

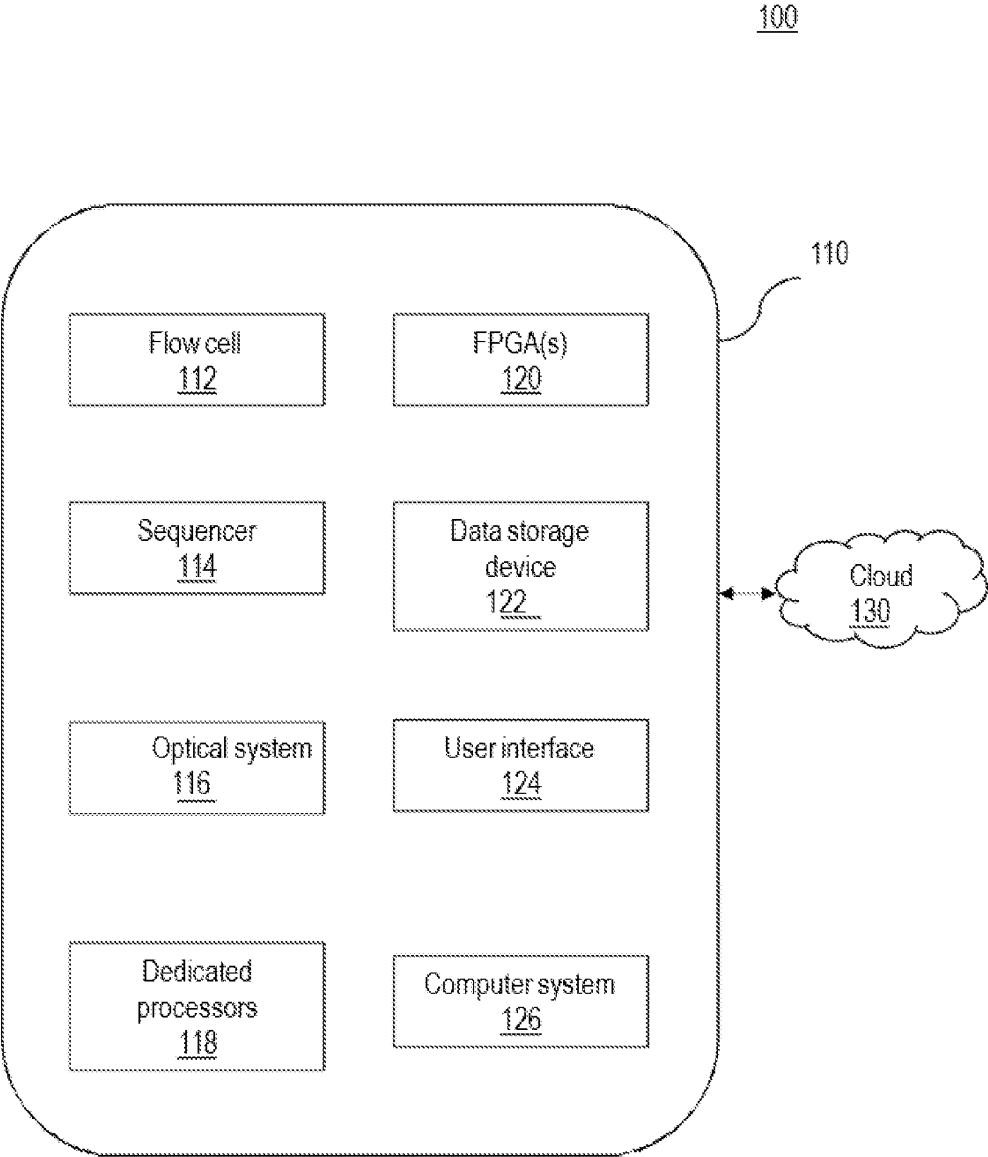
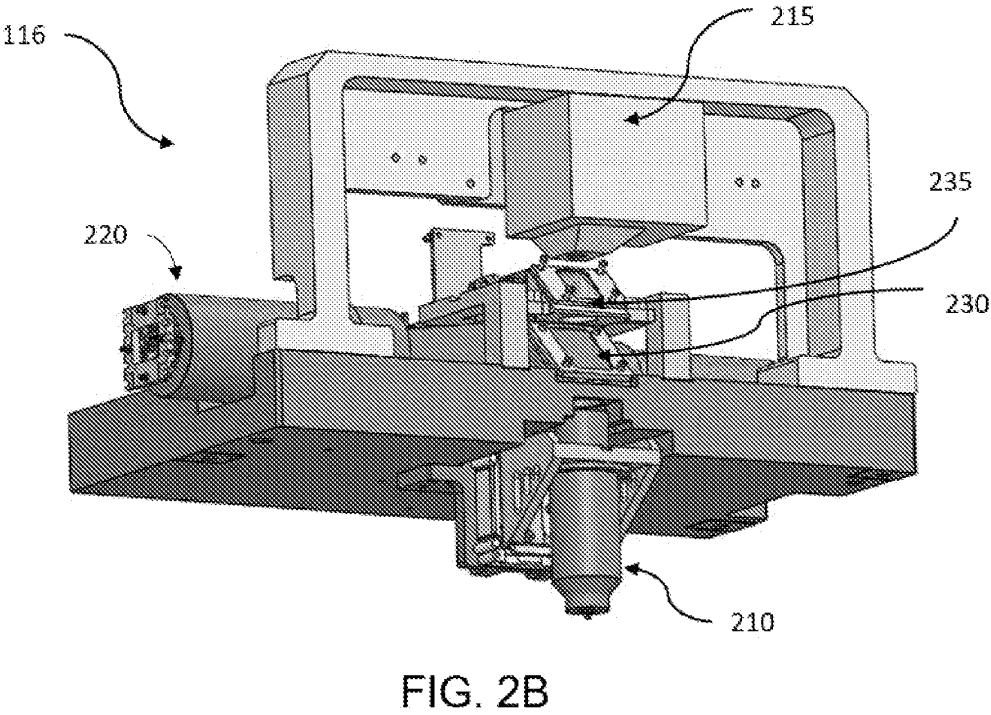
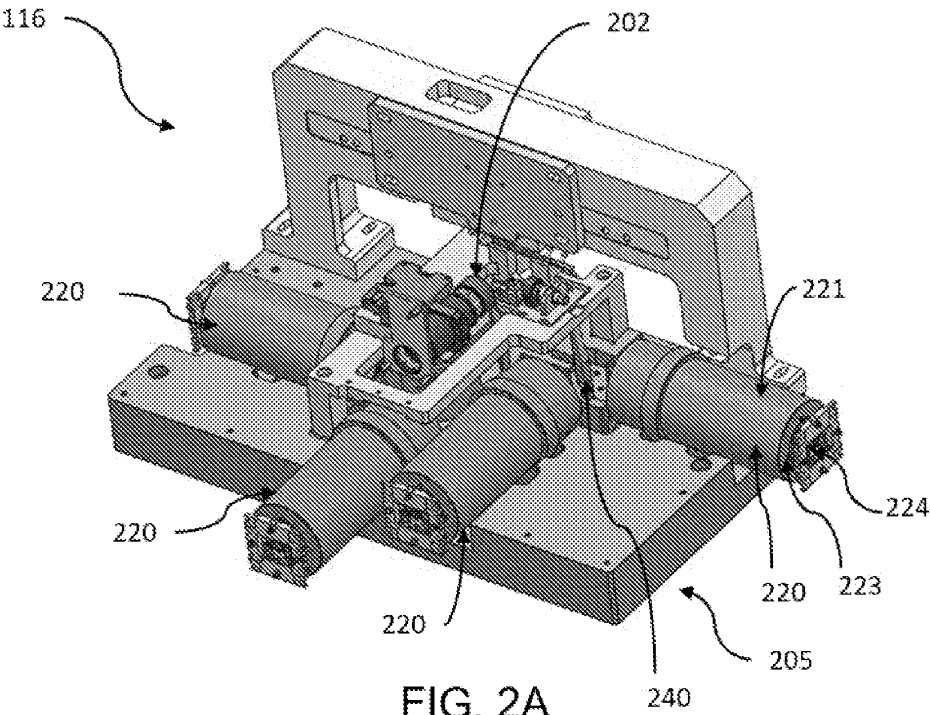


