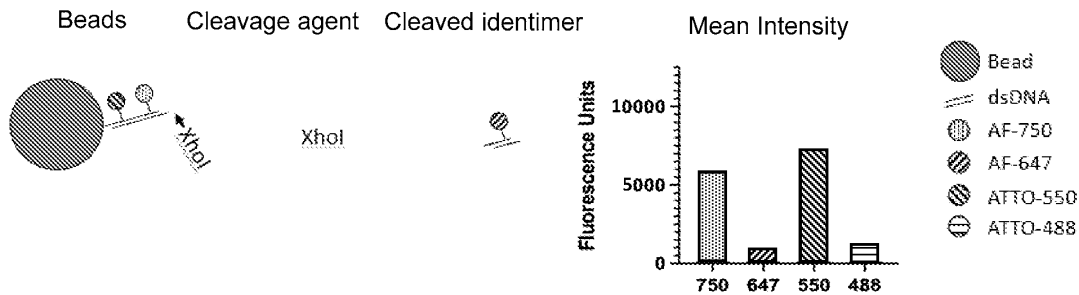


FIG. 20D

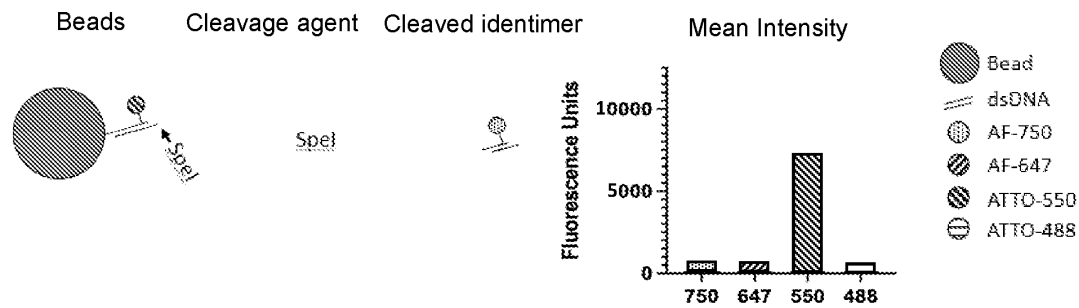


FIG. 21A

Decoding differentially-labeled dsDNA identimer chains: single and mixed segments

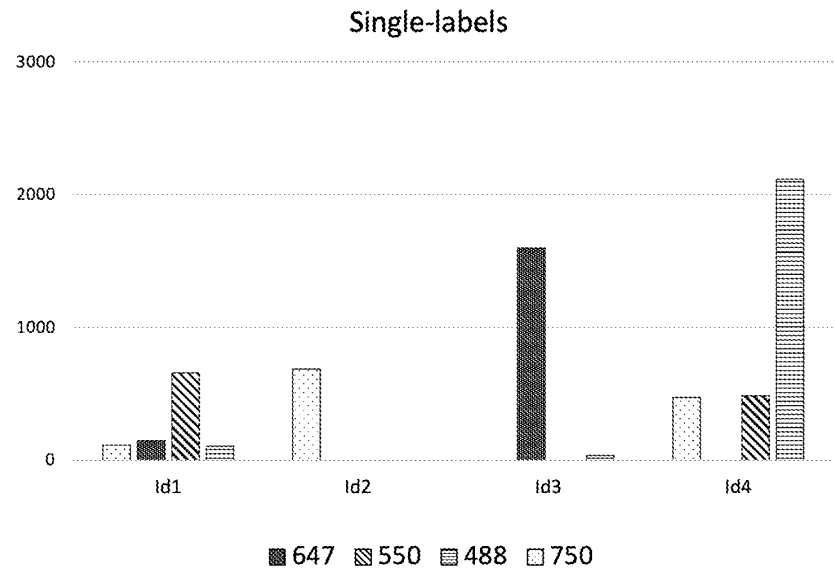


FIG. 21B

Decoding differentially-labeled dsDNA identimer chains: single and mixed segments

