

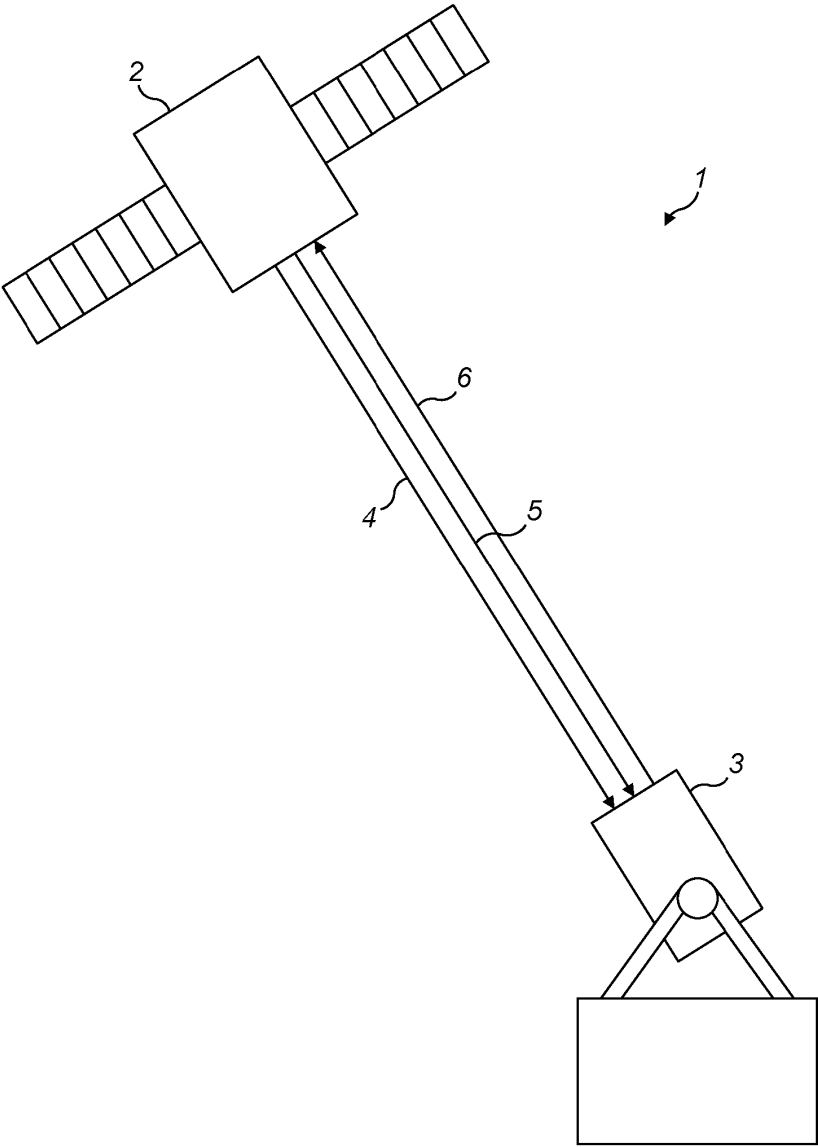


FIG. 1

