

A method and Apparatus for Relative Navigation Using Reflected GPS Signals

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DESCRIPTION

This technology is a passive orbiting spacecraft navigating method. The method involves receiving direct signals, where each direct signal is transmitted from a corresponding one of celestial global positioning system (GPS) earth orbiting satellites transmitting ranging data signals, and receiving a reflected signal reflected off an orbiting target from the corresponding one of the GPS satellites. The direct signals and the reflected signals are compared, and a position of an orbiting spacecraft relative to the orbiting target is determined based on comparison of the direct signals and the reflected signals.

FEATURES AND BENEFITS

- The position of the orbiting spacecraft relative to the orbiting target is determined based on comparison of the direct signals and the reflected signals, thus providing passive autonomous relative navigation of the orbiting spacecraft towards the orbiting body.

APPLICATIONS

- Navigation and Positioning
- Satellites
- Spacecrafts

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-15483-1, please contact:

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