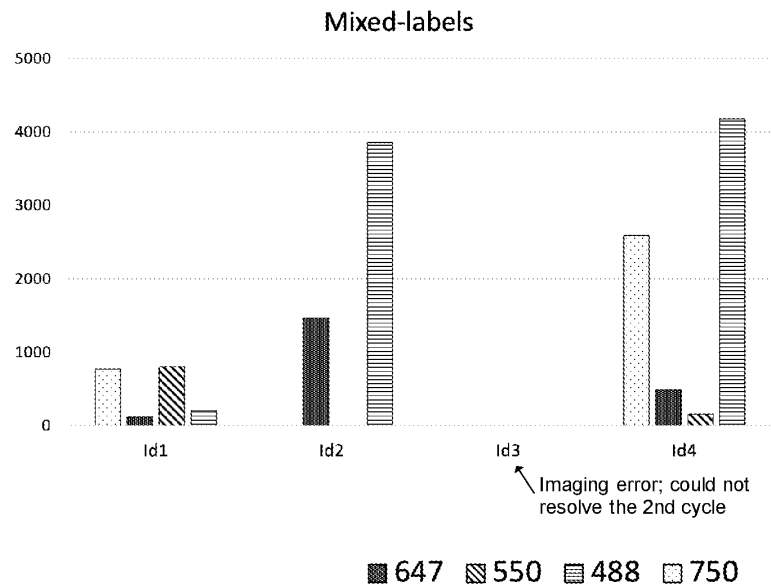


FIG. 22A

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

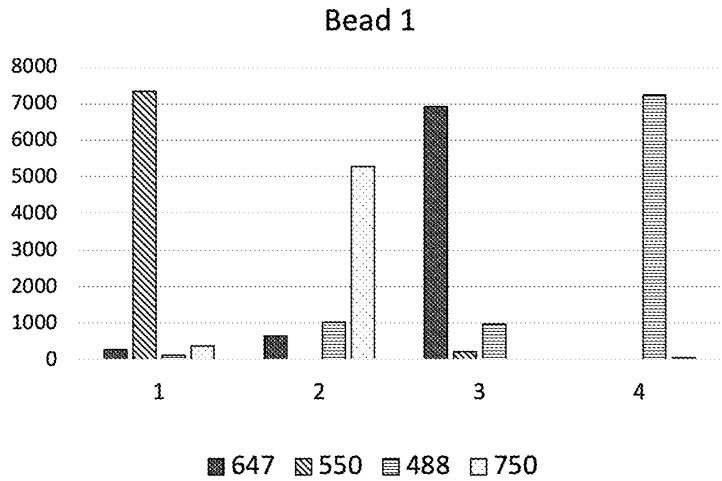


FIG. 22B

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

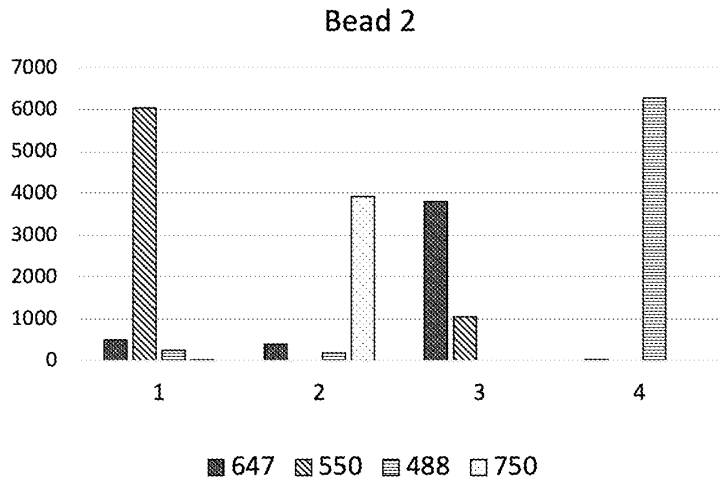


FIG. 22C

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

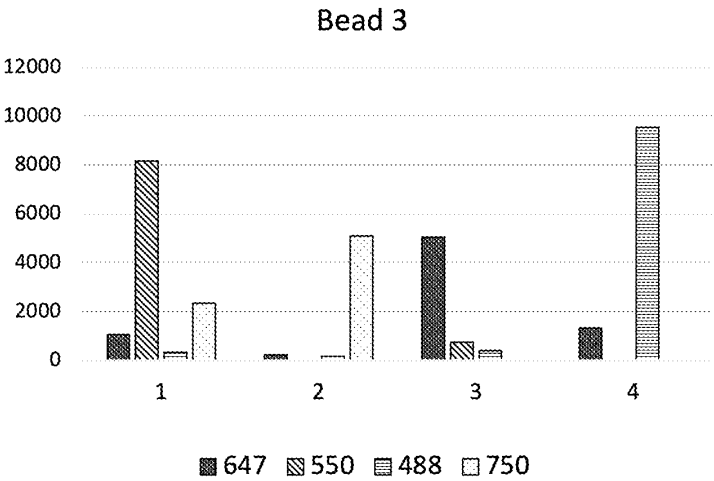


FIG. 22D

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

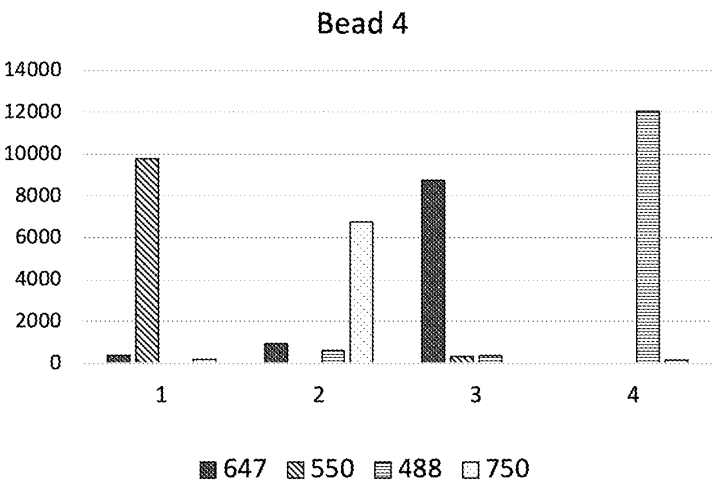


FIG. 22E

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

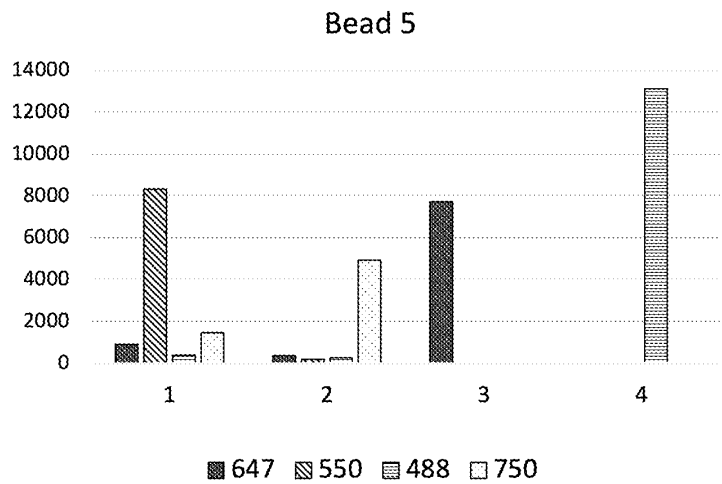


FIG. 22F

Decoding dsDNA identimer chains: tracking individual beads over 3 cycles (4 images)