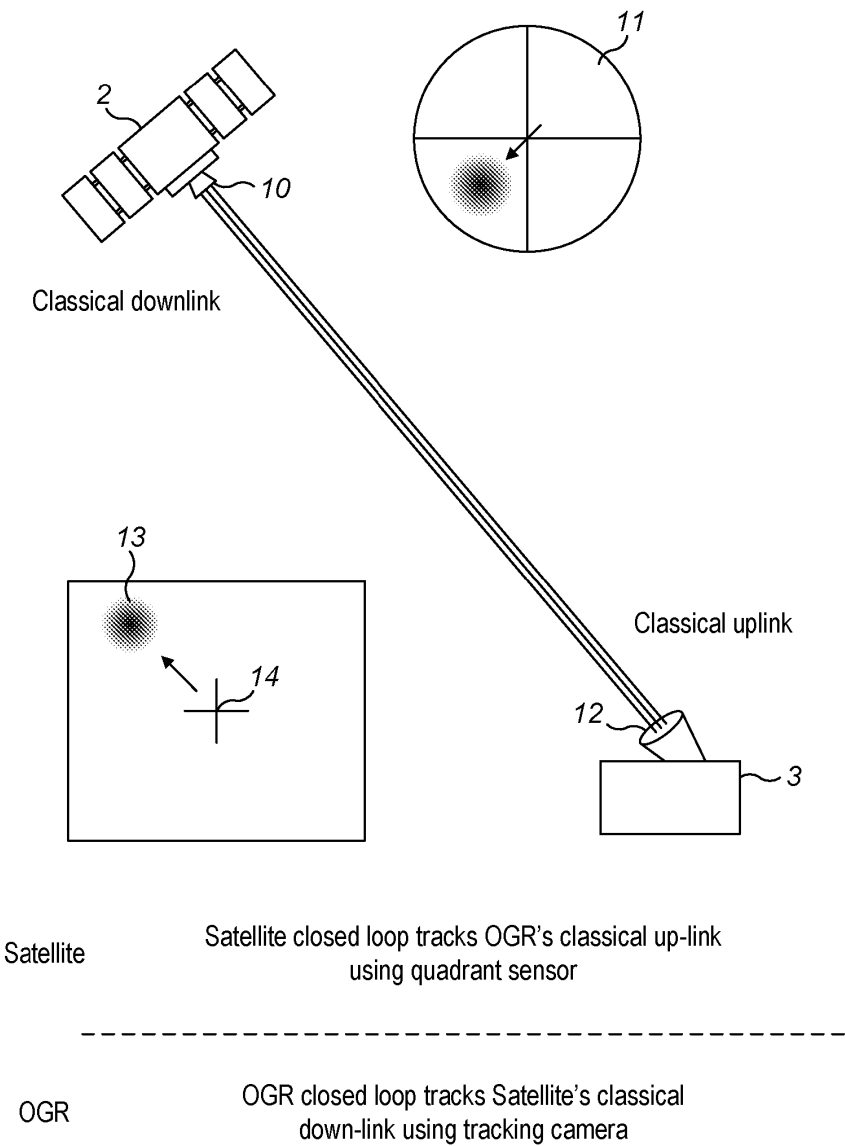
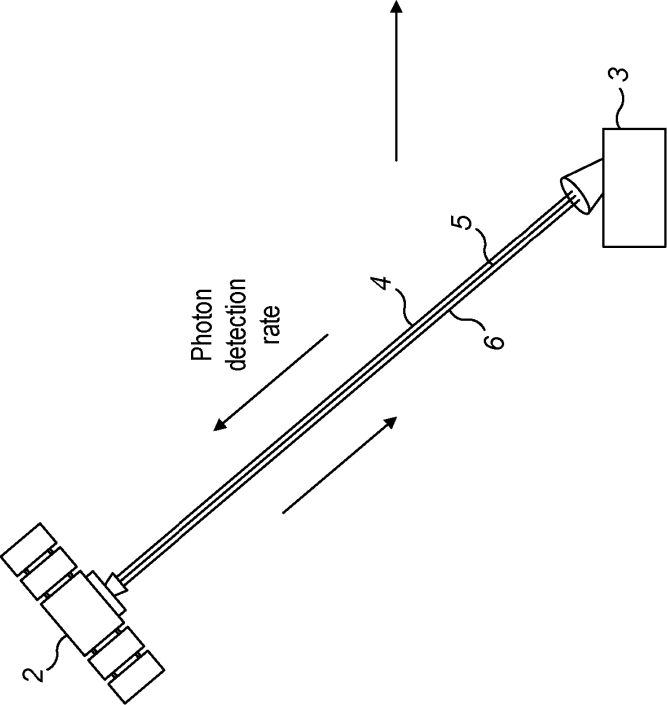


