

FIG. 1A

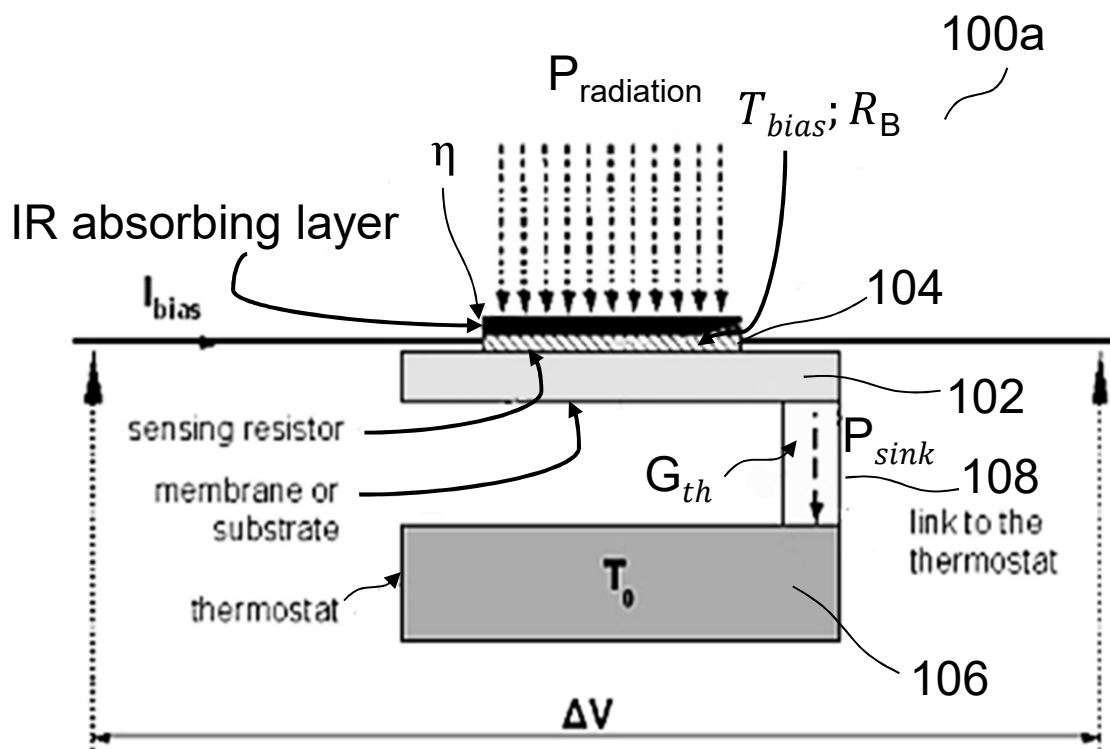


FIG. 1B

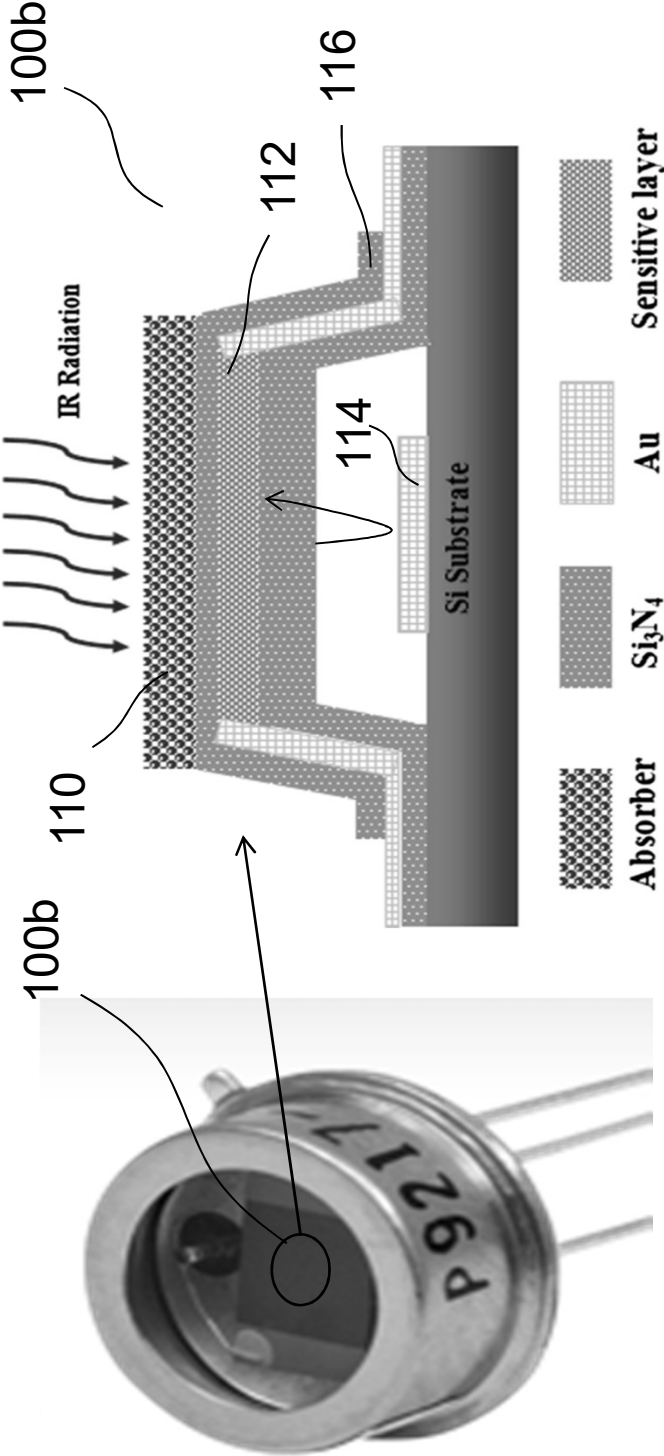


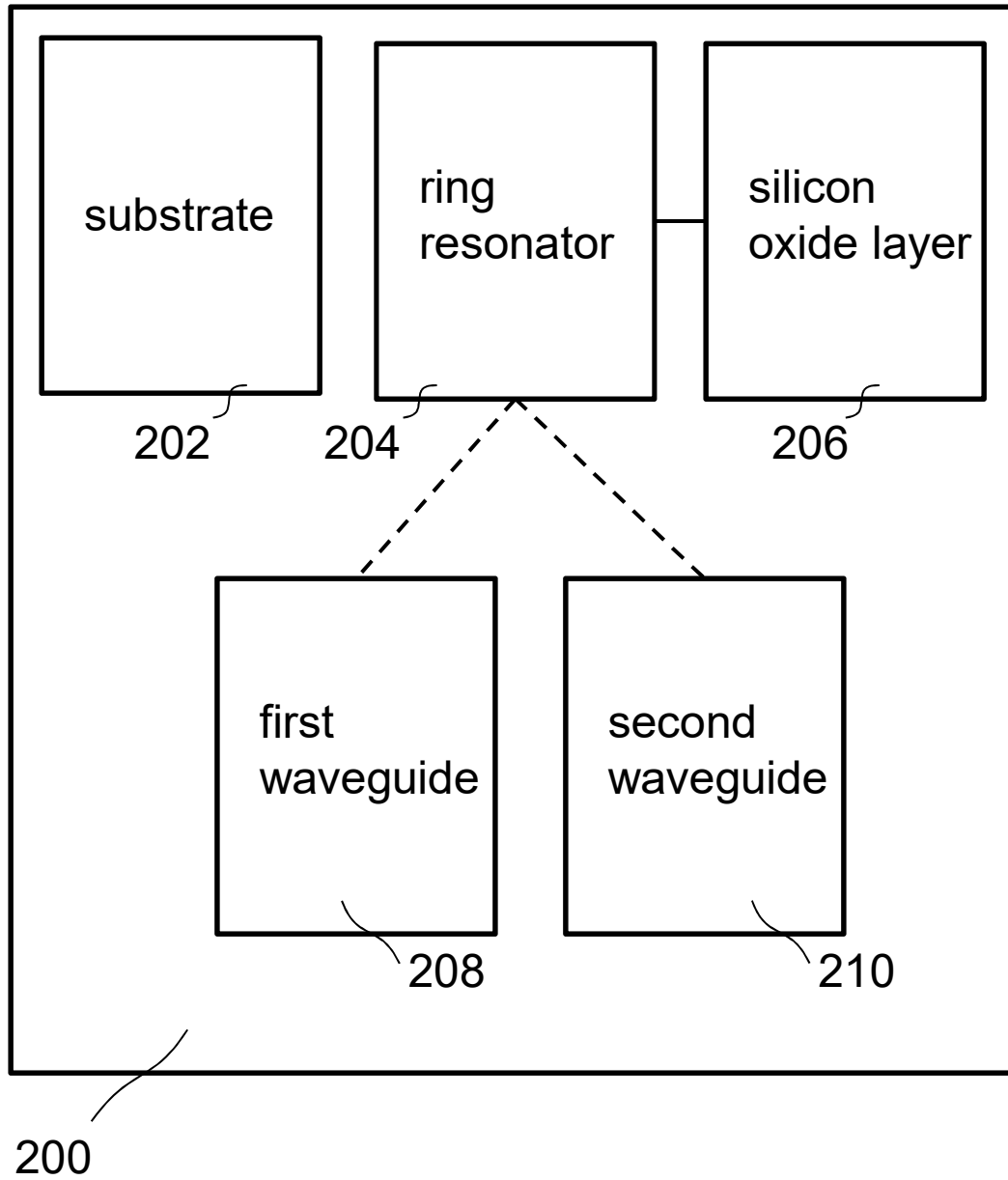
FIG. 2

FIG. 3

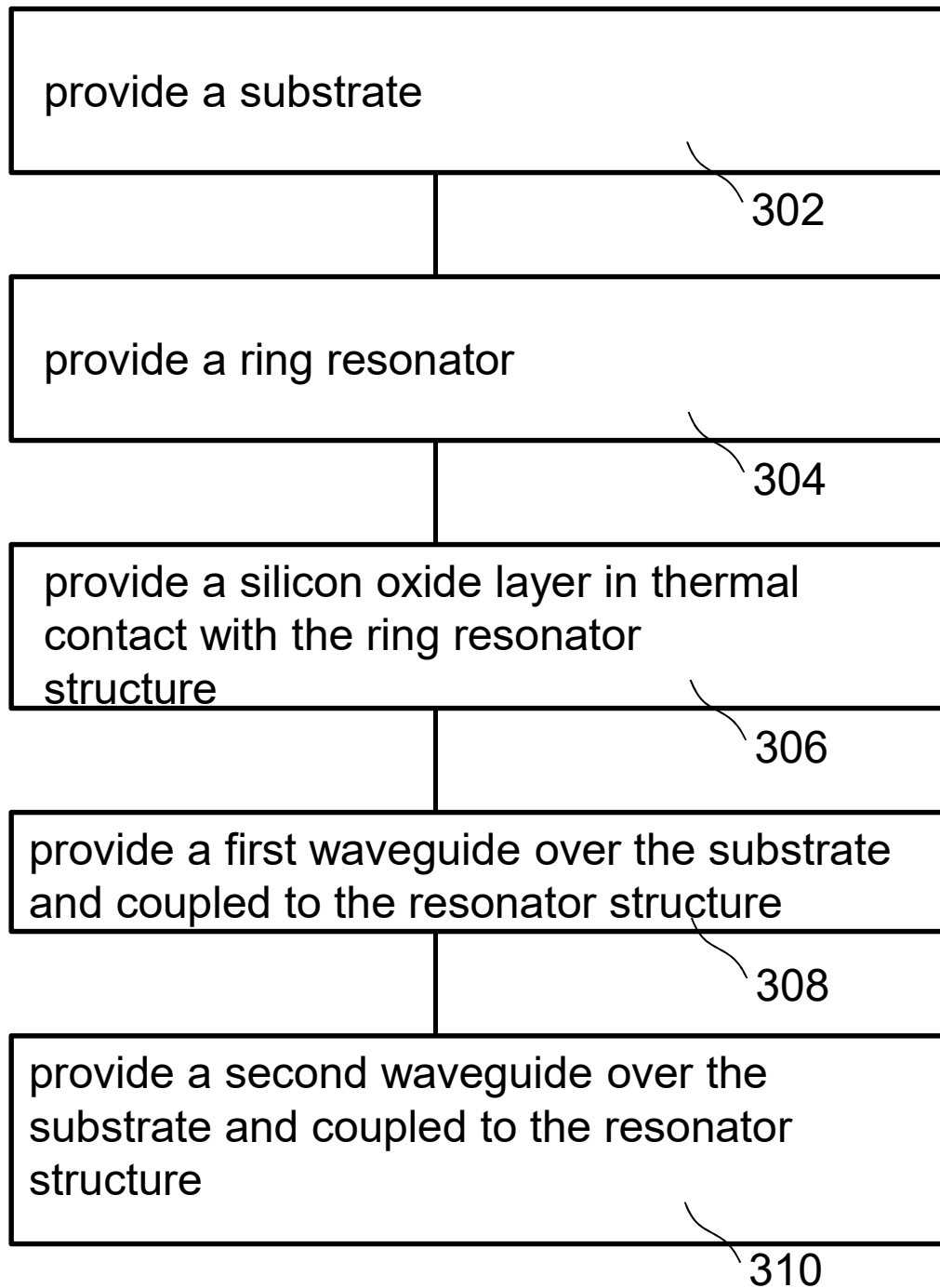
300

FIG. 4

400

couple an infrared light to a ring resonator structure via a first waveguide

402

couple a probe light input via a second waveguide to the ring resonator structure