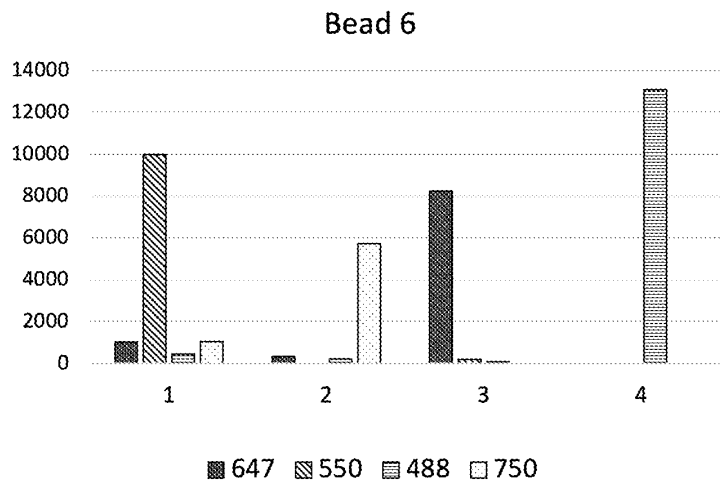


FIG. 23A

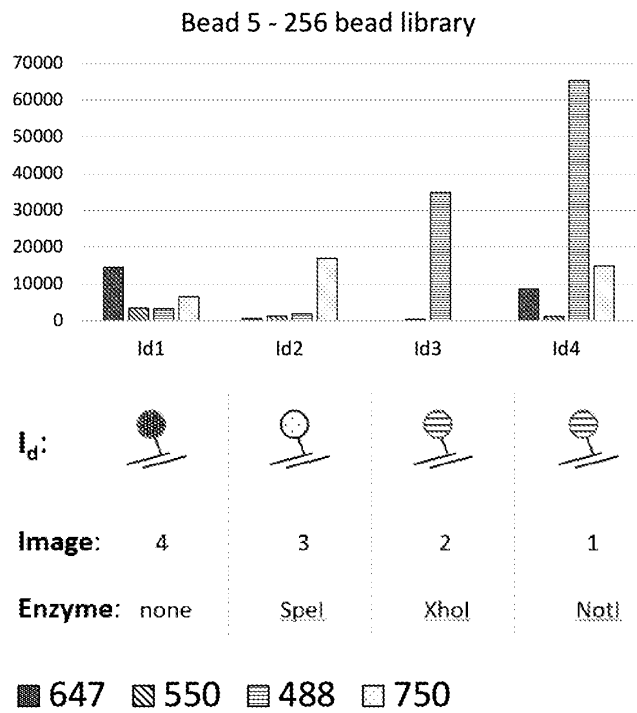


FIG. 23B

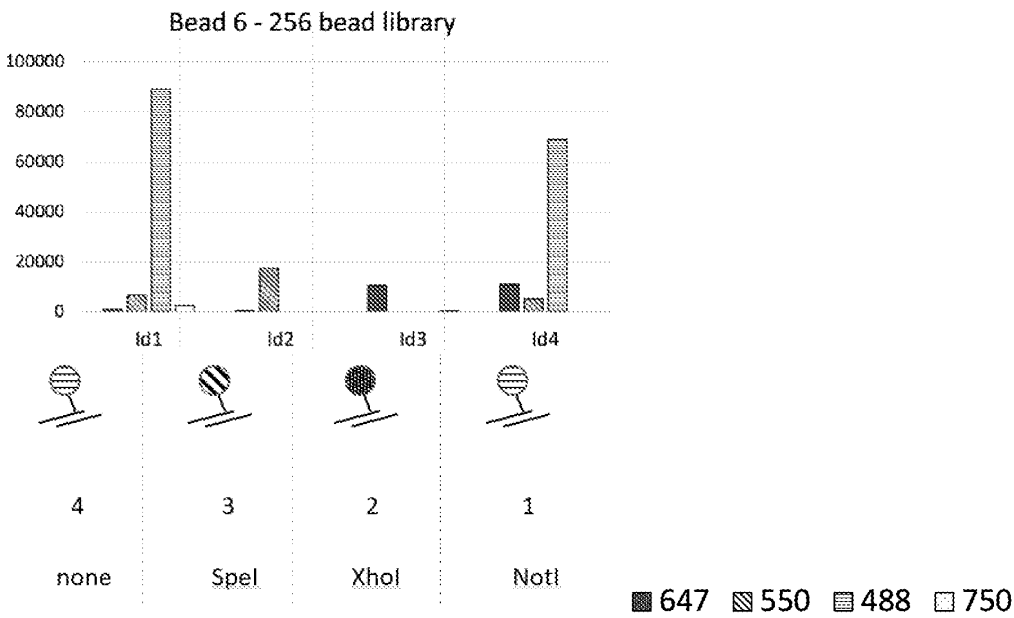