FIG. 2



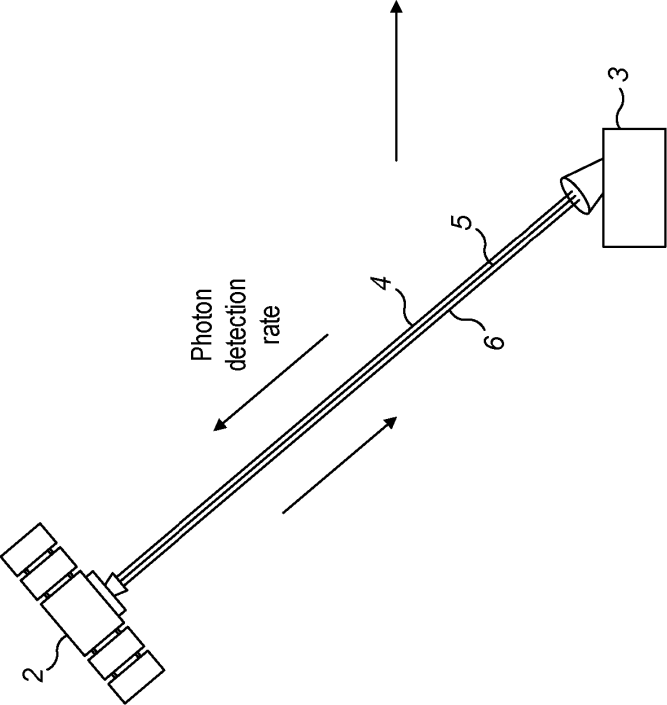
Satellite delivers photons via the quantum down-link*

OGR receives photons from the quantum down-link and calculates photon detection rate*

