### (19) World Intellectual Property Organization

International Bureau



## 

# (43) International Publication Date 27 December 2007 (27.12.2007)

(10) International Publication Number WO 2007/149977 A3

(51) International Patent Classification: *H04L 9/00* (2006.01)

(21) International Application Number:

PCT/US2007/071773

(22) International Filing Date: 21 June 2007 (21.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/815,676 21 June 2006 (21.06.2006) US

(71) Applicant (for all designated States except US): RF CODE, INC. [US/US]; 9229 Waterford Center Drive, Suite 500, Austin, Texas 78758 (US).

(72) Inventor: WORTHY, David; 9229 Waterford Center Drive, Austin, Texas 78758 (US).

(74) Agents: LARSON NEWMAN ABEL POLANSKY & WHITE, LLP et al.; 5914 West Courtyard Drive, Suite 200, Austin, Texas 78730 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

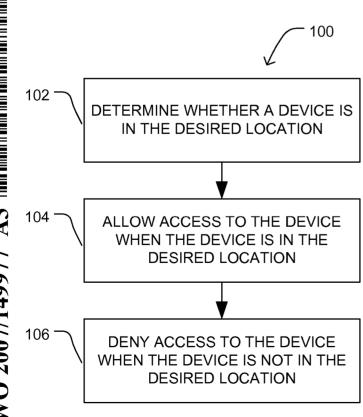
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (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: 3 April 2008

(54) Title: LOCATION-BASED SECURITY, PRIVACY, ACCESS CONTROL AND MONITORING SYSTEM



(57) Abstract: A system includes a transmit unit to transmit a signal including a data key, and a receiving unit to receive the signal. The receiving unit to determine an encryption key based at least in part on the data key and to decrypt encrypted data using the encryption key.

### INTERNATIONAL SEARCH REPORT

International application No. PCT/US 07/71773

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - H04L 9/00 (2007.10)			
USPC - 713/171 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) USPC: 713/171			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 705/65; 713/180; 713/150 (search terms below)			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(PGPB,USPT,EPAB,JPAB); DialogPRO(Engineering); Google Scholar; Text search terms: location based access control monitoring systems, transmit unit signal key, receiving unit signal, receiving unit determine encryption key, decrypt encrypted key			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	ppropriate, of the relevant passages	Relevant to claim No.
x	US 2004/0162076 A1 (CHOWDRY et al.) 19 August 2004 (19.08.2004) entire document, especially Abstract, FIGS.1-3B, 5 and 13 and para [0015], [0107], [0109], [0170], [0174], [0185], [0187], [0189], [0203], [0212], [0215], [0226] and [0295]		1-5, 7-10, 12-15, 19-20, 24-28 and 33-34
Y			6, 11, 16-18, 21-23, 29- 32 and 35
Υ	US 6,611,201 B1 (BISHOP et al.) 26 August 2003 (26. Abstract and (col 17, ln 13-15) and (col 19, ln 31-37)	08.2003) entire document, especially	6 and 11
Y	US 2006/0031934 A1 (KRIEGEL) 09 February 2006 (09.02.2006) entire document, especially Abstract and para [0025] and [0027]		16-18 and 35
Y	US 2005/0076242 A1 (BREUER) 07 April 2005 (07.07.2005) entire document, especially Abstract, FIG.1A and para [0008]-[0009], [0011] and [0032]		21-23 and 29-32
A	AKYILDIZ, lan F. et al. 'A survey on sensor networks' [online]. In Communications Magazine, IEEE Publication Date: Aug 2002, Volume: 40, Issue: 8, p. 102-114. [retrieved on 2007-10-22]. Retrieved from the Internet: <url asurveyonsensornetworks.pdf="" http:="" saloot.googlepages.com=""></url>		1-35
Fuetho	a decuments are listed in the continuation of Pour C		
Further documents are listed in the continuation of Box C.  * Special categories of cited documents:  "T" later document published after the international filling date or priority.			
"A" document defining the general state of the art which is not considered to be of particular relevance		"T" later document published after the interr date and not in conflict with the applic the principle or theory underlying the i	ation but cited to understand
"E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is		"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	
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		considered to involve an inventive step when the document is combined with one or more other such documents, such combination	
		"&" document member of the same patent family	
Date of the actual completion of the international search 22 October 2007 (22.10.2007)		Date of mailing of the international search report  17 DEC 2007	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents		Authorized officer: Lee W. Young	
P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	