FIG. 1



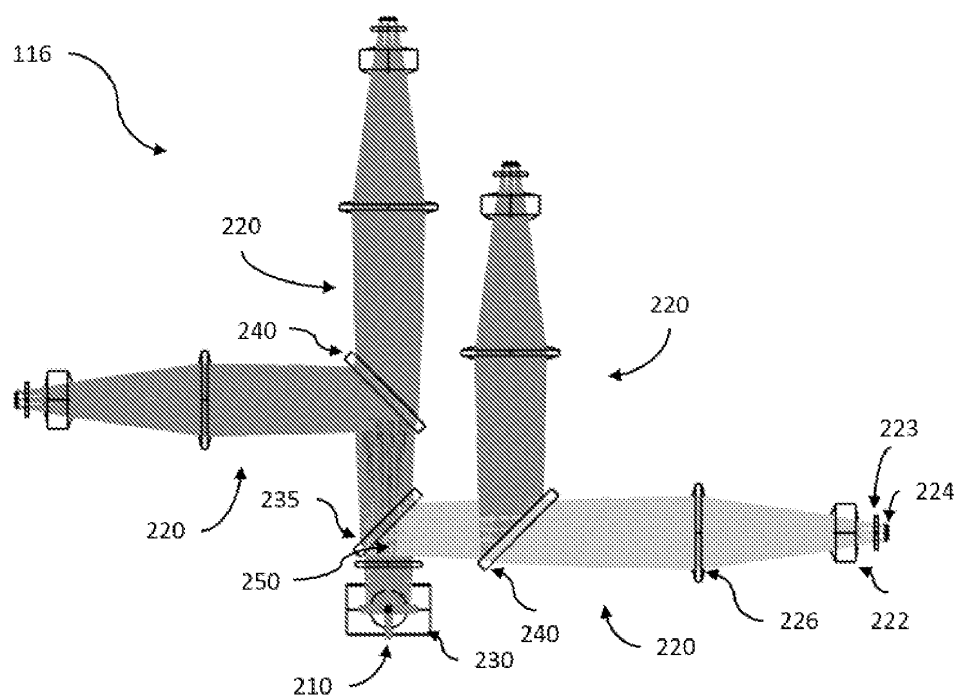


FIG. 3A

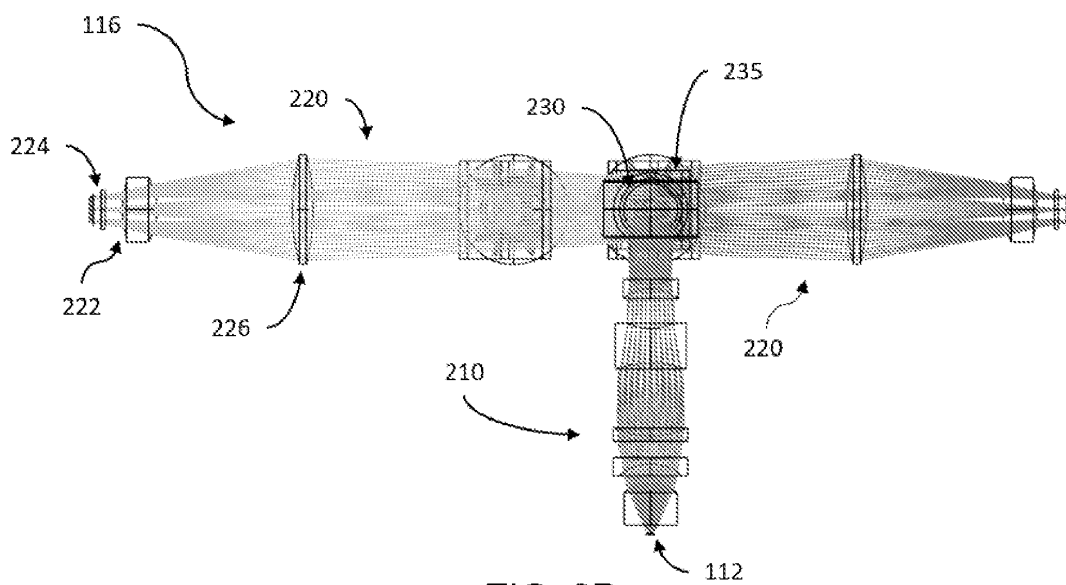


FIG. 3B

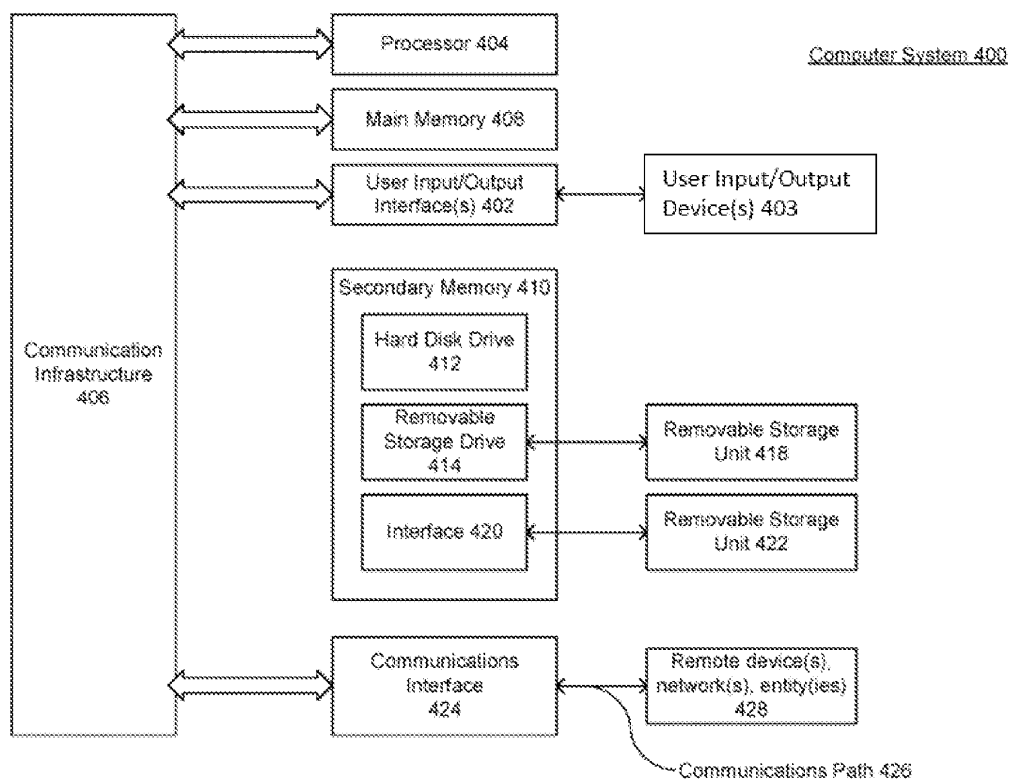


FIG. 4

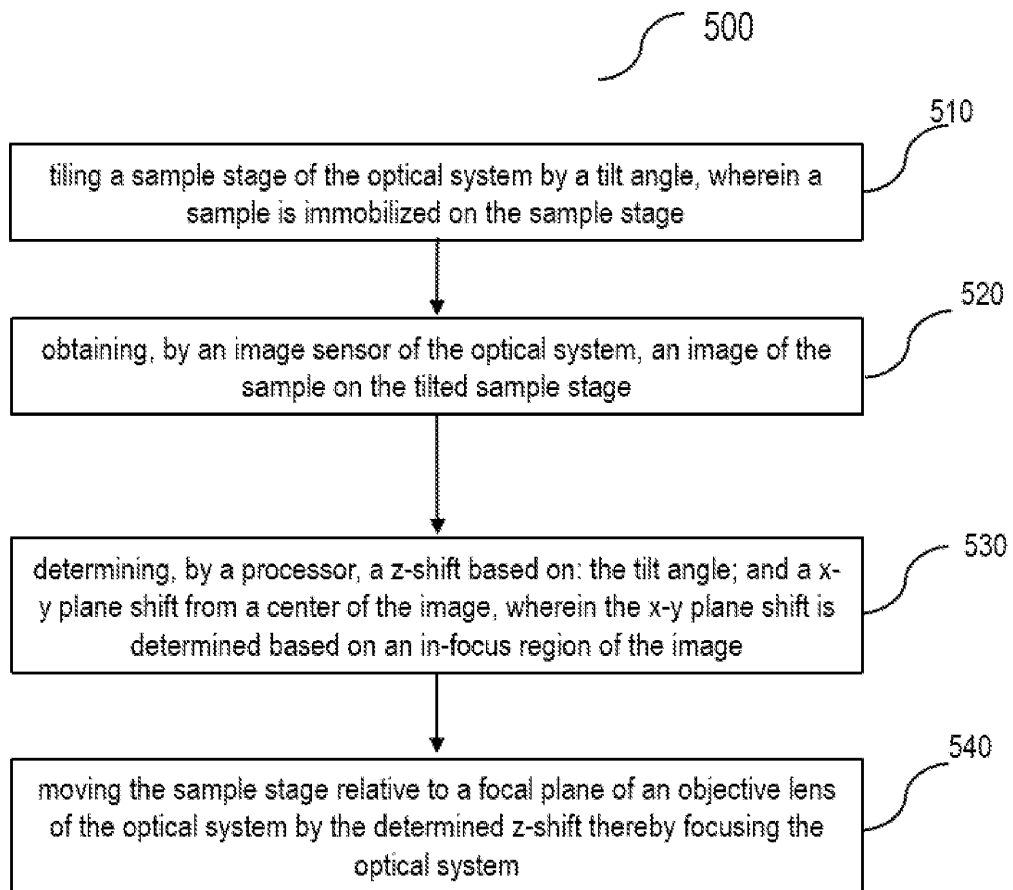


FIG. 5