404

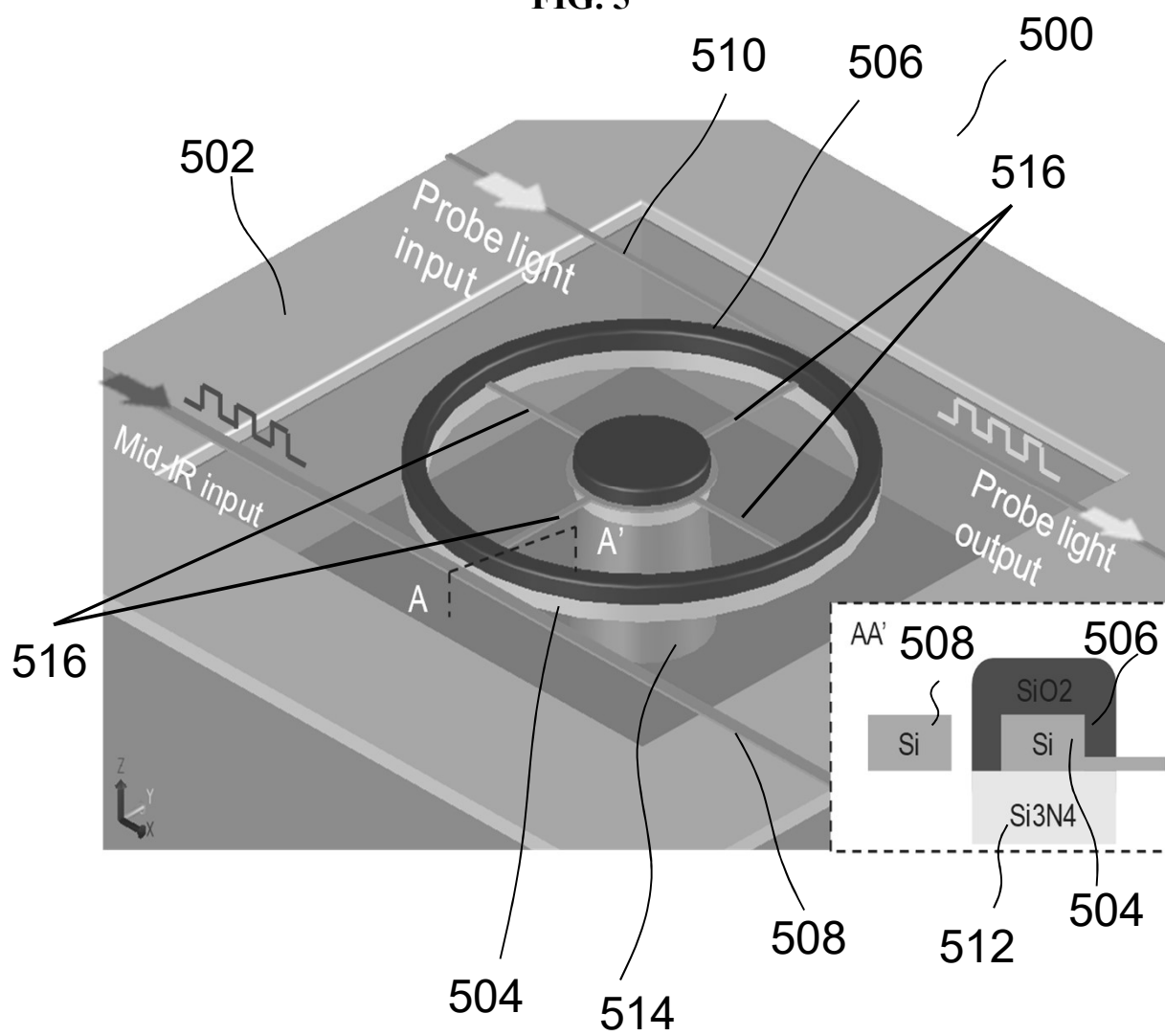
FIG. 5

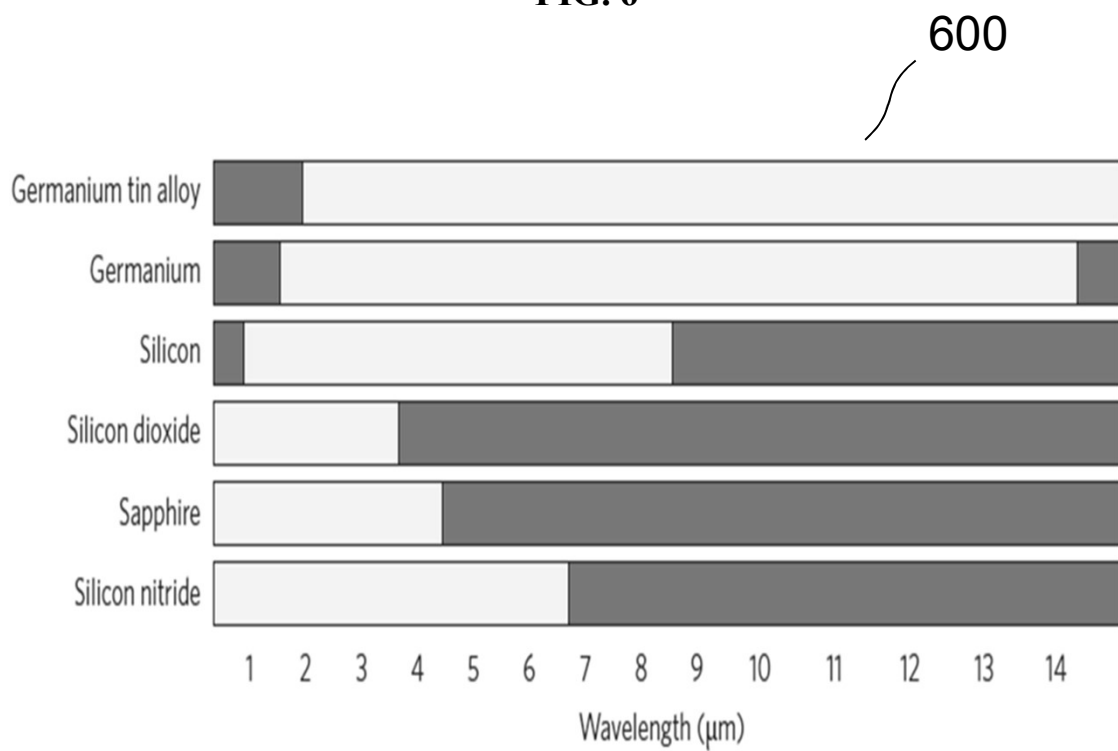
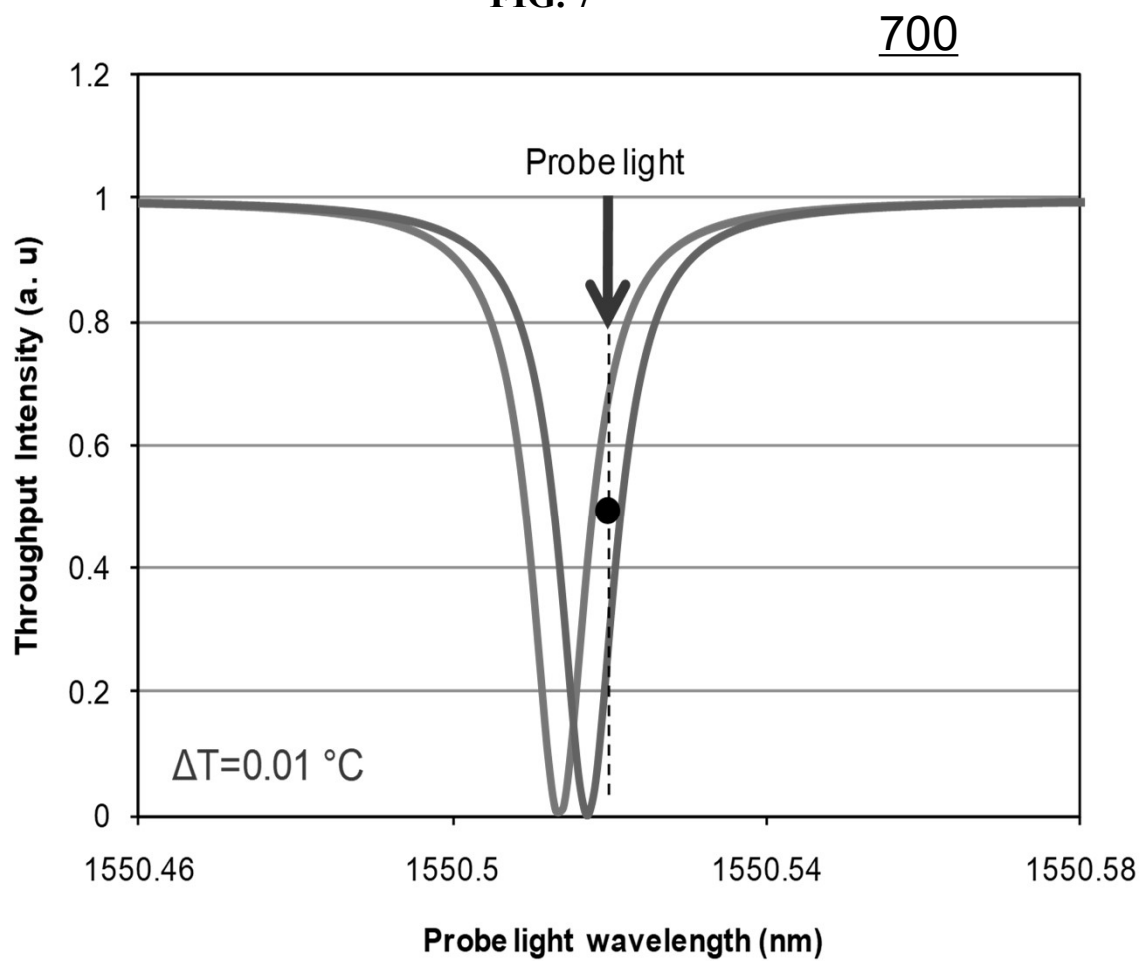
FIG. 6**FIG. 7**

