

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number  
**WO 2004/061412 A3**

(51) International Patent Classification<sup>7</sup>: **G08B 1/08**

(21) International Application Number:  
PCT/US2003/039148

(22) International Filing Date:  
10 December 2003 (10.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/436,024 23 December 2002 (23.12.2002) US  
10/382,606 6 March 2003 (06.03.2003) US

(71) Applicant: **GENTAG, INC.** [US/US]; 9505 Helmswell  
Place, Potomac, MD 20854 (US).

(72) Inventor: **PEETERS, John, P.**; 4607 Harling Lane,  
Bethesda, MD 20814 (US).

(74) Agent: **KELLY, Robert, L.**; Radder Fishman & Grauer  
PLLC, 39533 Woodward Avenue, Suite 140, Bloomfield  
Hills, MI 48304 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

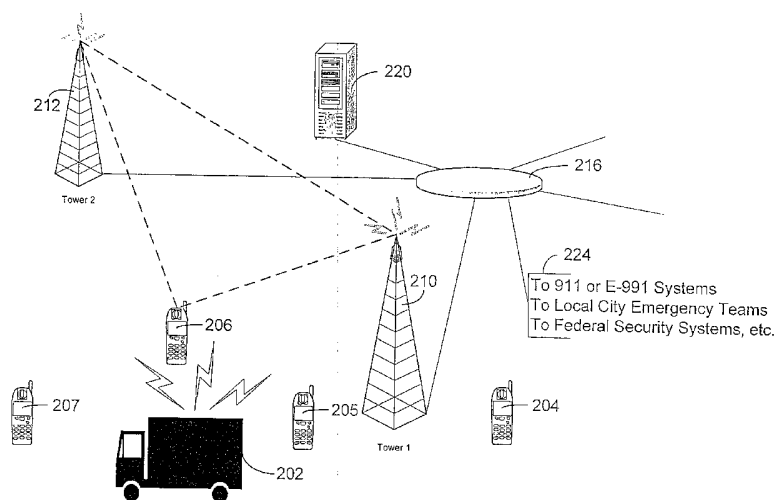
**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
14 July 2005

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

(54) Title: METHOD AND APPARATUS FOR WIDE AREA SURVEILLANCE OF A TERRORIST OR PERSONAL THREAT

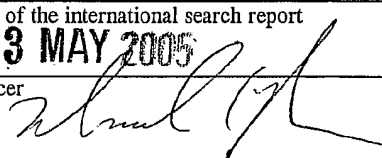


(57) Abstract: The present invention is related to a means for detecting external threats by the use of methods and apparatuses for the wide area detection of chemical, radiological or biological threats using modified personal wireless devices combined with new advanced micro and nanosensor technologies. A cost effective method is provided for wide area surveillance of a potential terrorist or personal threat. Personal electronic devices such as mobile phones, PDAs or watches, in combination with new microsensor technologies described herein, can be used as a new type of platform detection technology for wide area surveillance of major threats. A "Homeland Security chip" is further provided which combines the elements of geo-location, remote wireless communication and sensing into a single chip. The personal electronic devices can be further equipped for detecting various medically related threats. Similarly modified personal devices can be used to detect external threats that are person-specific.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/39148

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : G08B 1/08 US CL : 340/539.11 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 340/539.11, 539.1, 539.13, 539.22, 539.24, 539.26 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)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,084,510 A (LEMELSON et al) 04 July 2000 (04.07.2000), column 12, lines 1 et seq.	1-155
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> 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	"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
"E"	earlier application or patent published on or after the international filing date	"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
"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)	"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
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 23 May 2005 (23.05.2005)		Date of mailing of the international search report <b>23 MAY 2005</b>
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Daryl C. Pope  Telephone No. 571-272-2600