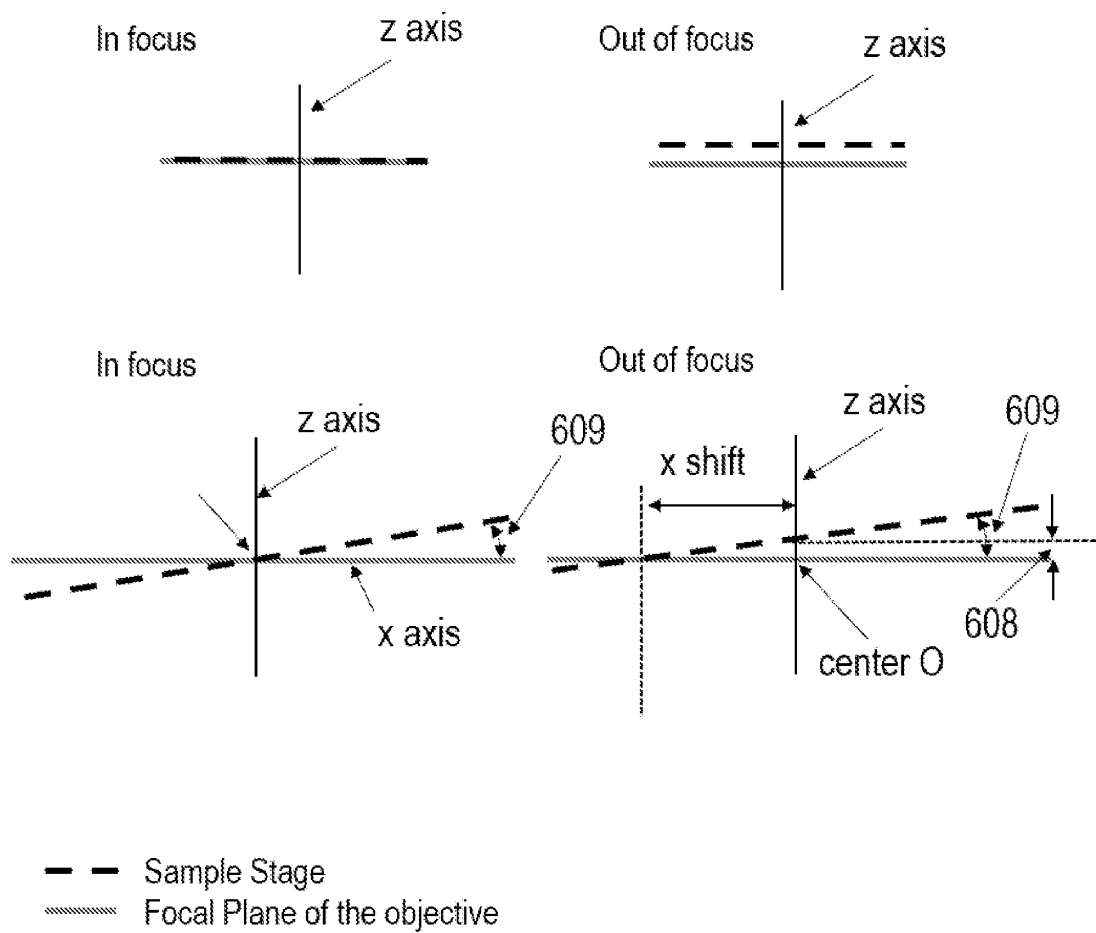


FIG. 6A

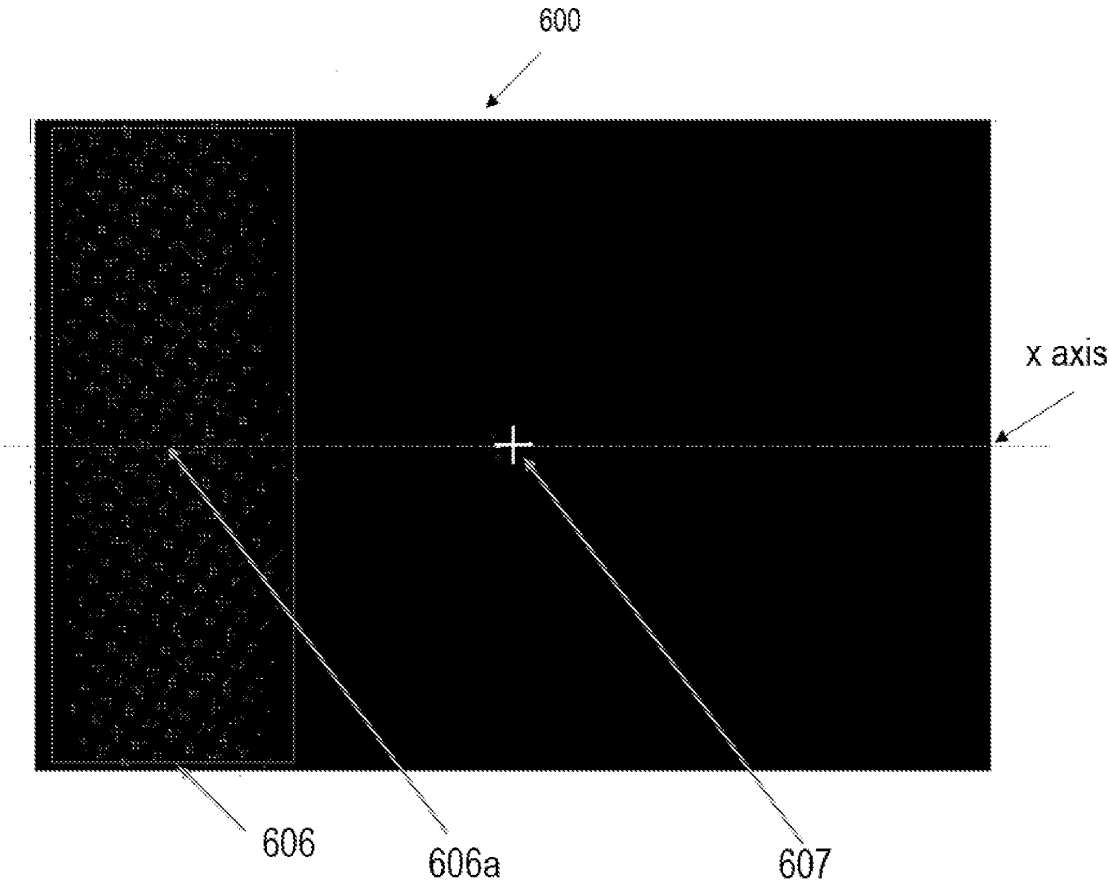


FIG. 6B

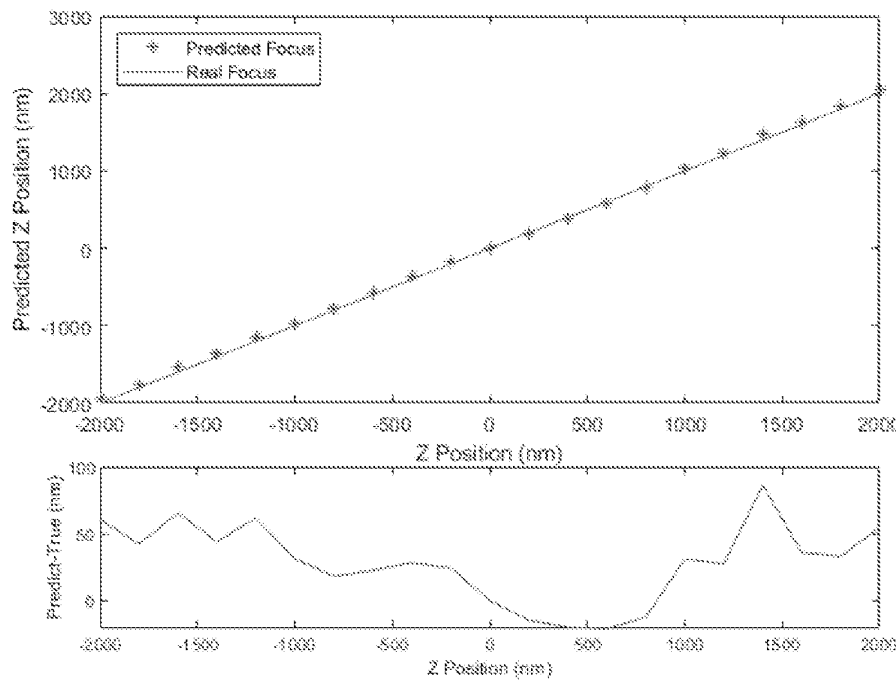


FIG. 7A

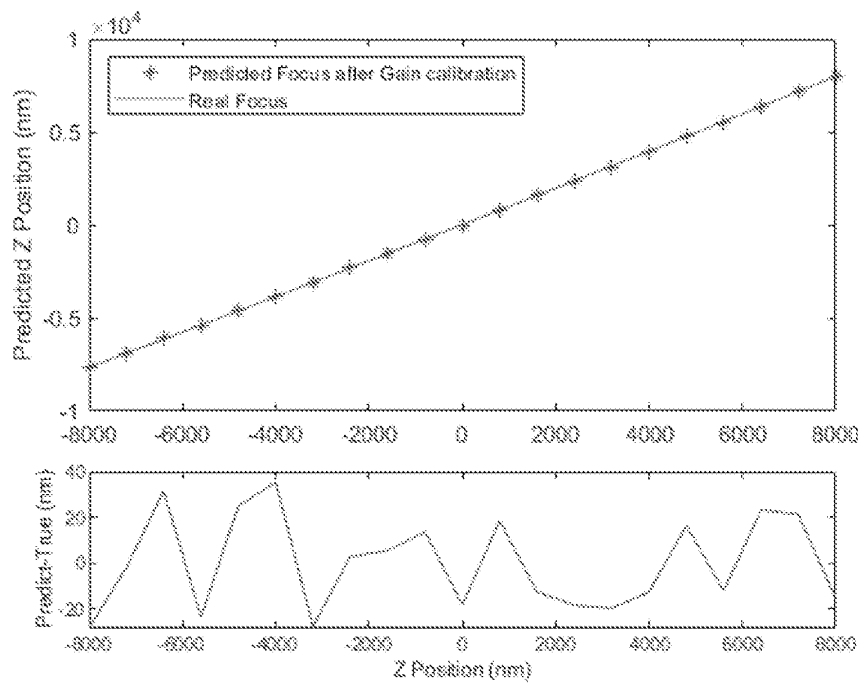


FIG. 7B

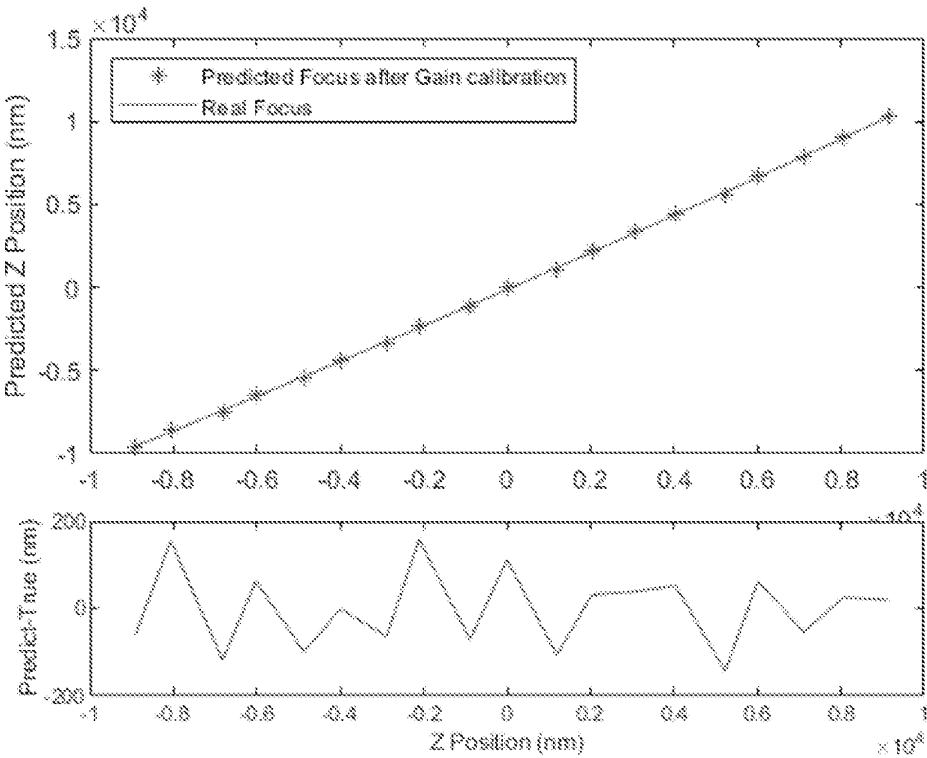


FIG. 8

