

Title (en)

SPIN-STABILIZED PROJECTILE WITH PULSE RECEIVER AND METHOD OF USE

Publication

EP 0371007 A3 19910417 (EN)

Application

EP 90101270 A 19861121

Priority

- EP 90101270 A 19861121
- US 80117185 A 19851122

Abstract (en)

[origin: EP0371007A2] 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.

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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)

Citation (search report)

- [AD] US 3860199 A 19750114 - DUNNE BRIAN B
- [A] US 3439617 A 19690422 - BOYD AUBREY B, et al

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