### (19) World Intellectual Property Organization

International Bureau



## 

## (43) International Publication Date 23 November 2006 (23.11.2006)

# (10) International Publication Number WO 2006/124909 A3

(51) International Patent Classification:

**G08B 13/14** (2006.01) **G06K 13/00** (2006.01) **H04O 7/00** (2006.01) **G06K 19/00** (2006.01)

(21) International Application Number:

PCT/US2006/018935

**English** 

(22) International Filing Date: 17 May 2006 (17.05.2006)

(26) Publication Language: English

(30) Priority Data:

(25) Filing Language:

60/681,866 17 May 2005 (17.05.2005) US 60/761,466 24 January 2006 (24.01.2006) US

- (71) Applicant (for all designated States except US): EXPLO TRACK, LLC [US/US]; 5101 Brandywine Drive, Eagleville, PA 19403 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MORHARD, Robert, C. [US/US]; 5101 Brandywine Drive, Eagleville, PA 19403 (US). GELORMINO, Thomas, A. [US/US]; 233 Oakbrook Lane, Torrington, CT 06790 (US). ZUKOVICH, Thomas, M. [US/US]; 5220 Shawnee Blvd., Schnecksville, PA 18078 (US).

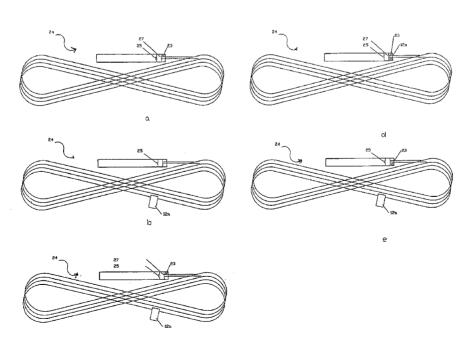
- (74) Agent: WOLF BLOCK, SCHORR AND SOLIS-CO-HEN LLP; 1650 Arch Street, 22nd Floor, Philadelphia, PA 19103 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- (88) Date of publication of the international search report: 18 May 2007

[Continued on next page]

 $\textbf{(54) Title:} \ \text{SYSTEM AND METHOD FOR DETECTING, MONITORING, TRACKING AND IDENTIFYING EXPLOSIVE MATERIALS}$ 



(57) Abstract: This invention relates to a system and method for monitoring, detecting, tracking and identifying explosive materials. The system and method involves tracking and monitoring the explosive material during every part of the chain of custody.

#### 

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.

### INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/18935

		· · · · · · · · · · · · · · · · · · ·		
A. CLASSIFICATION OF SUBJECT MATTER IPC: G08B 1/08,13/14;H04Q 7/00;G06K 13/00,19/00; H04Q 7/00				
USPC: 340/539.1,539.13,539.16,539.32,572.1,572.2;235/485,487 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) U.S.: 340/539.1.539.13.539.16,539.32,572.1,572.2;235/485,487				
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 practicable, search terms used) EAST search				
C. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where	appropriate, of the relevant passages	Relevant to claim No.	
X	US 6,810,816 B2 (RENNARD) 02 November 2004		21,25,34,40	
X	US 5,646,365 A (COLLIER) 08 July 1997 (08.07.1997), col. 3, lines 10-32, Fig. 7		22-24,35-38,41-42	
Y				
X	US 7,088,229 B2 (JOHNSON) 15 December 2005 (15.12.2005), see col. 8, lines 16-25.		43-45	
Y,P				
X  Y,P	US 2004/0124977 A1 (BIFFAR) 01 July 2004 (01.07.2004), pargraphs 0044, 0064.		46-47	
	documents are listed in the continuation of Box C.	See patent family annex.		
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the applica	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	
"E" earlier application or patent published on or after the international filing date		"X" document of particular relevance; the c considered novel or cannot be consider step when the document is taken alone	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	
"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)		considered to involve an inventive step combined with one or more other such	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	
"O" document	referring to an oral disclosure, use, exhibition or other means	- "	alt	
"P" document published prior to the international filing date but later than the priority date claimed document member of the same patent		•		
Date of the actual completion of the international search  Date of mailing of the international search report				
20 December 2006 (20.12.2006) 1 20 FFB 2007 \(\sigma\)			·   //	
Name and mailing address of the ISA/US  Authorized officer				
Mail Stop PCT, Attn: ISA/US			I land	
Commissioner of Patents P.O. Box 1450			V//////	
Alexandria, Virginia 22313-1450 Telephone No. 571-272-2600			W 4	
Facsimile No. (571) 273-3201				
orm PCT/ISA	/ZIU (SECONG Sheet) / http://doi.org/			

PCT/US06/18935

#### INTERNATIONAL SEARCH REPORT

# C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT Category \* Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages X,P US 2004/0124977 A1 (BIFFAR) 01 July 2004 (01.07.2004), Fig. 4, paragraphs 0042, 26-30 0053, 0064, 0068. X US 6,281,795 B1 (SMITH et al.) 28 August 2001 (28.08.2001), Fig. 4, col. 3, lines 1-16. 31-33, 38-39 Y X,E US 2006/0164251 A1 (MEYER et al.) 07 January 2005 (07.01.2005), see Figs. 3,7 and 49-50,63,69 paragraphs 0002-0003, 0025. X,E US 2004/0124977 A1 (BIFFAR) 01 July 2004 (01.07.2004), Figs. 1,4, paragraph 0029, 53-62,65-68,70-78 0026, 0035, 0053, 0060, 0064. Y X US 5,646,365 A (COLLIER) 08 July 1997 (08.07.1997), see Figs. 1-7, col. 3, lines 20-65, 79-96 col. 5, lines 34-39 and 61-63.