FIG. 8A

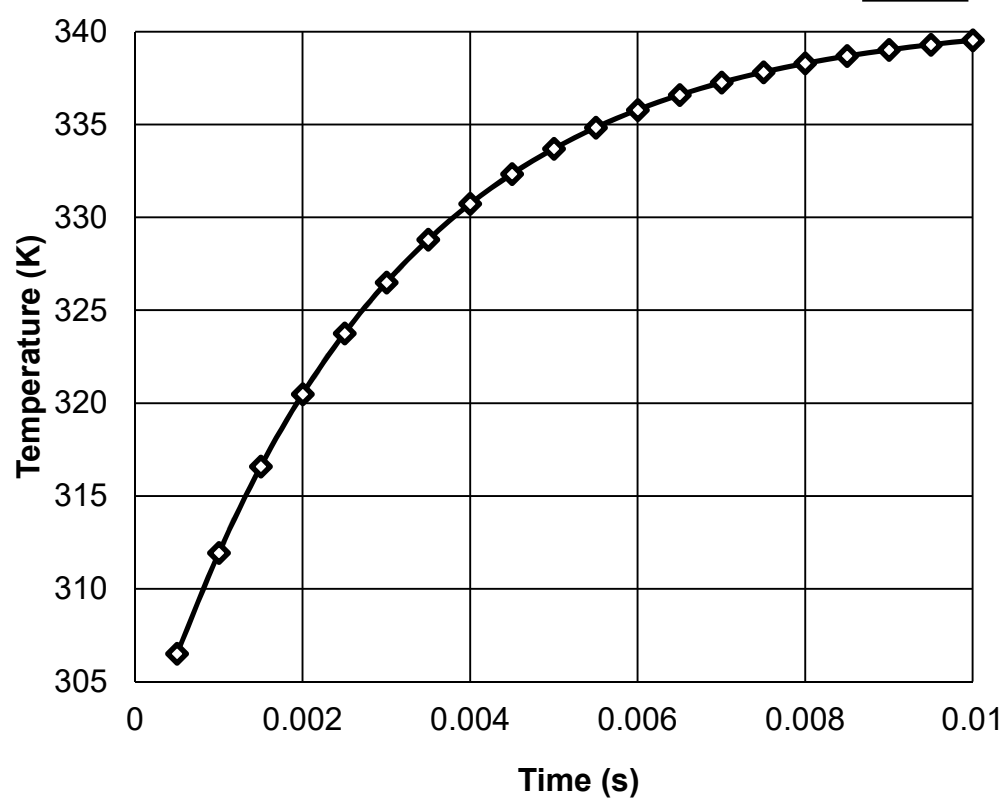
800a

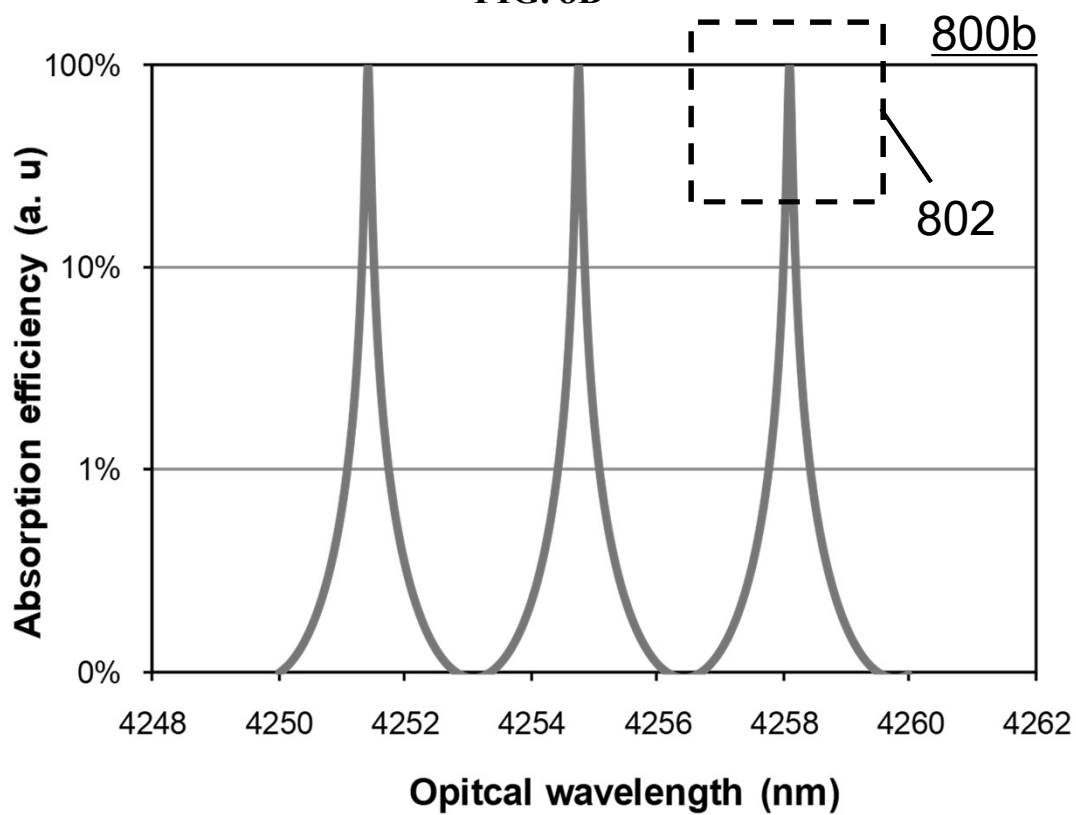
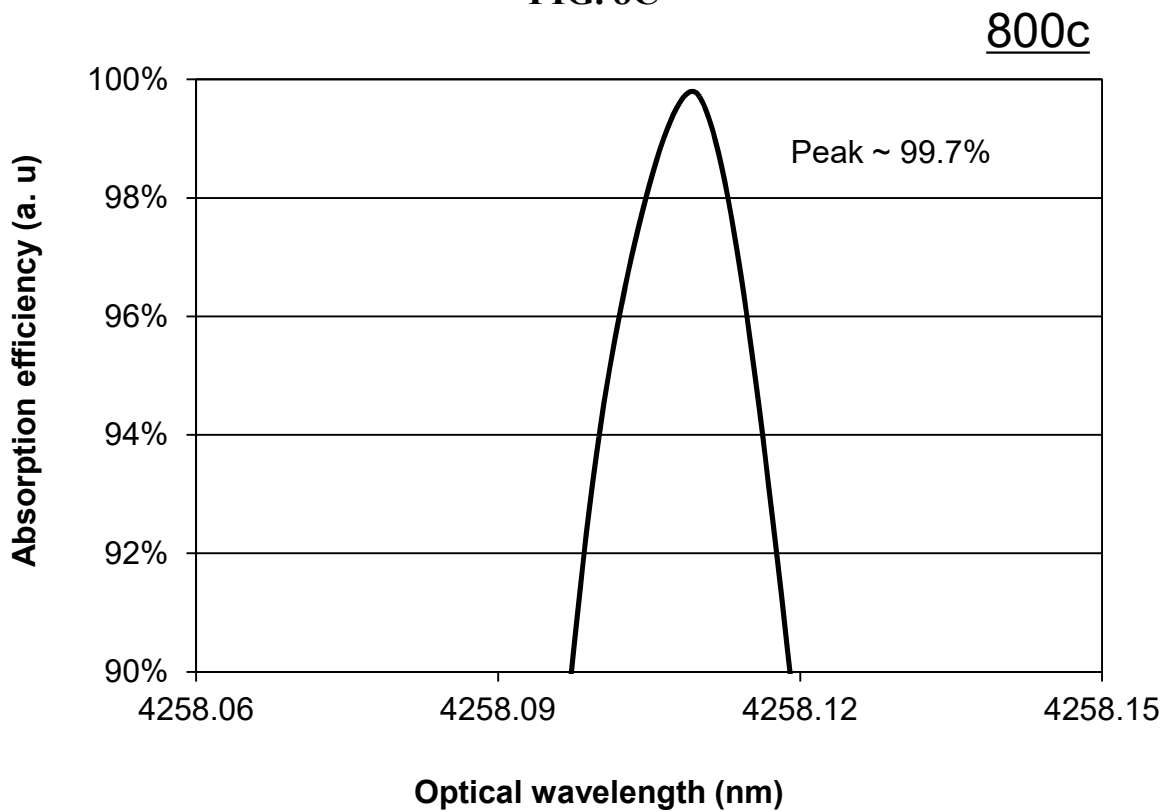
FIG. 8B**FIG. 8C**