1

*activity is continuous throughout the remaining steps

FIG. 3A

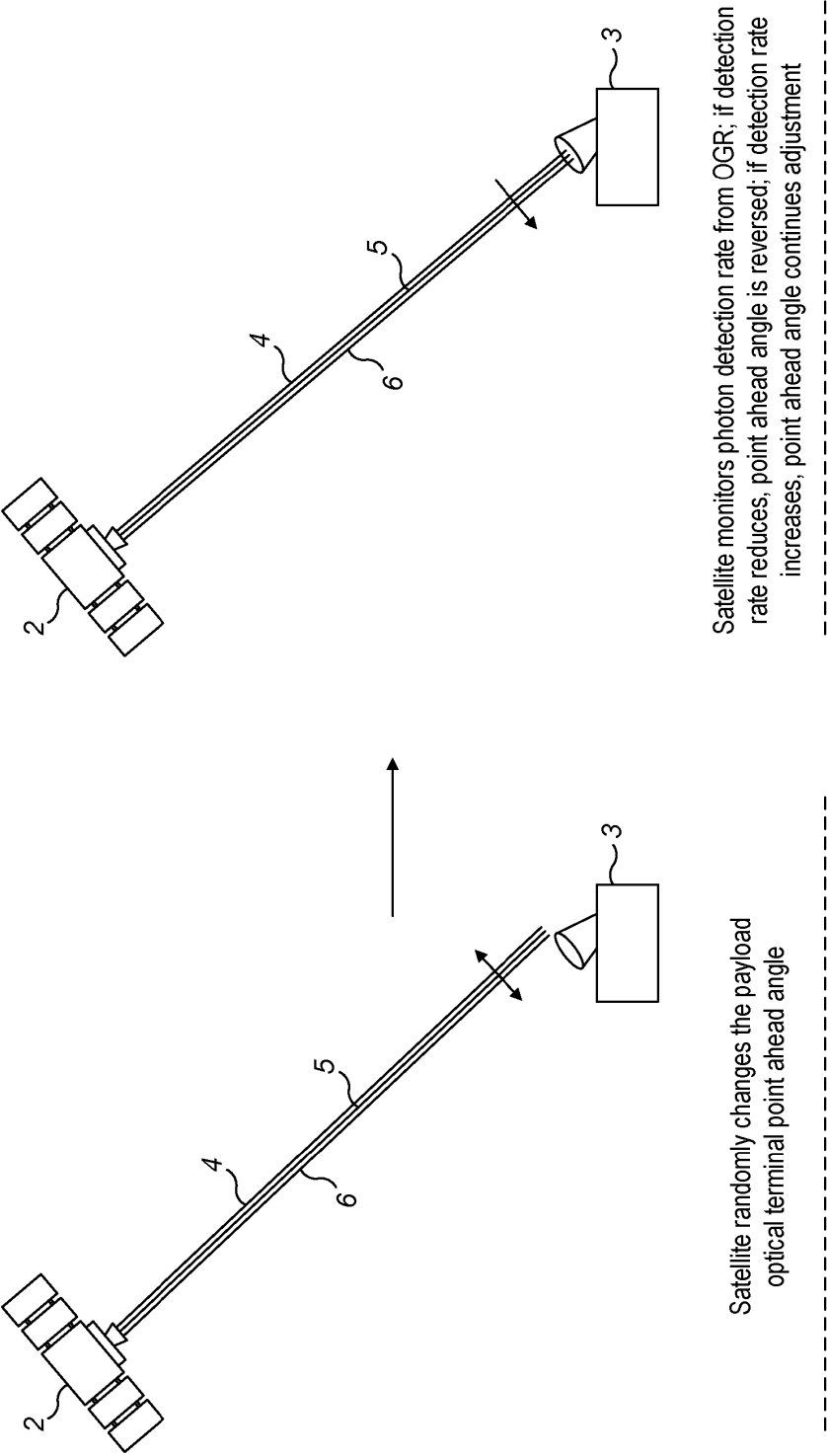


Satellite receives the OGR's detected photon rate via the classical up-link

