



TECHNOLOGY

Navigation Using X-ray Sources

OVERVIEW

Researchers at the University of Maryland, College Park, have developed a system and method for navigation utilizing sources of pulsed celestial radiation.

The invention includes a mobile receiver for detecting pulsed radiation. The receiver is mounted onto a spacecraft, satellite, planetary rover or other terrestrial or non-terrestrial vehicle, and the received pulses are used for calculating the navigational data for the vehicle. The invention also includes a clock or timer in communication with the mobile receiver for generating a timing signal corresponding to the reception and detection of the pulsed celestial radiation. The timing signal is used to calculate a time offset between predicted and measured pulse reception at the mobile receiver.

The system can also be used for navigation on Earth in much the same way that GPS technology is used. See also <http://www2.eps.gov/spg/ODA/DARPA/CMO/BAA04%2D23/listing.html>

See US. Issued Patent 7,197,381.

For more information, contact the Office of Technology Commercialization, 301 405-3947 or by e-mail otc@umd.edu.

CONTACT INFO

UM Ventures
0134 Lee Building
7809 Regents Drive
College Park, MD 20742
Email: umdtechtransfer@umd.edu
Phone: (301) 405-3947 | Fax: (301) 314-9502

Additional Information

INSTITUTION

University of Maryland, College Park

PATENT STATUS

Issued

LICENSE STATUS

Contact OTC for licensing information

CATEGORIES

- Imaging devices

EXTERNAL RESOURCES

- [US Patent 7,197,381](#)

PS-2003-064