FIG. 8D

800d

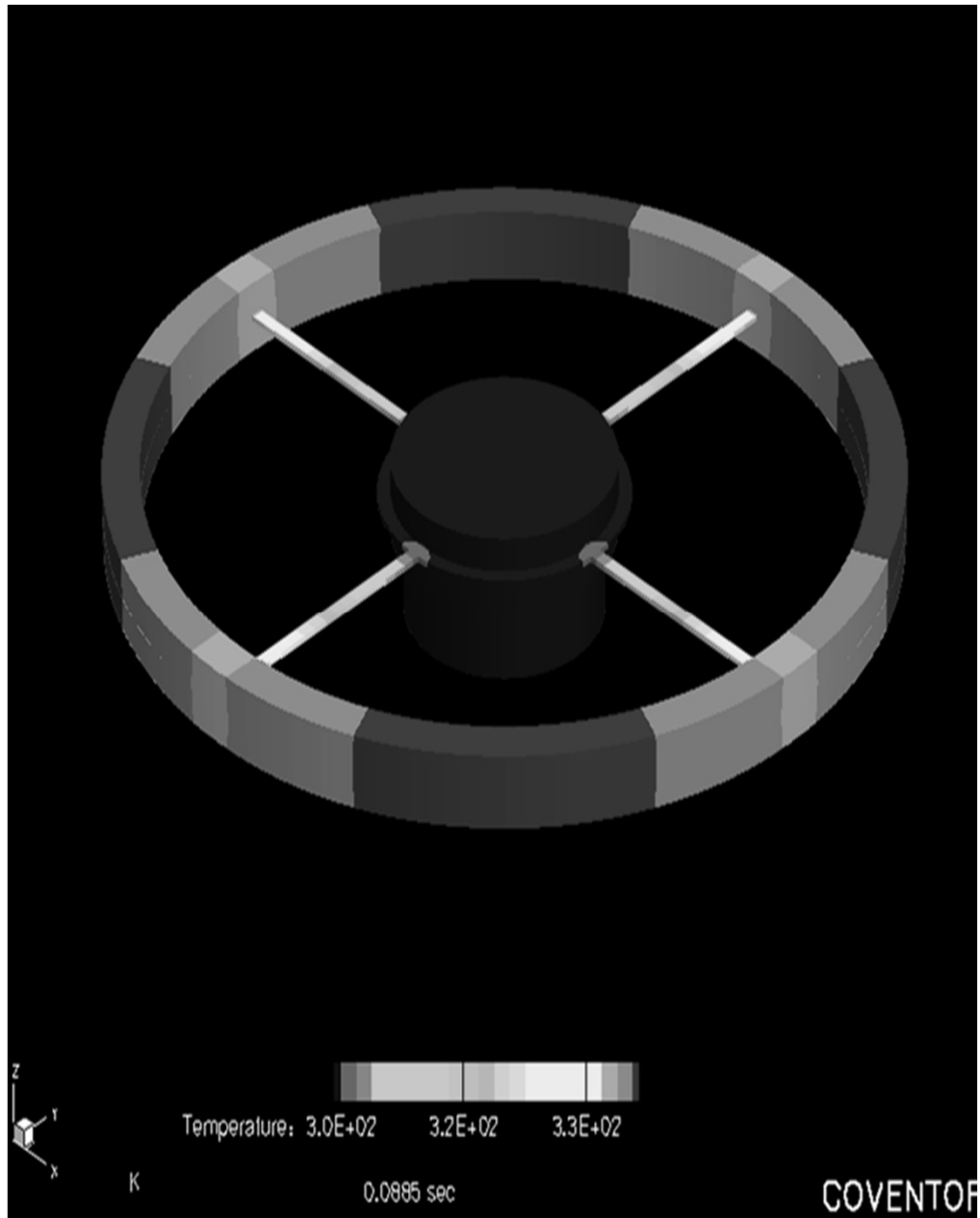


FIG. 9

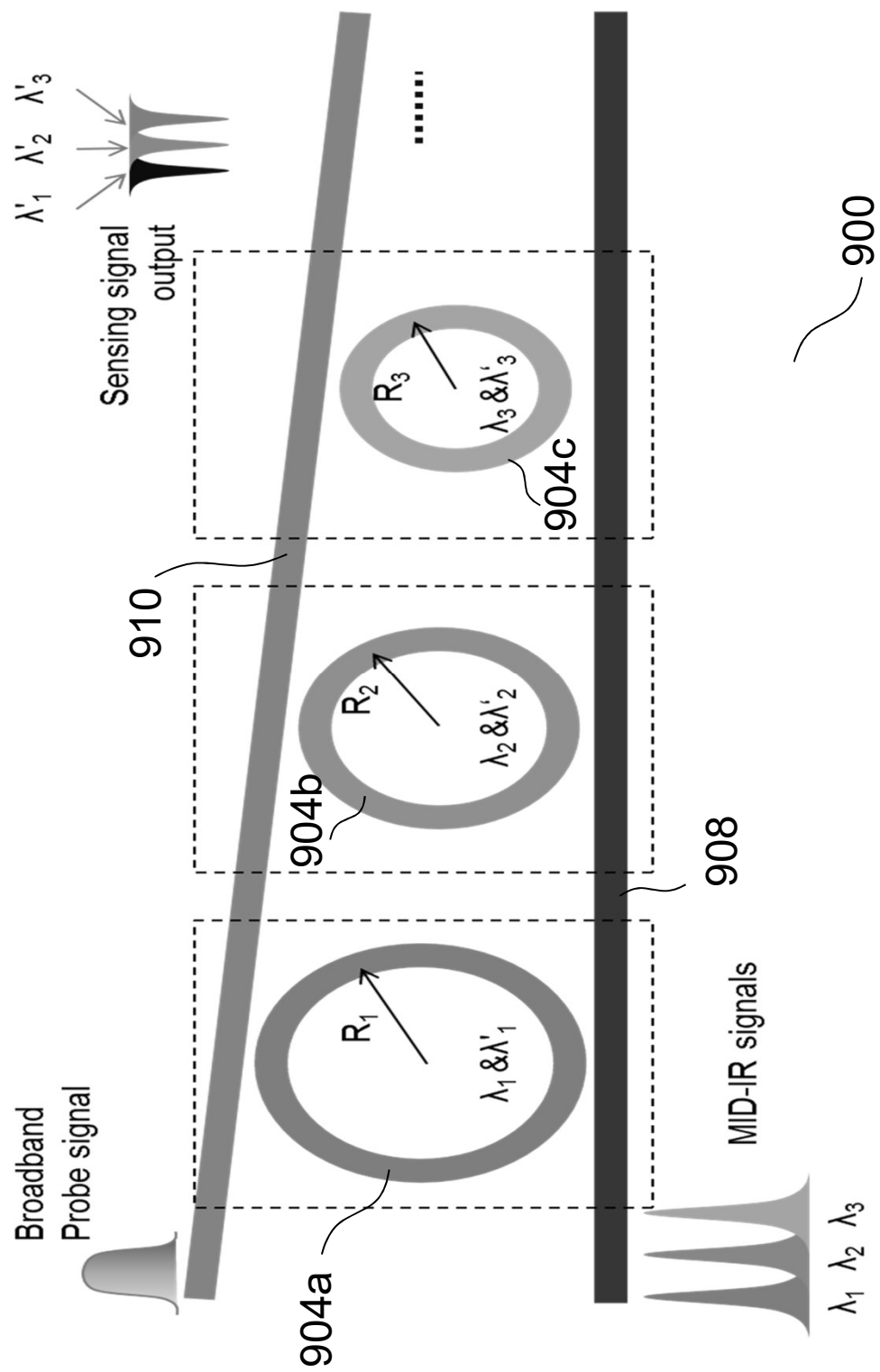


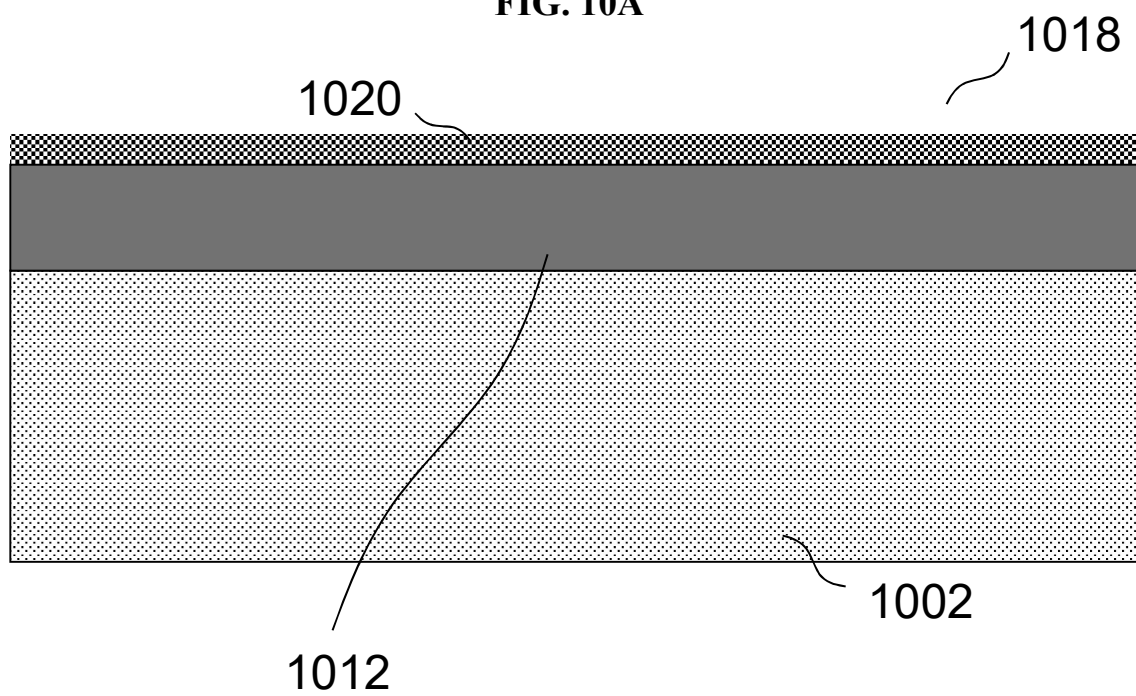
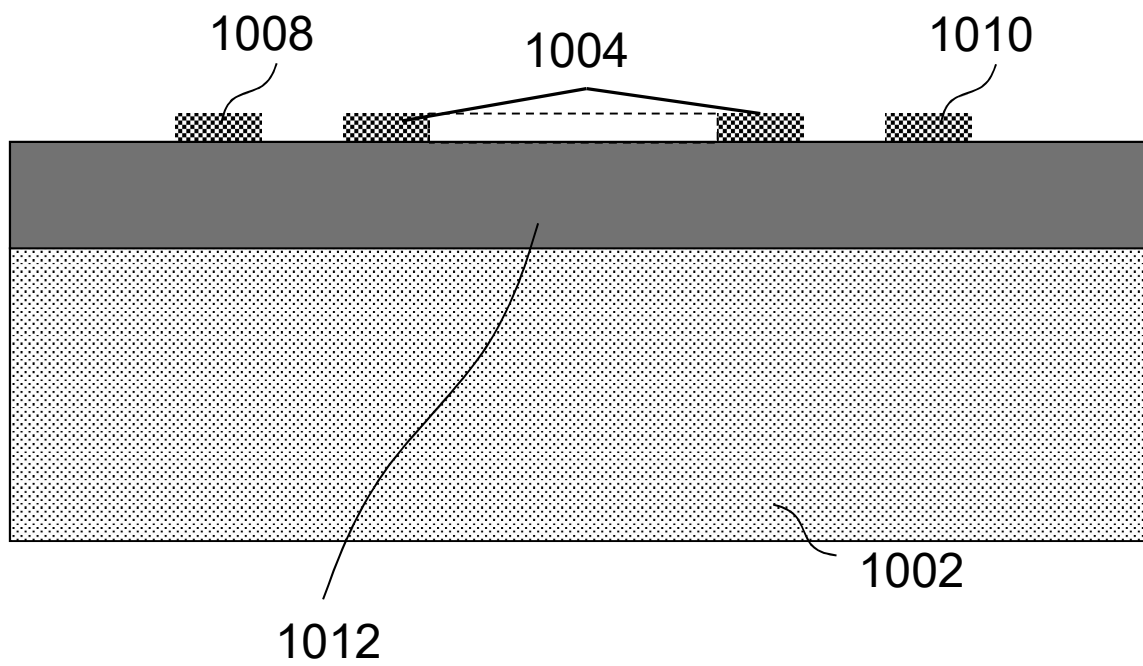
FIG. 10A**FIG. 10B**