FIG. 23C

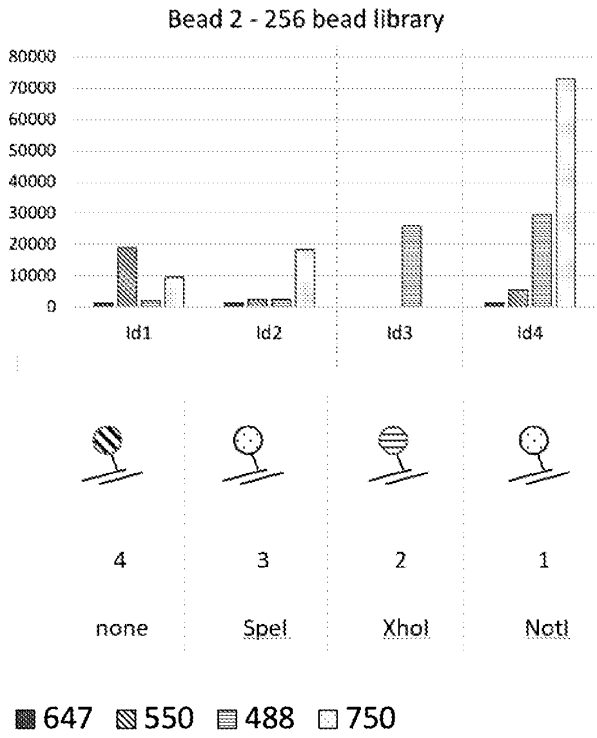


FIG. 24A

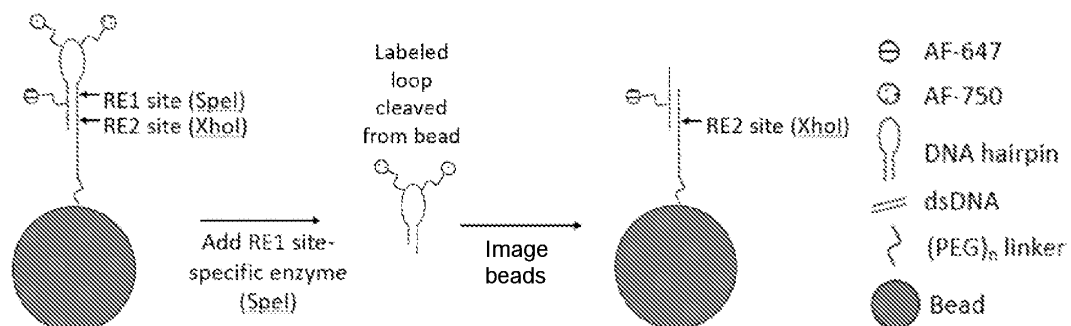


FIG. 24B