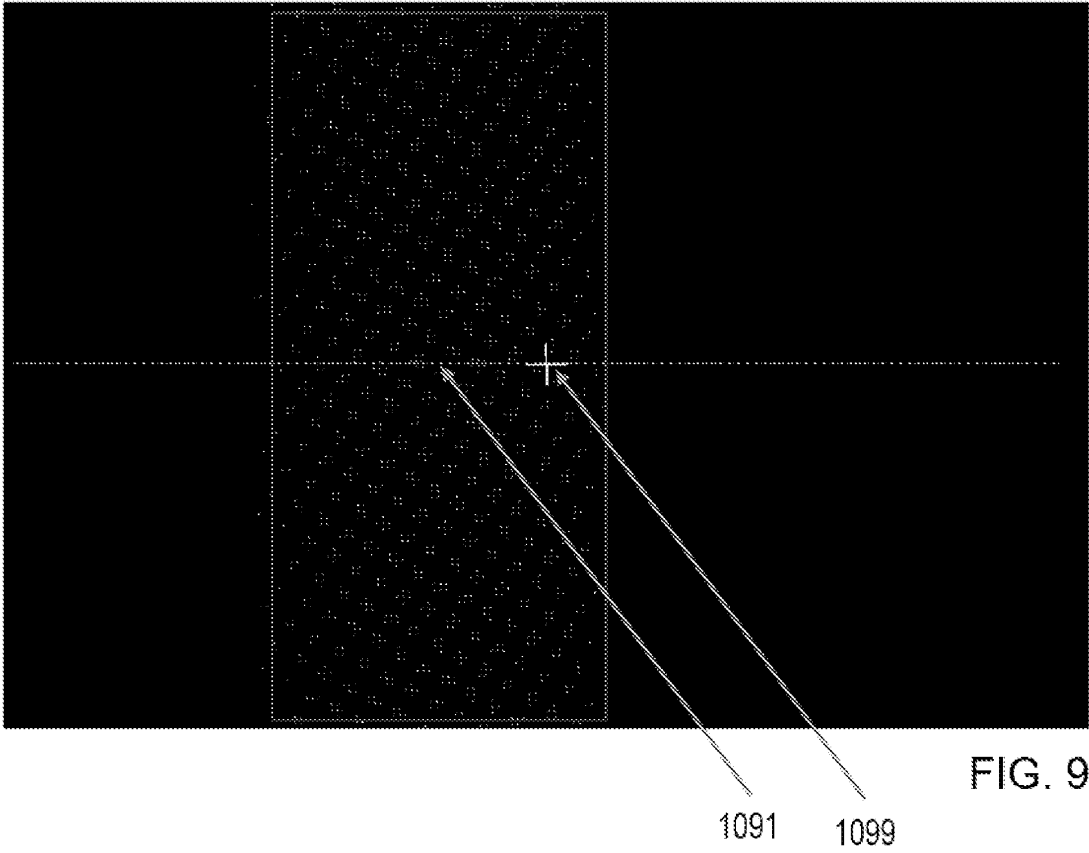


FIG. 9

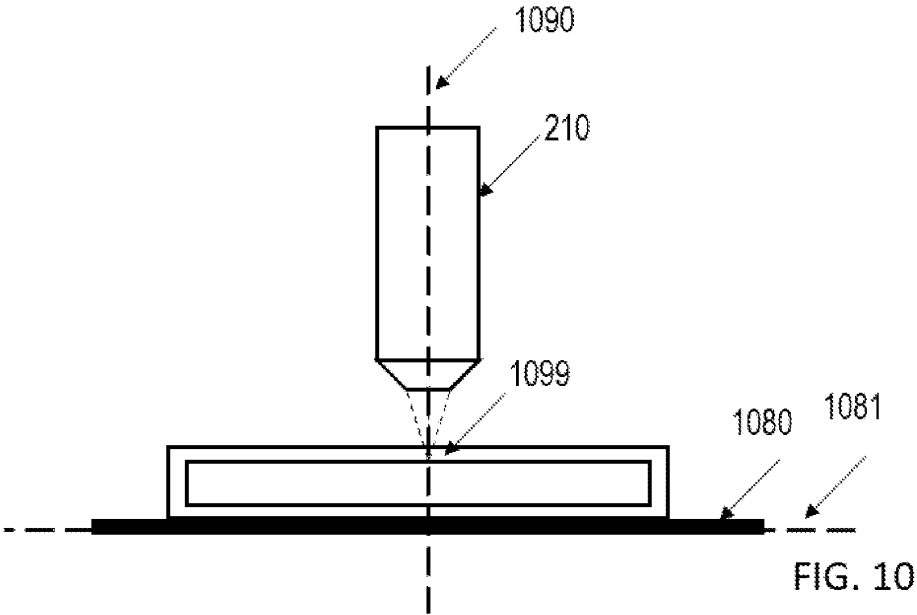


FIG. 10

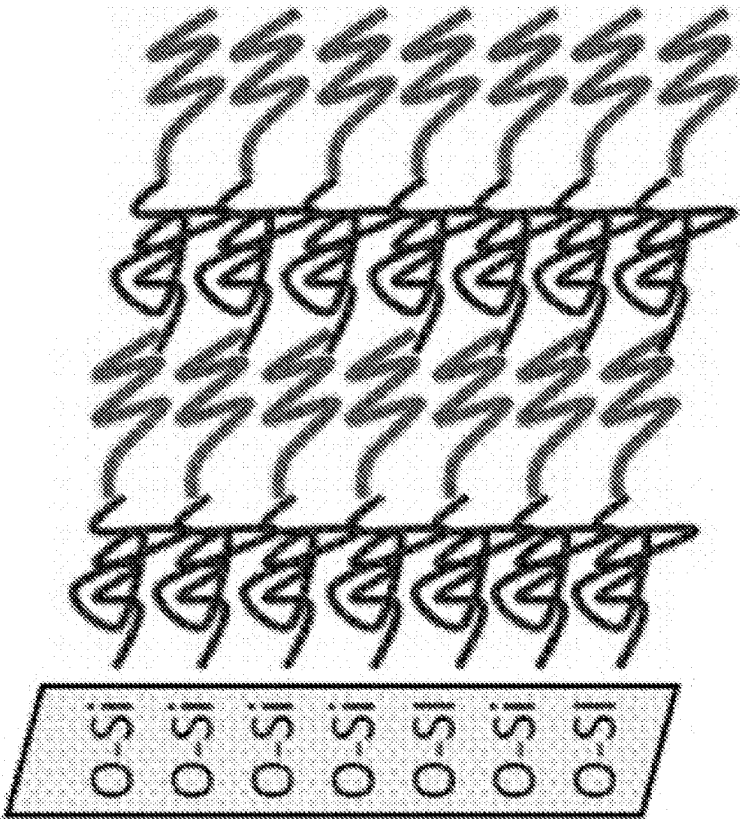


FIG. 11

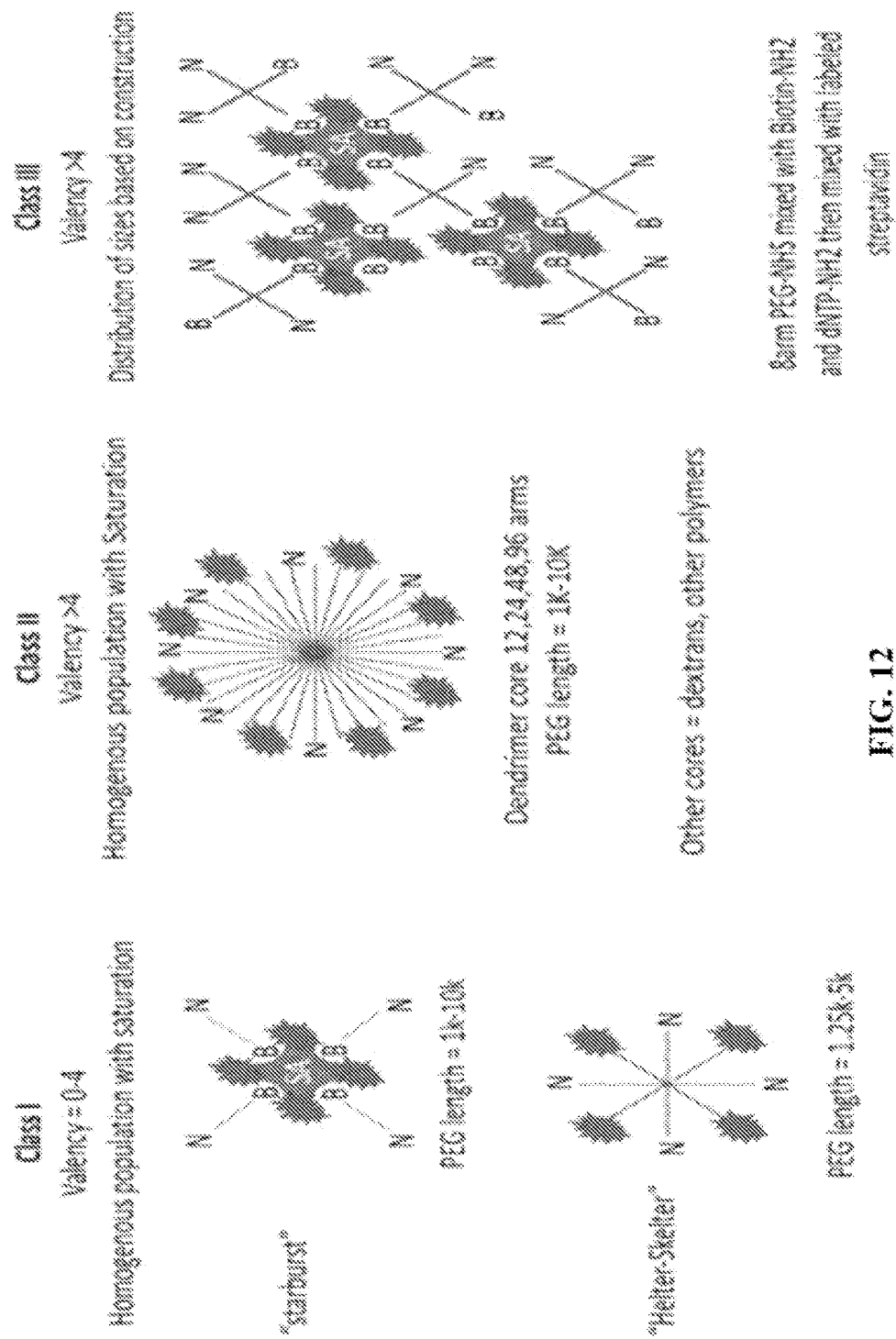


FIG. 12

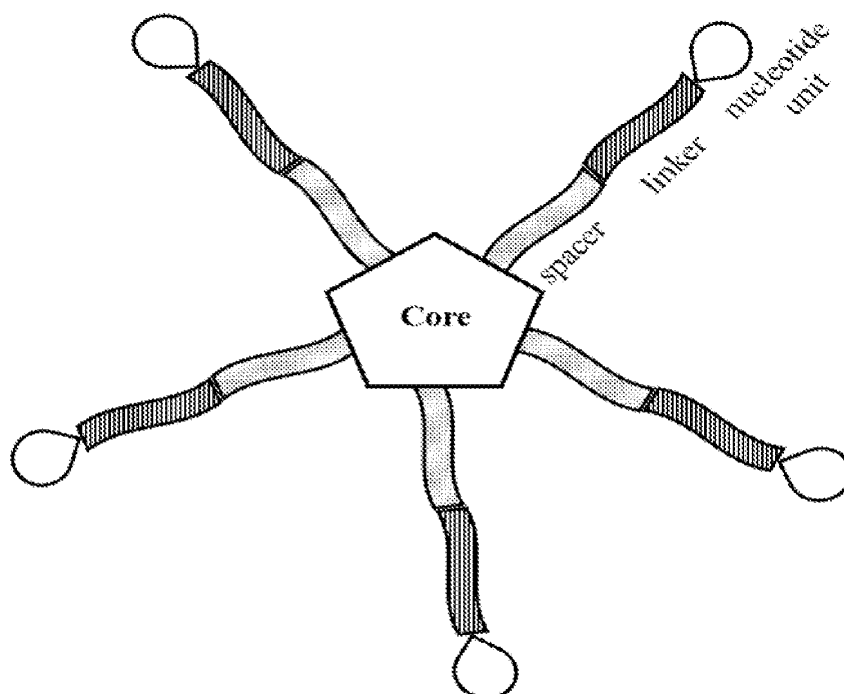