FIG. 10C

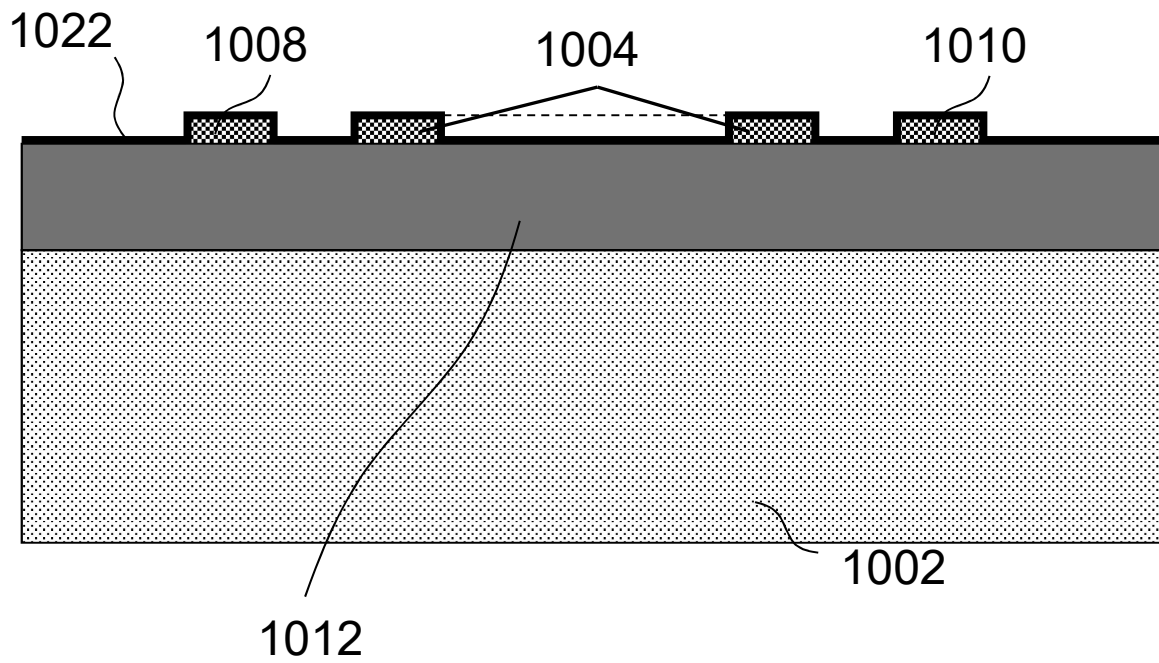
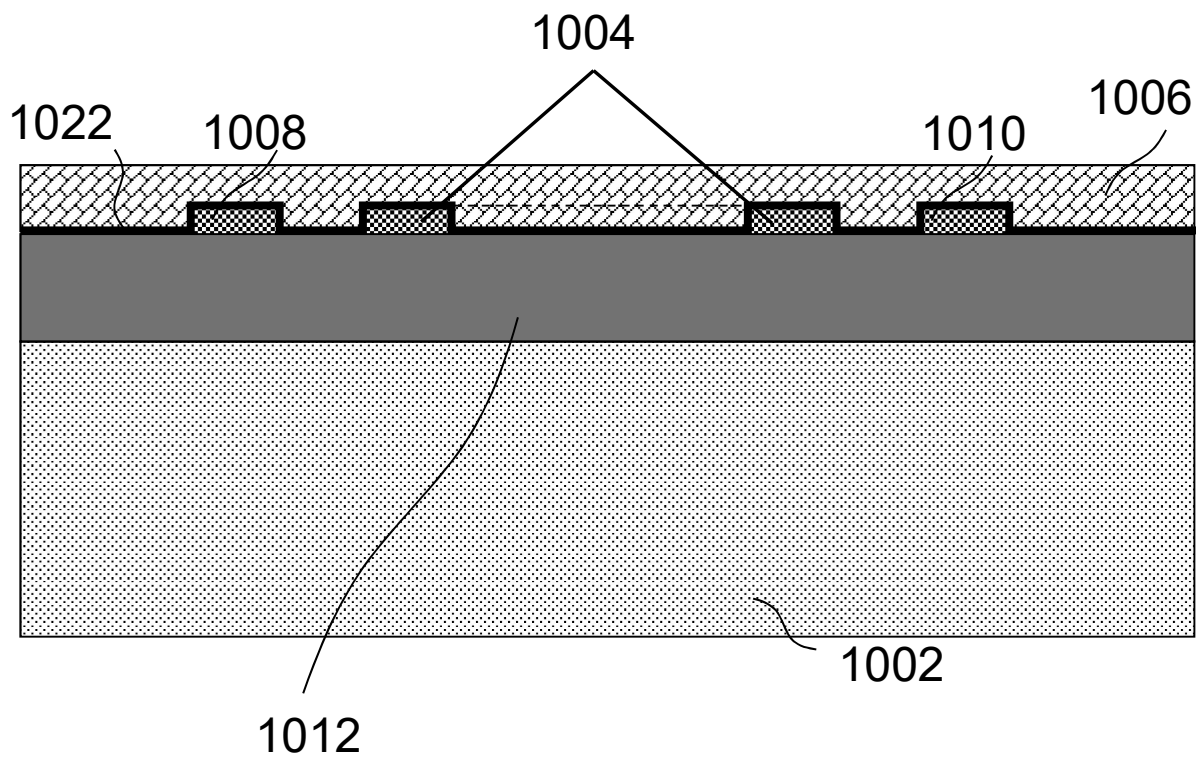