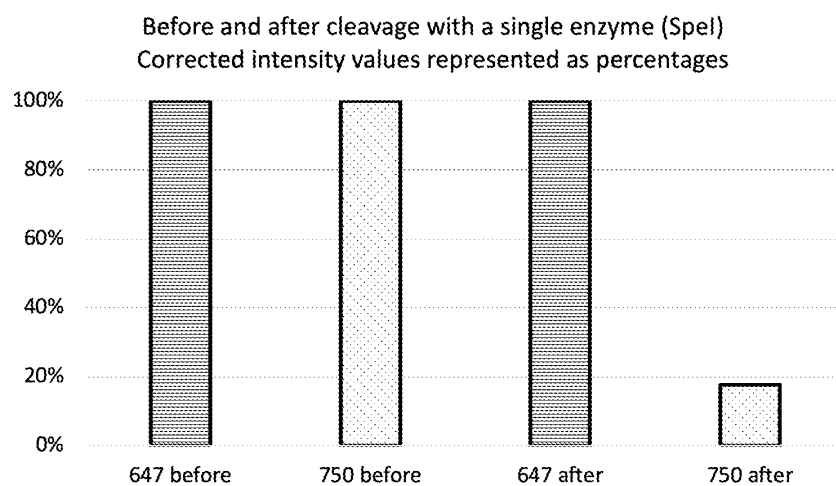


FIG. 25A

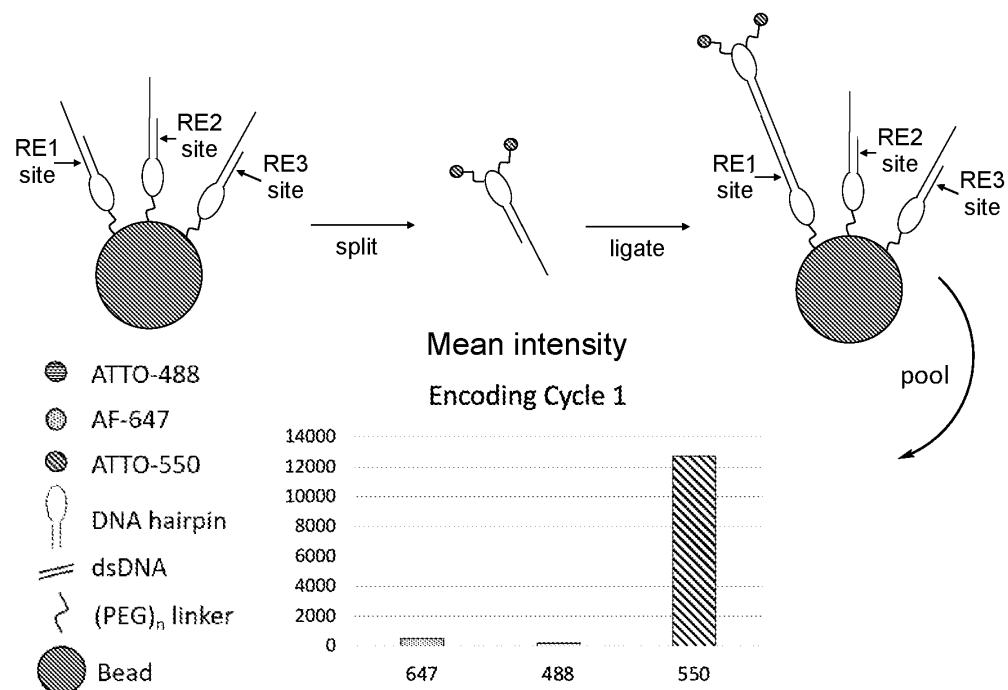


FIG. 25B

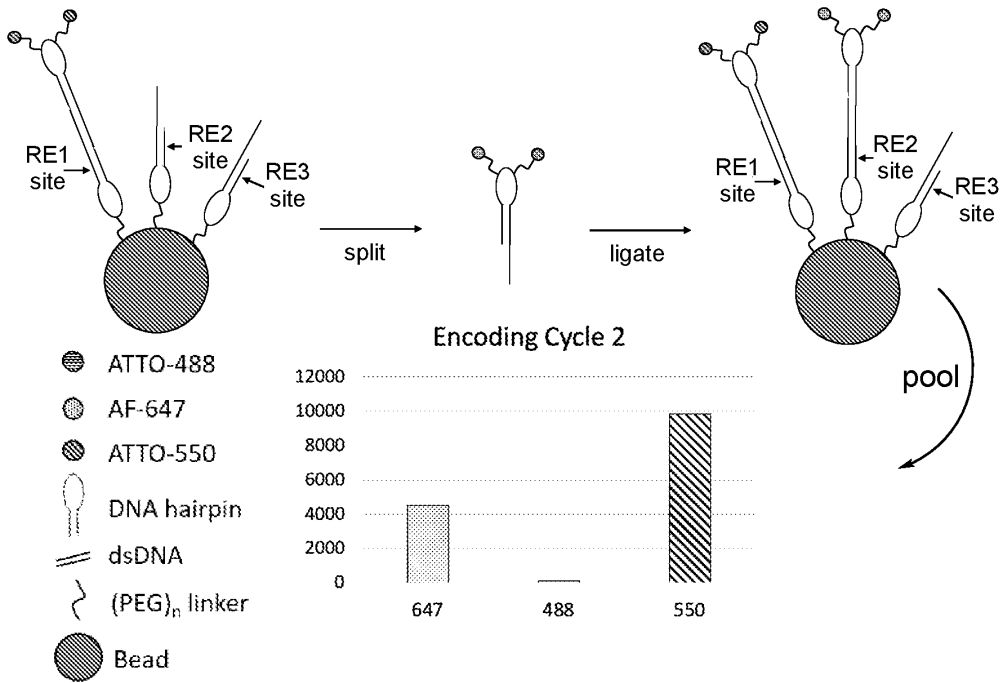


FIG. 25C