FIG. 13

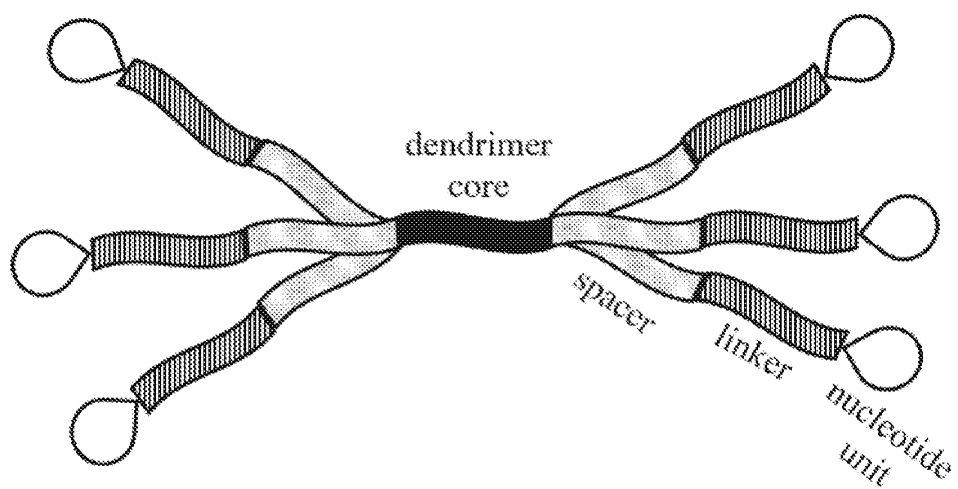
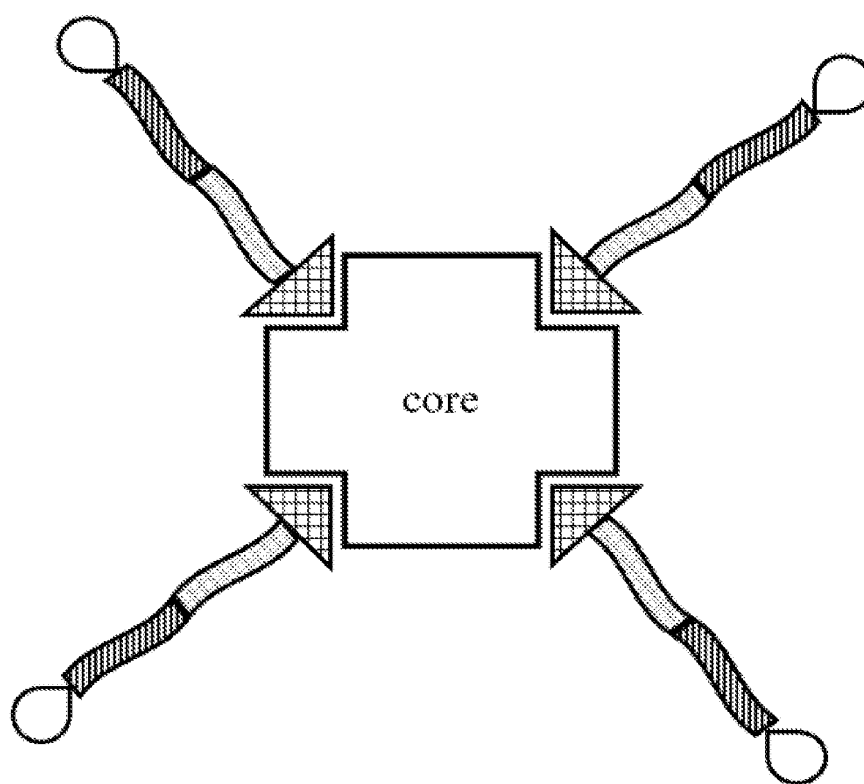
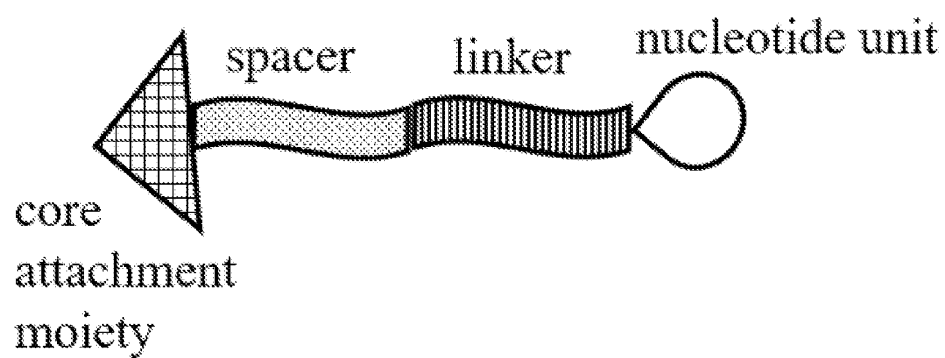
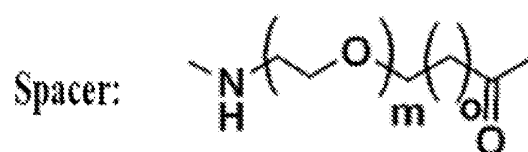
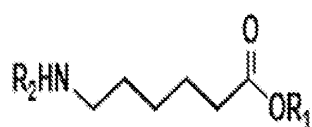


FIG. 14

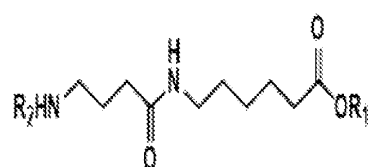
**FIG. 15****FIG. 16**

**Linkers:**

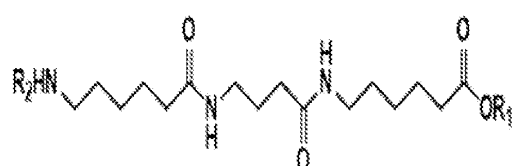
11 atom Linker:



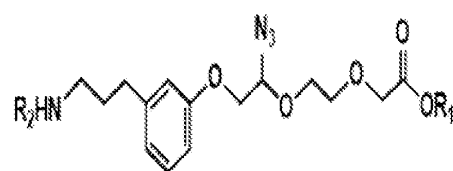
16 atom Linker:



23 atom Linker:



N3 Linker:

**FIG. 17**

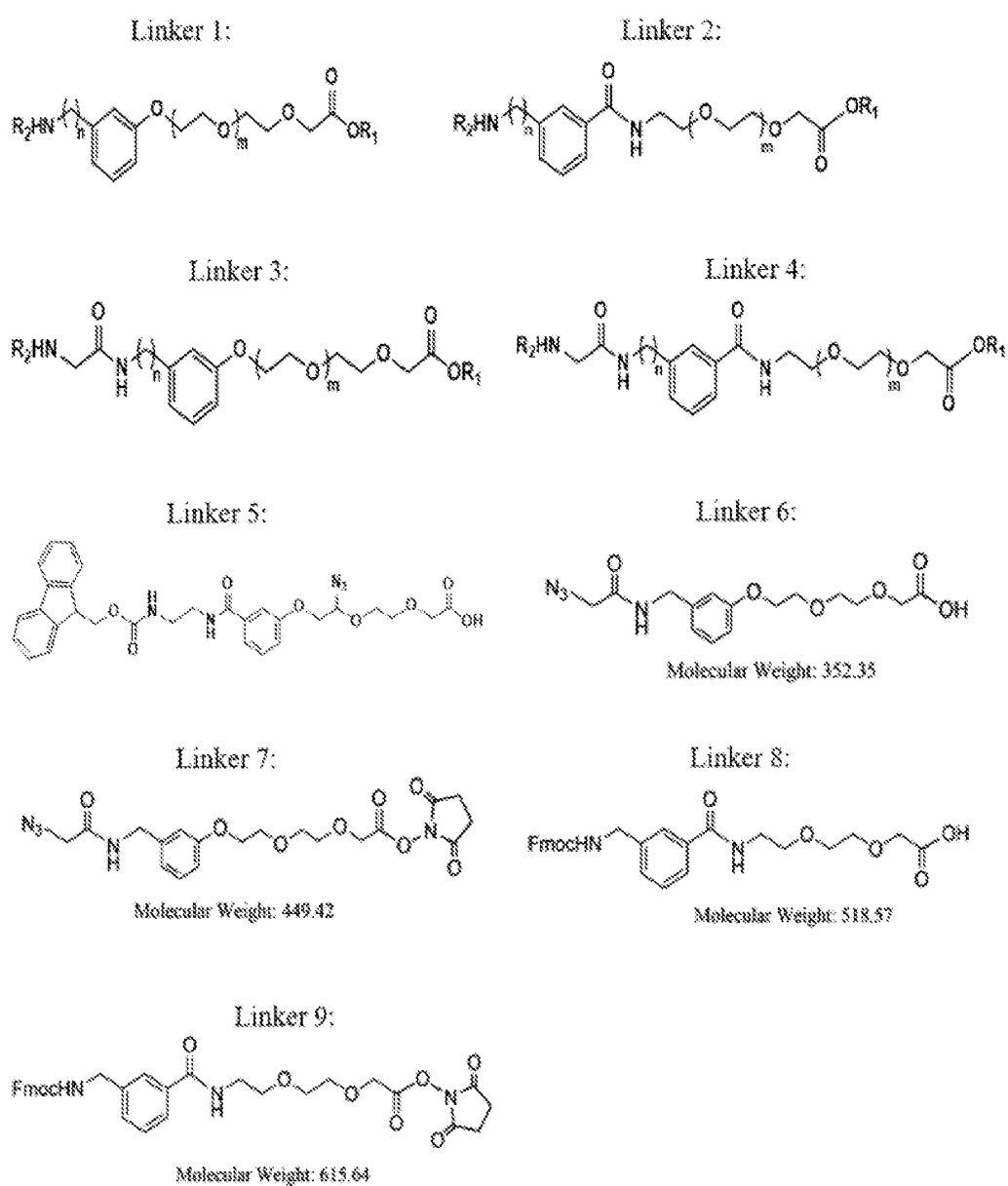
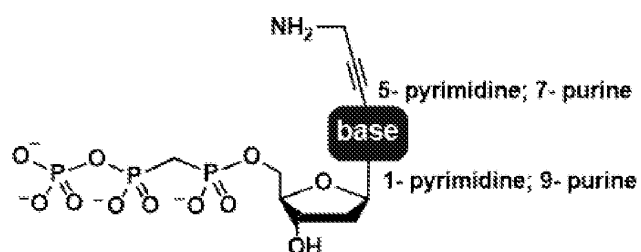
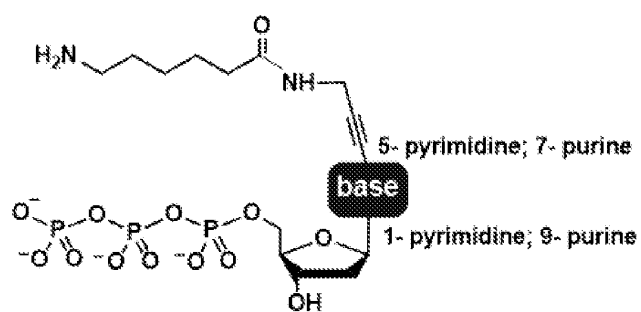
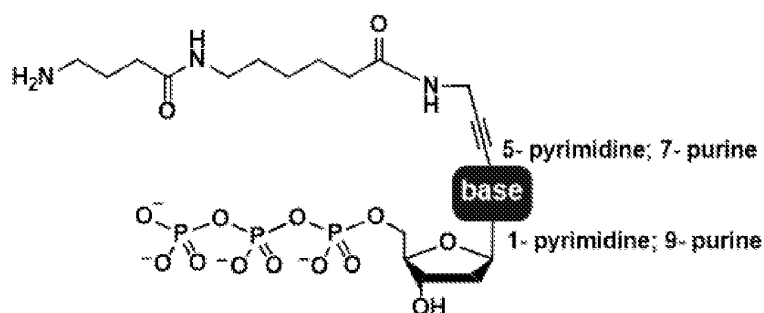
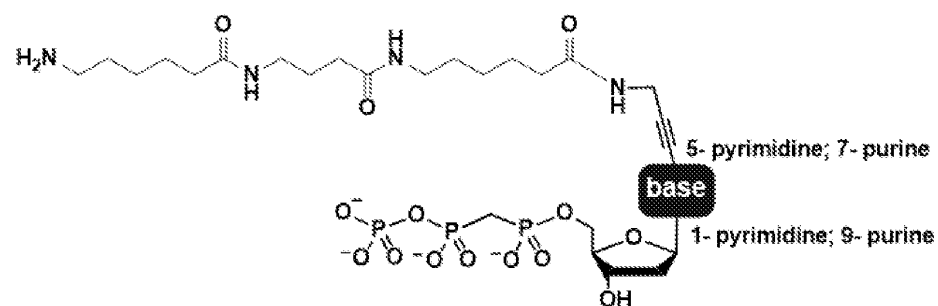
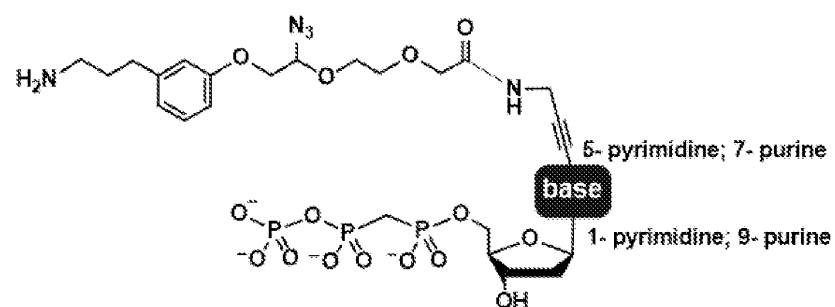
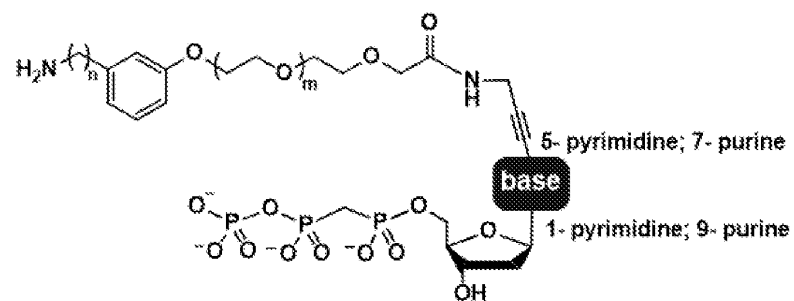
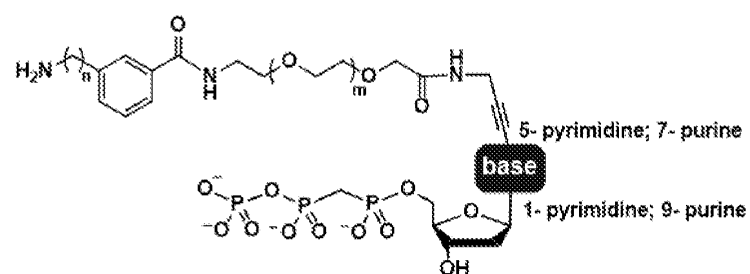
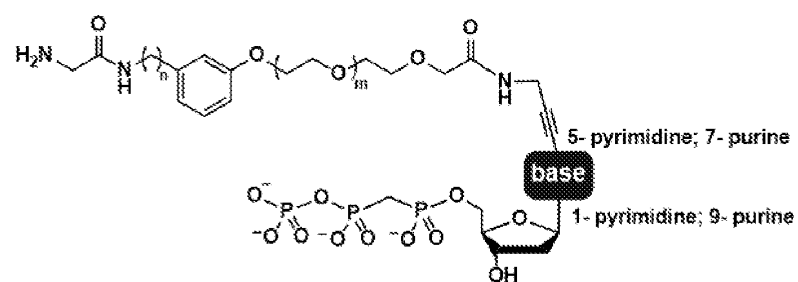
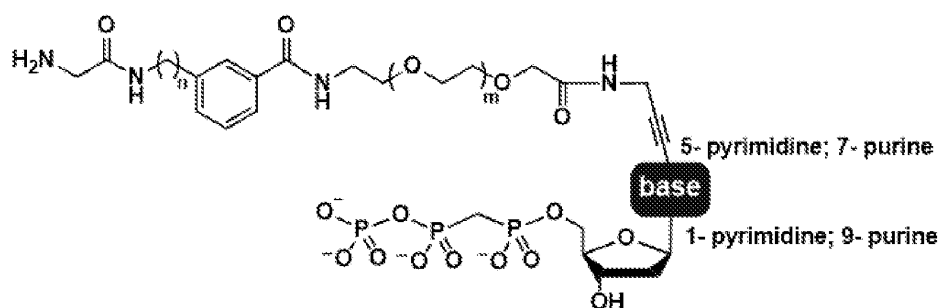
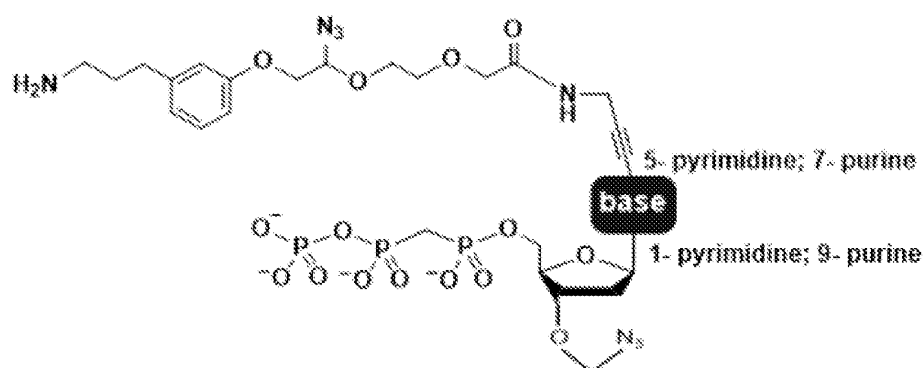