FIG. 10D



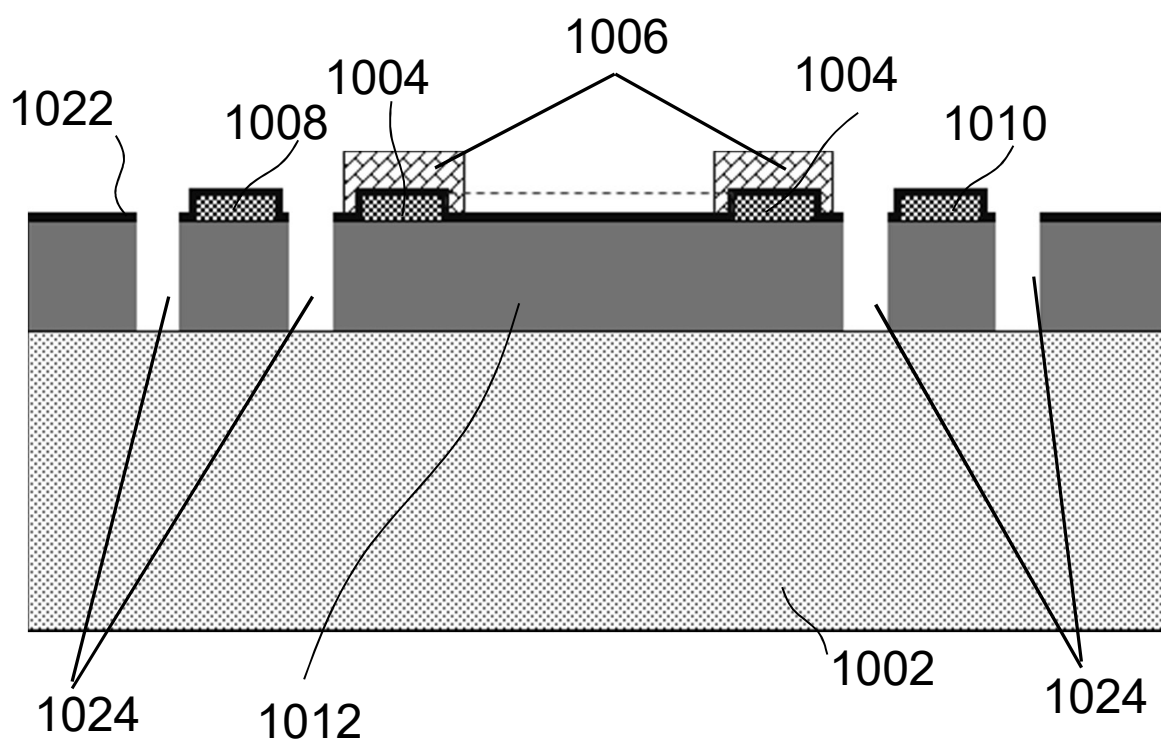


FIG. 10G

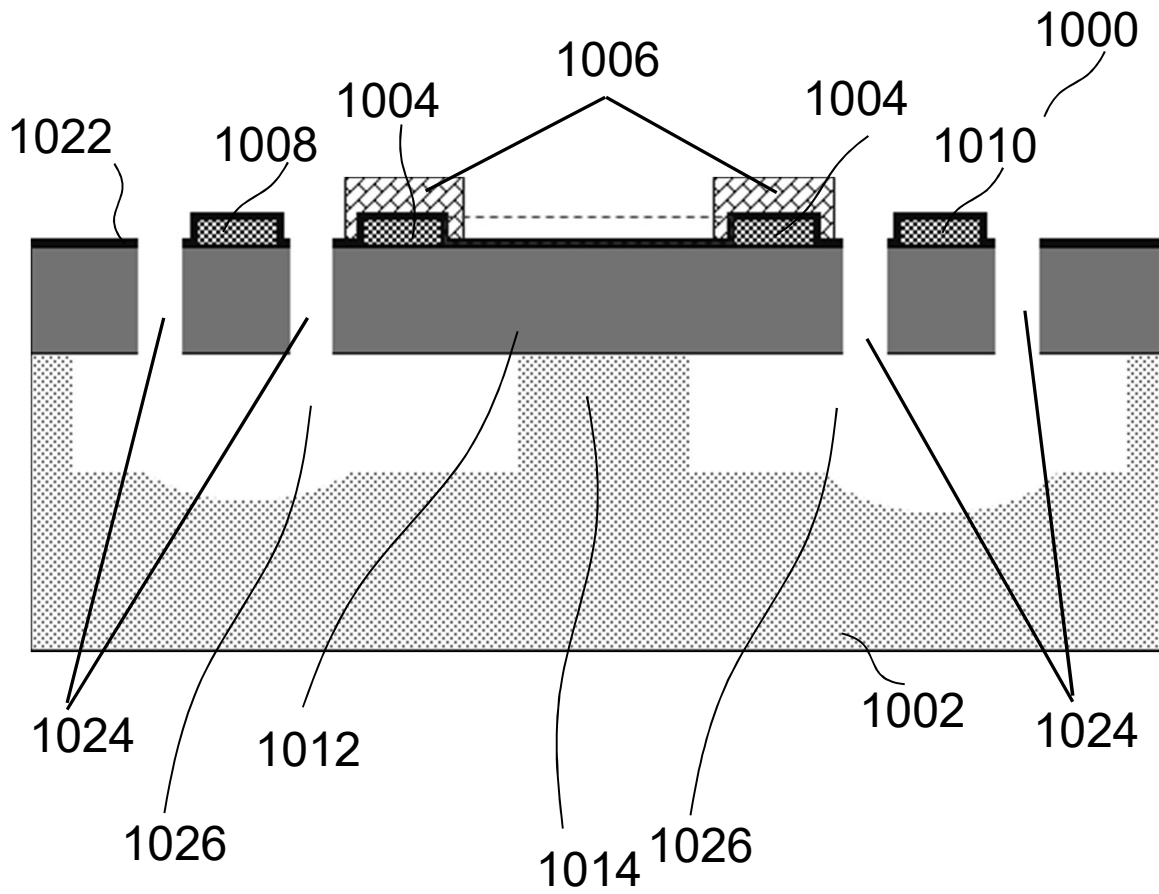


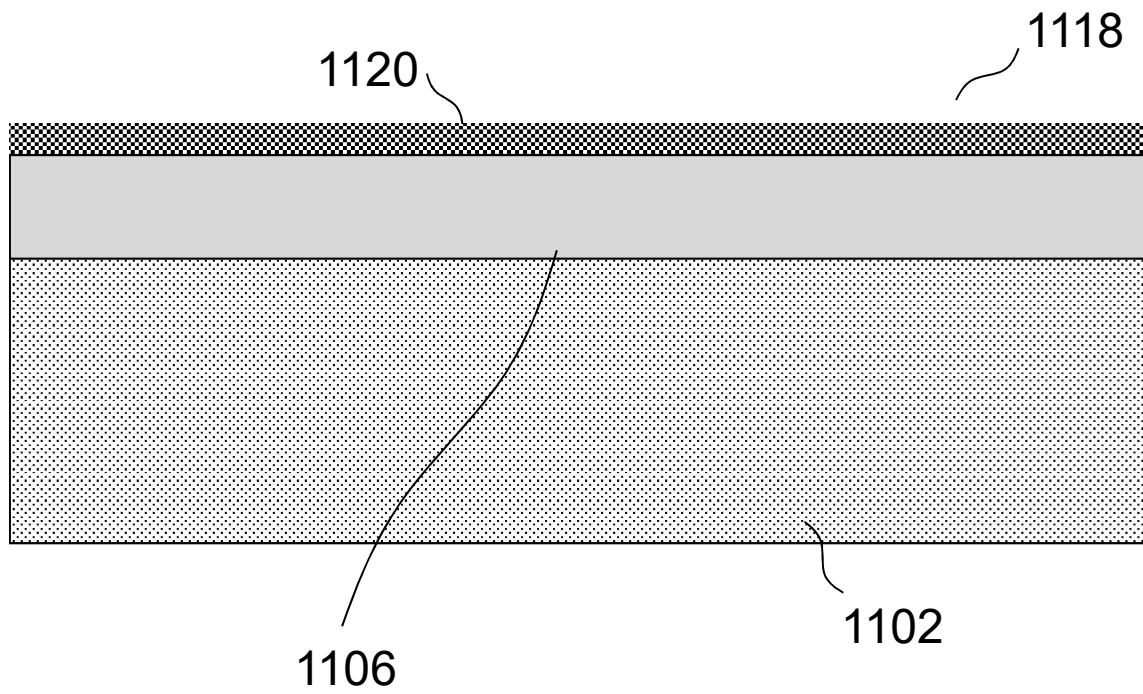
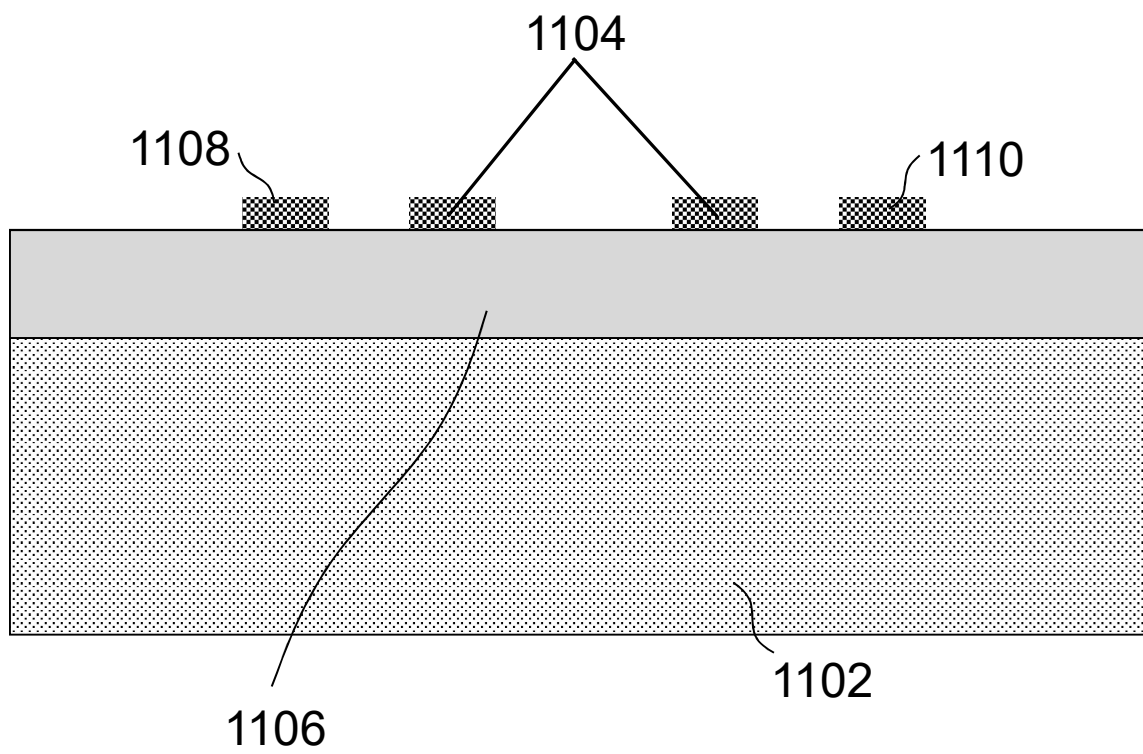
FIG. 11A**FIG. 11B**