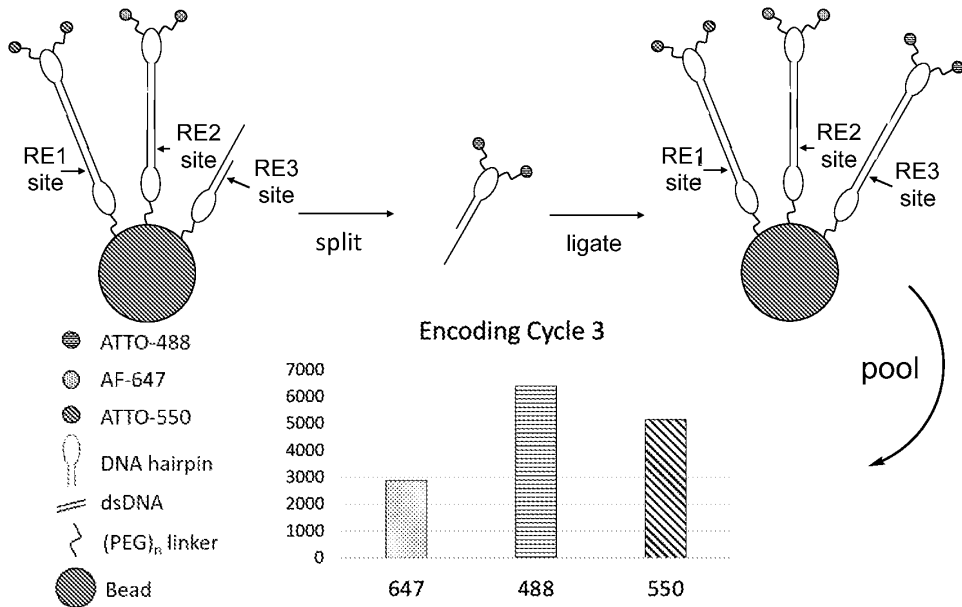


FIG. 26A

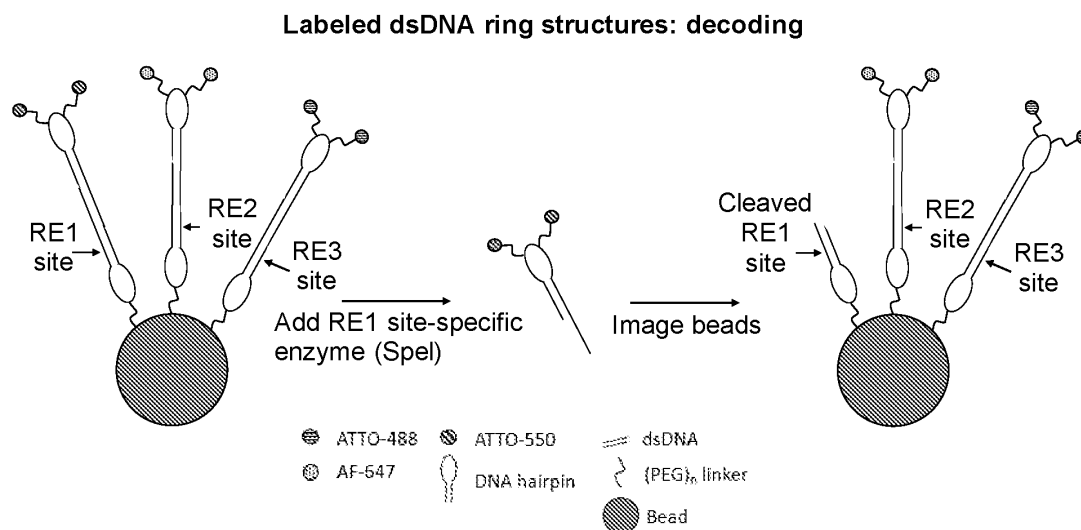


FIG. 26B

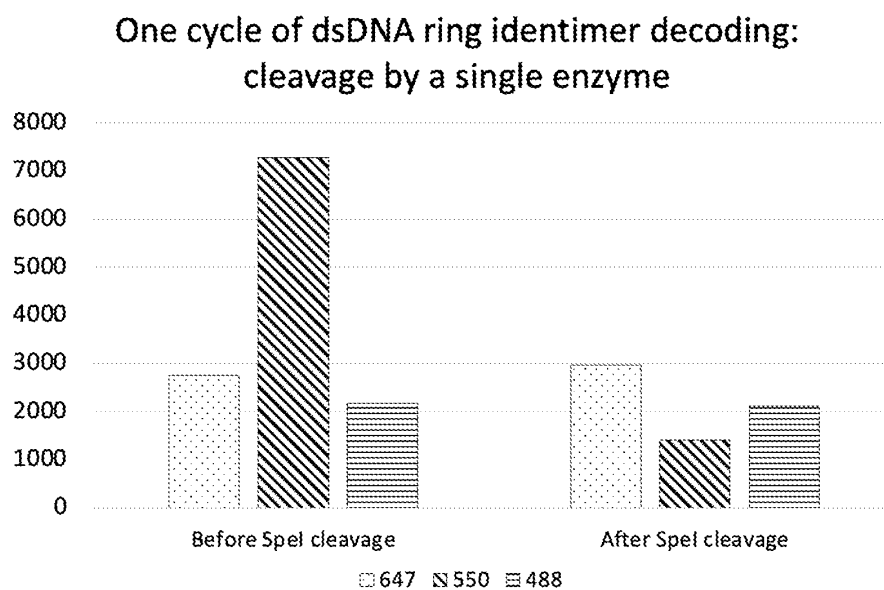


