

Improved Time Delay and Distance Measurement

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DESCRIPTION

This technology is a time delay measuring method for cellular telephones. The method involves providing electromagnetic radiation carrier frequency, and modulating one of amplitude, phase, frequency, polarization and pointing angle of the carrier frequency with a return to zero (RZ) pseudo random noise (PN) code, where the RZ PN code includes a constant bit period and a pulse duration that is less than the bit period. The modulated electromagnetic radiation is detected after transmitting the modulated electromagnetic radiation. A time record of the detected electromagnetic radiation is converted into a signal processing format.

FEATURES AND BENEFITS

- The method enables reduction of a receiver duty cycle to reduce an impact of noise via time gating and improve signal-to-noise ratio (SNR), thus improving timing resolution.

APPLICATIONS

- Cell Phones
- Transmitters
- Telecommunications

FOR MORE INFORMATION

If you are interested in more information or want to pursue transfer of this technology, GSC-15445-1, please contact:

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