

Title (en)

Spin-stabilized projectile with pulse receiver and method of use.

Title (de)

Mit einem Empfänger versehenes Geschoss und sein Anwendungsverfahren.

Title (fr)

Projectile stabilisé par rotation comportant un récepteur d'impulsions et sa méthode d'utilisation.

Publication

EP 0371007 A2 19900530 (EN)

Application

EP 90101270 A 19861121

Priority

- EP 90101270 A 19861121
- US 80117185 A 19851122

Abstract (en)

A spin-stabilized projectile the trajectory of which can be improved to increase accuracy with the projectile being controlled by a source of electromagnetic radiation providing pulses carrying encoded information. The projectile includes a nose (22) end and a midportion (26) having a periphery disposed about which are a plurality of spaced masses (28) with a high explosive charge associated with each mass for high explosive detonation acceleration of its corresponding mass to provide an impulse to the projectile. A projectile has a boatail (24) defining a cavity (32) opened at the rear end of the boatail (24). Received in the cavity is a pulsed electromagnetic radiation receiver and processor. This radiation receiver and processor has a component for determining the approximate elapsed time from firing of the projectile, a component for determining the direction of the source of electromagnetic radiation with respect to the projectile, a component for determining approximate vertical, a component for determining rotational rate, and a component for counting the times between adjacent electromagnetic pulses in a series of such pulses. The radiation receiver and processor also includes a microprocessor responsive to these components for controlling selective high explosive detonation acceleration of the masses to improve the trajectory of the projectile towards its target. A method of controlling a number of such projectiles is also disclosed.

IPC 1-7

F42B 10/66; F42C 15/34

IPC 8 full level

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CPC (source: EP)

F41G 7/266 (2013.01); **F41G 7/305** (2013.01); **F42B 10/661** (2013.01)

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