FIG. 27A

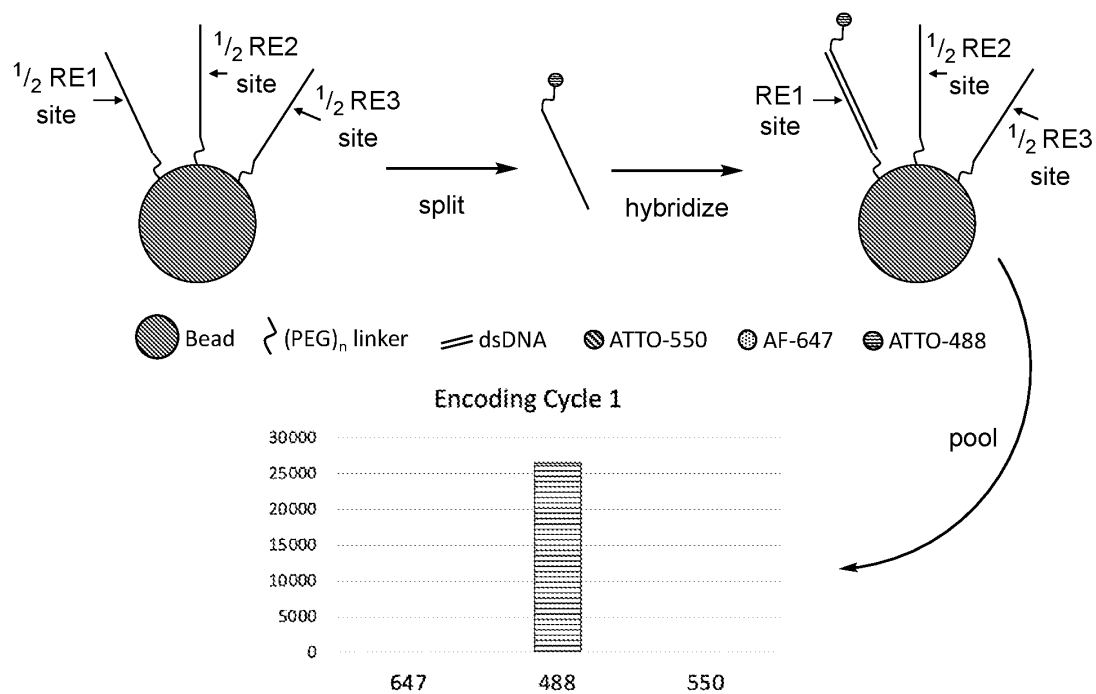


FIG. 27B

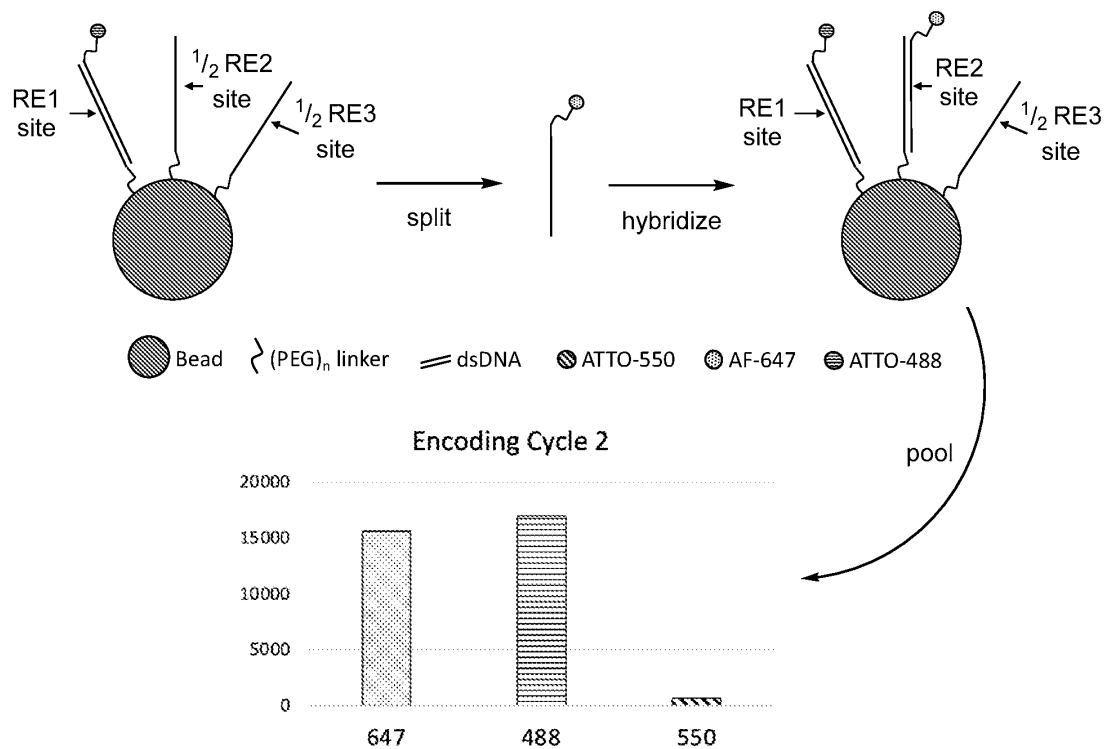


FIG. 27C

