

Optical Source and Apparatus for Remote Sensing

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DESCRIPTION

This remote sensing and mapping system is comprised of an illumination source controller and modulator coupled to processor(s); a pulsed illumination source coupled to the modulator; and a receiver having a capability for detecting illumination and providing signals based on detected illumination. The pulsed illumination source comprises a seed coupled to the illumination source controller and modulator and accepting control and modulation signals, and an optical amplifier having an input coupled to the seed and an output. The amplifier has gain section(s) forming continuous solid waveguide.

FEATURES AND BENEFITS

- The invention realizes high efficiency and electronically controllable optical sources for coherent radiation.
- The optical sources are more robust to increase useful life of laser light sources intended for laser-based metrology and mapping
- The performance latitude achievable via employment of such light sources is also increased.

APPLICATIONS

- LiDAR
- Navigation and Positioning
- Radar
- Satellites

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-13644-1, please contact:

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