FIG. 11C

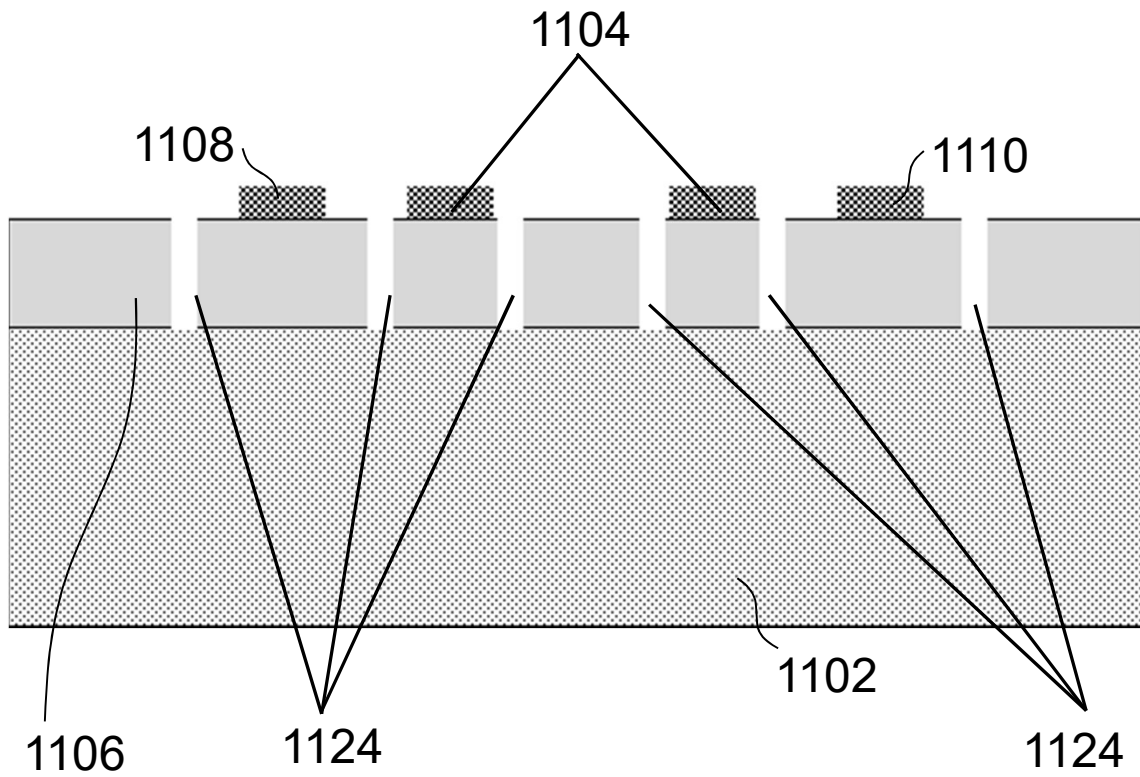


FIG. 11D

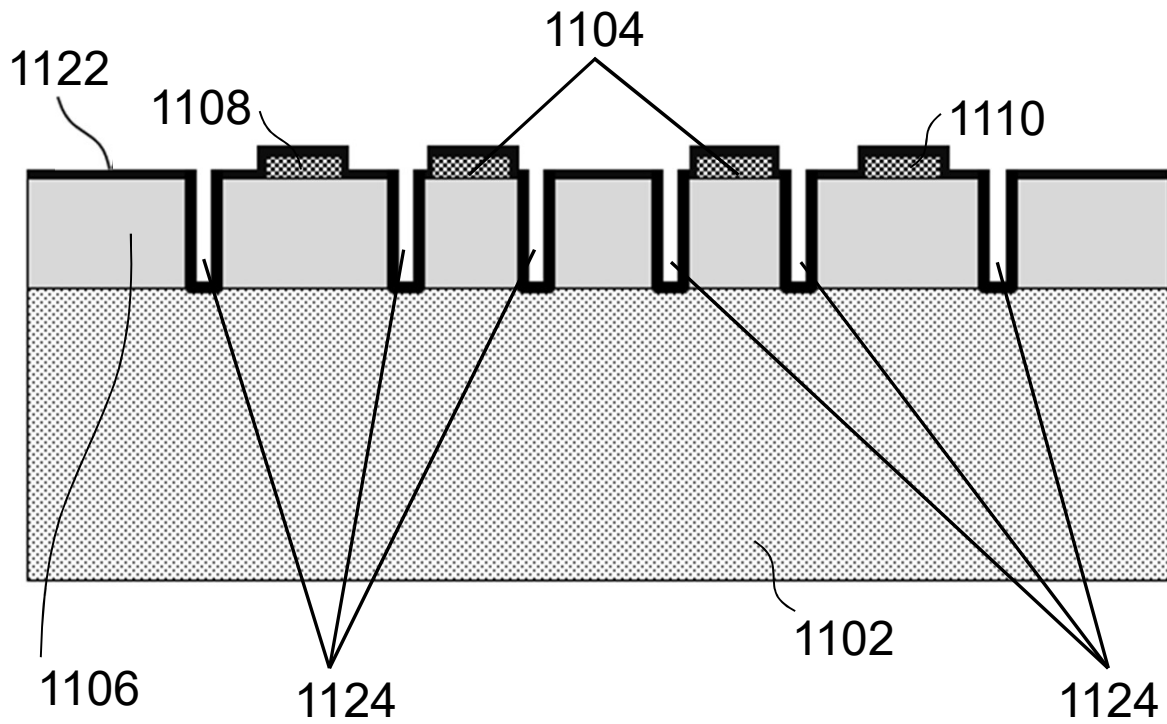


FIG. 11E

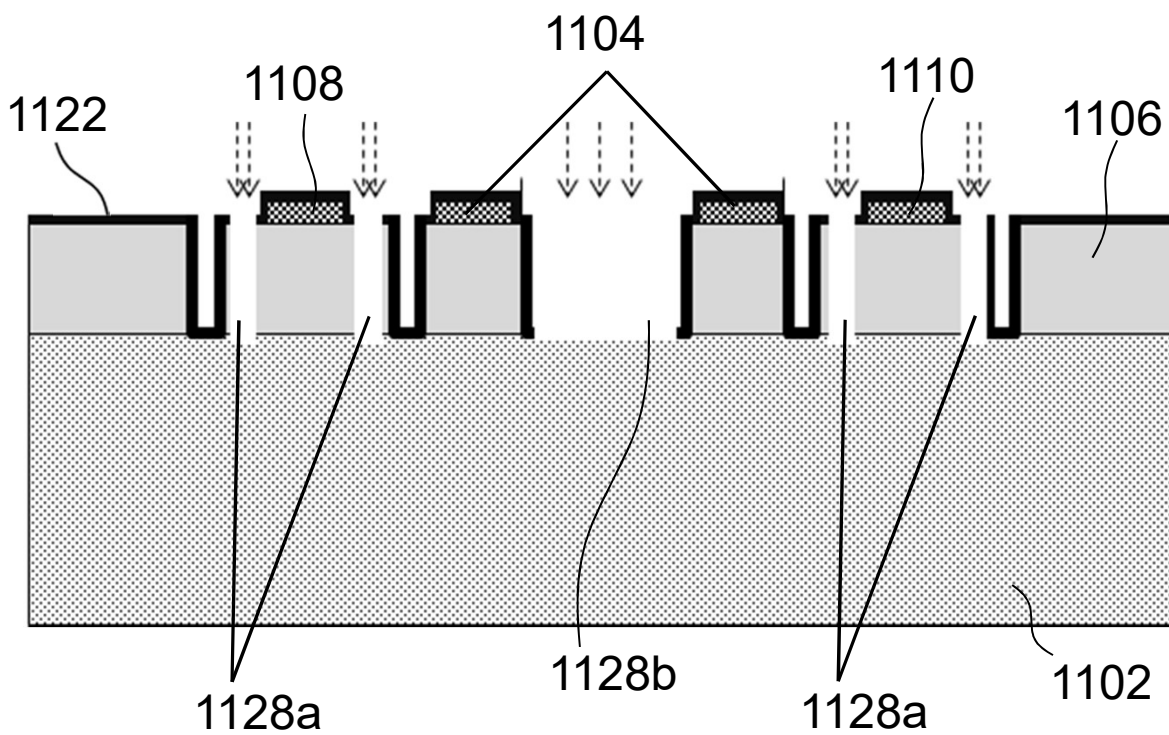


FIG. 11F