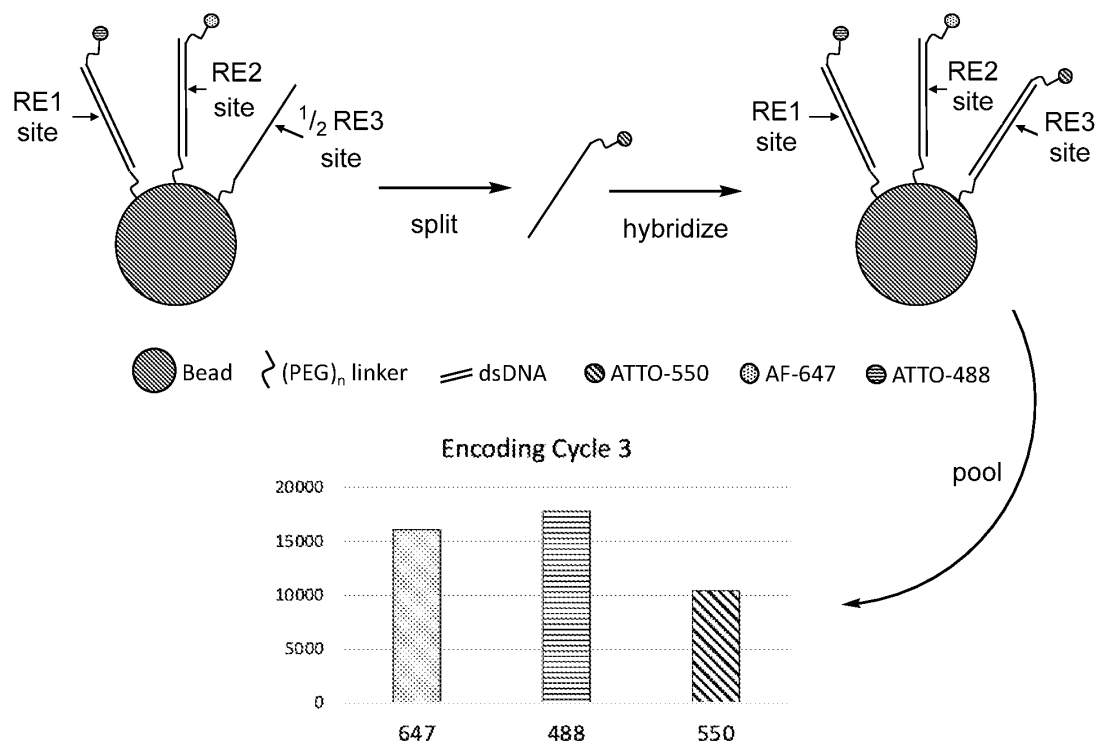


FIG. 28A

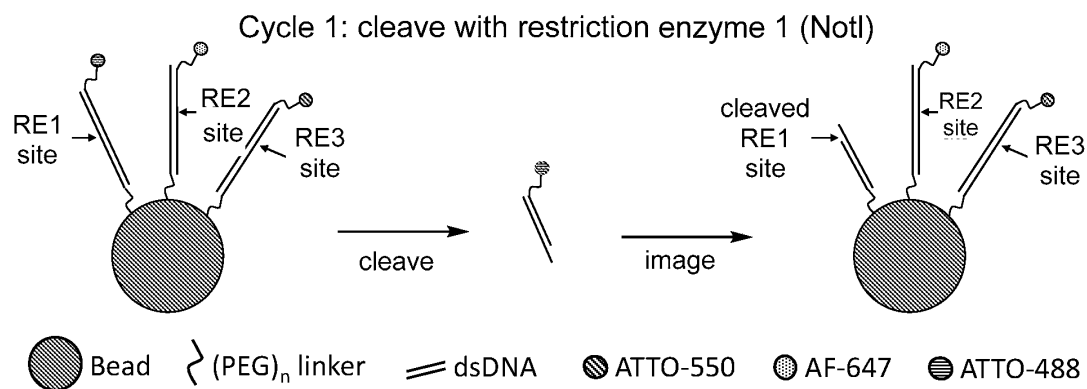


FIG. 28B

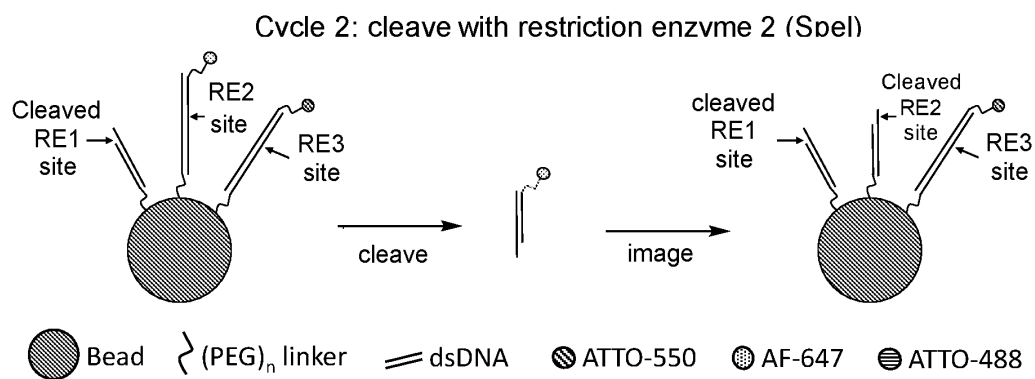


FIG. 28C