OGR transmits photon detection rate to the Satellite via the classical up-link

2

FIG. 3B



3

FIG. 3C

4

FIG. 3D

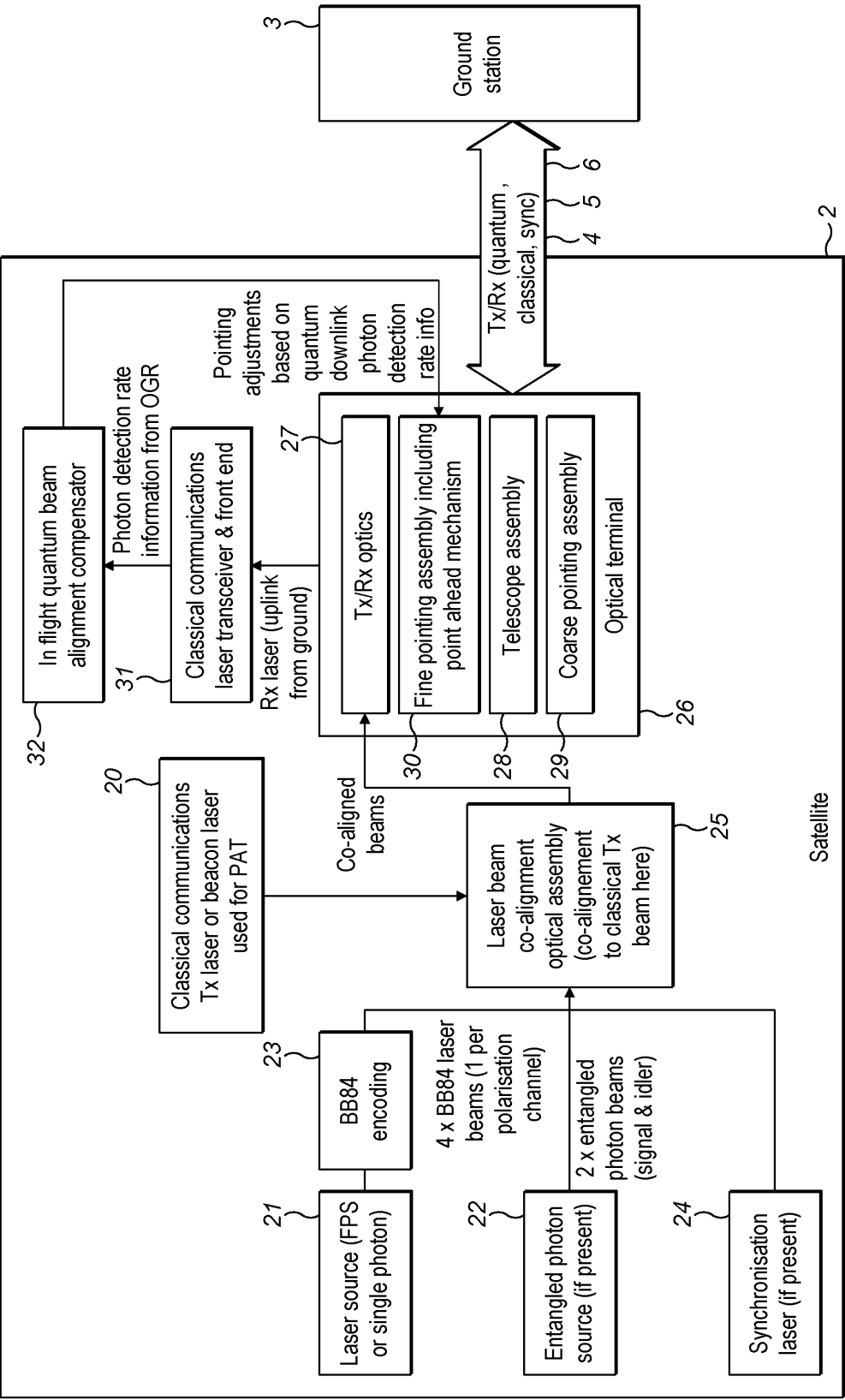


FIG. 4

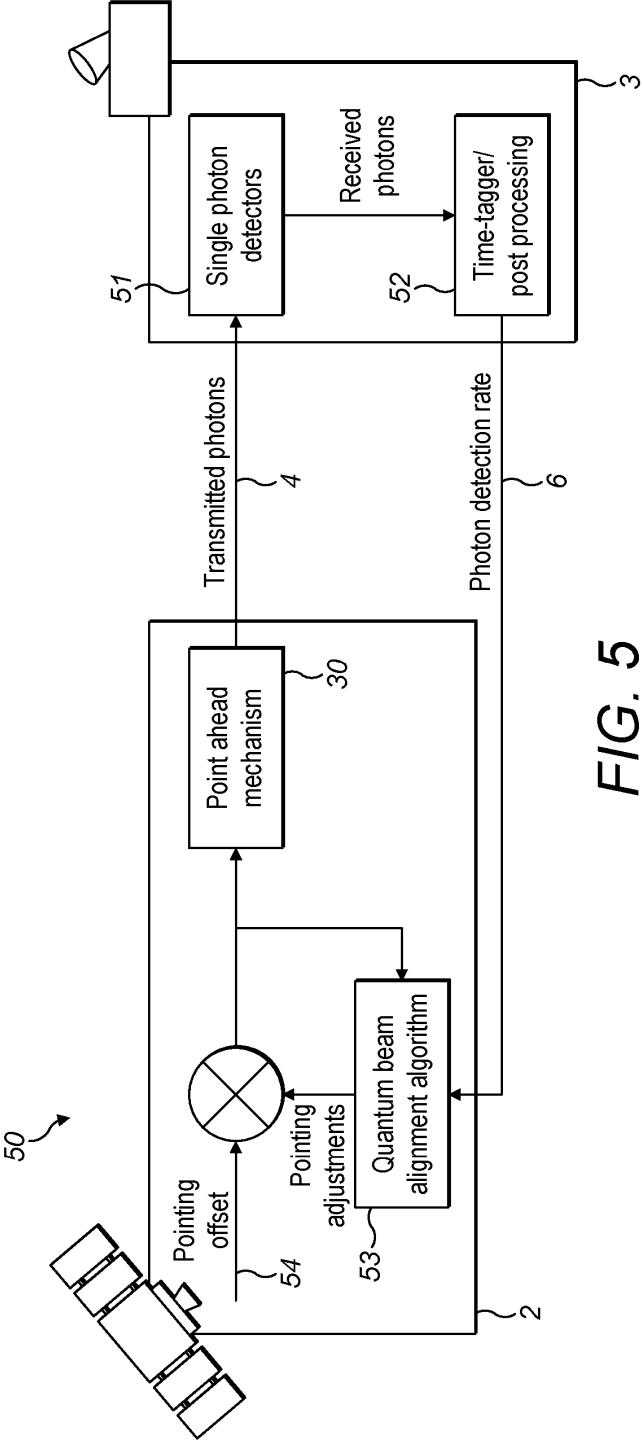


FIG. 5