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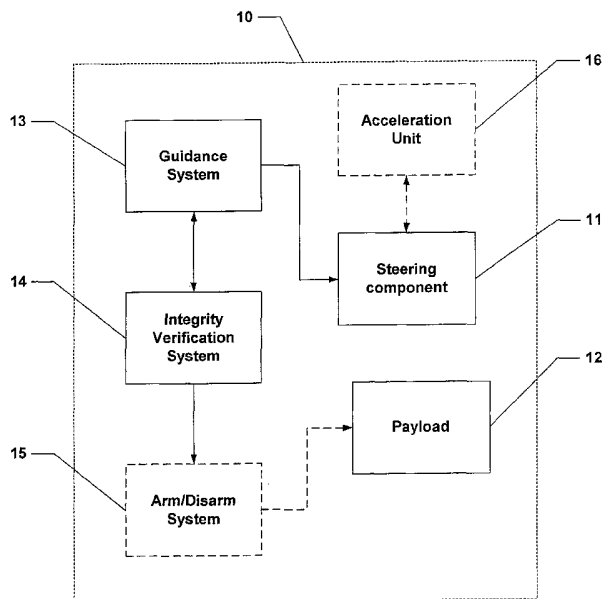
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[Continued on next page]

(54) Title: MUNITION WITH INTEGRITY GATED GO/NO-GO DECISION



(57) Abstract: A munition is presented which includes an integrity verification system that measures the integrity of the munition. When an integrity threshold is not met, engagement of the munition with a predetermined target is aborted. Also presented is a methodology for gating the engagement of the munition with the target. The methodology includes performing an integrity check of the munition after it is deployed. The method further includes aborting the engagement of the target when the integrity check of the munition fails.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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9 September 2005

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/015619

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F41G7/34 F41A17/08 F41G7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F41G F41A

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 142 411 A (COBLEIGH ET AL) 7 November 2000 (2000-11-07) abstract	1,28
A	column 2, line 29 - column 3, line 48; figures 1-3	2-12, 29-38

X	GB 2 211 371 A (* FERRANTI PLC) 28 June 1989 (1989-06-28) abstract	1,28
A	page 4, line 26 - page 20, line 19; figures 1-8	2-12, 29-38

A	EP 0 583 972 A (TEXAS INSTRUMENTS INCORPORATED) 23 February 1994 (1994-02-23) abstract page 4, line 49 - page 6, line 13; figures 1,2	1,28

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

1 August 2005

Date of mailing of the international search report

05. 08. 2004

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/015619

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-12, 28-38

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 28-38

a munition and associated method comprising:
a payload;
a steering component;
at least one guidance system in communication with said steering component, said guidance system capable of controlling said steering component to direct said munition to a predetermined target; and
an integrity verification system in communication with said guidance system, said integrity verification system performing the step of measuring an integrity of said munition, wherein, when an integrity threshold is not met, the step of aborting operation is executed.

2. claims: 13-27,39-53

a system and associated method for launching a munition comprising:
a munition; and
a munition platform including a pre deployment integrity verification system, wherein said integrity verification system measures an integrity of said munition and when an integrity threshold is not met, a deployment of said munition is aborted.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/015619

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6142411	A	07-11-2000	IL 128712 A	24-06-2003
GB 2211371	A	28-06-1989	NONE	
EP 0583972	A	23-02-1994	EP 0583972 A1	23-02-1994