Title (en)

Artillery rocket using canard fins for guiding

Title (de)

Mittels Canard-Rudern gesteuerte Artillerie-Rakete

Title (fr)

Roquette d'artillerie comportant des ailettes de guidage du type canard

Publication

EP 0636852 B1 19961002 (DE)

Application

EP 94110495 A 19940706

Priority

DE 4325218 A 19930728

Abstract (en)

[origin: EP0636852A1] The precision of the payload delivery of the basic artillery rocket (11) introduced with the MLRS system is very considerably improved if it is equipped with an inertial flight controller (15) for driving fins (25). The cost of the flight controller (15) can be kept low if it is supported by position and time data from a navigation receiver (20) with whose aid it is also possible to determine that the delivery (time) point has been reached. If the flight controller (15) together with sensors and an actuating system (17) is installed in front of the warhead, on the ogive of the rocket casing (27), the payload space is not noticeably reduced, and the front main frame (rib) (23) of the rocket structure can be used for mechanically robust fin mounting, so that it is unnecessary to have any involvement in the rear zone with the rocket motor (12). The fins (25), which are constructed as extended, heavily swept canards, are not deployed until the apogee (34) of the ballistic launch path (14) has been reached and, as a result of their additional lift, produce a transition into a greatly extended path (14') of considerably longer range (2R), in addition to more precise mission completion. <IMAGE>

IPC 1-7

F42B 10/64

IPC 8 full level

F42B 10/64 (2006.01)

CPC (source: EP US)

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