FIG. 18

dNTP-PA-NH₂:**dNTP-PA-11 Atom Linker-NH₂:****dNTP-PA-16 Atom Linker-NH₂:****FIG. 19**

dNTP-PA-23 Atom Linker-NH₂:**dNTP-PA-N3 Linker-NH₂:****dNTP-PA-Linker 1-NH₂:****FIG. 20**

dNTP-PA-Linker 2-NH₂:**dNTP-PA-Linker 3-NH₂:****FIG. 21**

dNTP-PA-Linker 4-NH₂:**dNTP-PA-N3 Linker-NH₂:****FIG. 22**

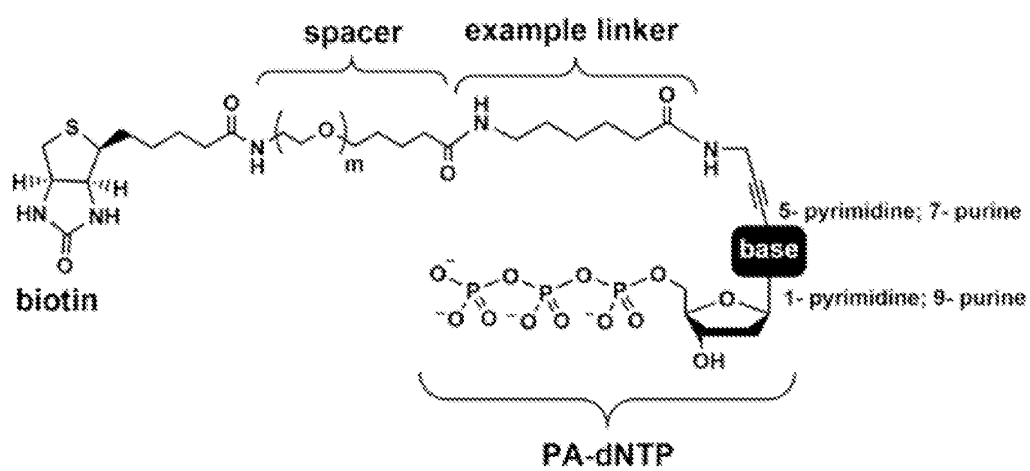


FIG. 23

$$T_{\text{top-substrate}} = (T_{\text{channel}} * (n_{\text{fluid}} / n_{\text{top-substrate}}))$$

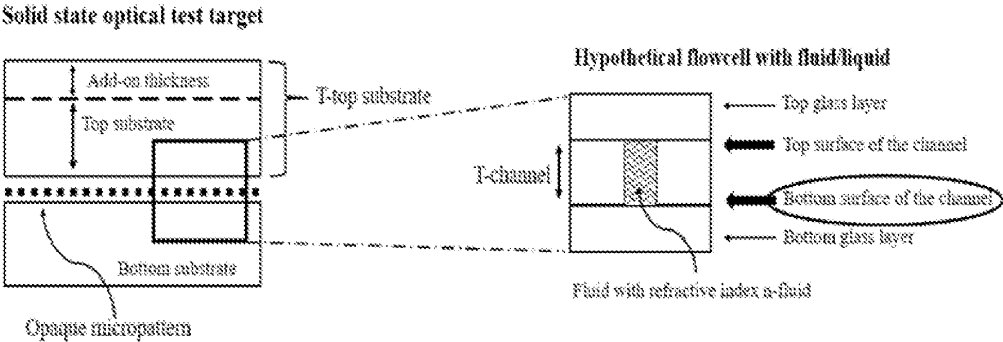


FIG. 24

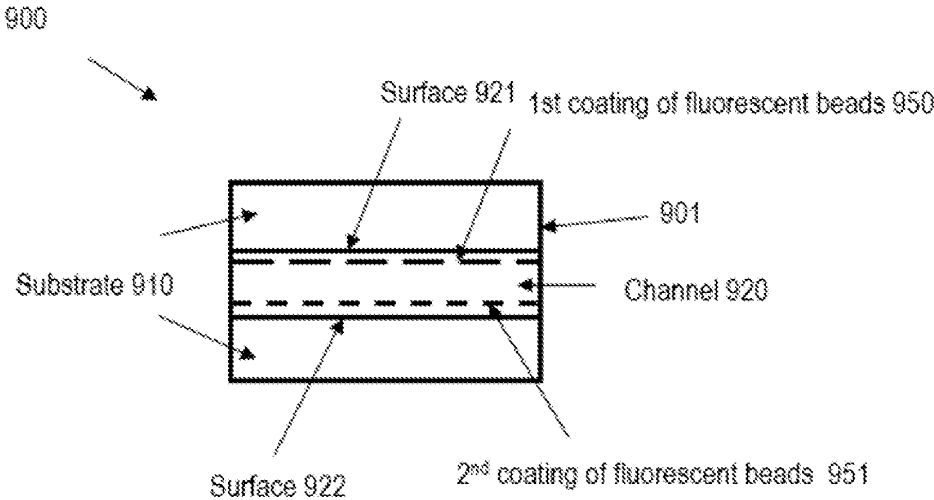


FIG. 25