(19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 25 November 2004 (25.11.2004)

PCT

(10) International Publication Number WO 2004/102313 A3

(51) International Patent Classification⁷: H04J 3/00

(21) International Application Number:

PCT/US2004/013424

(22) International Filing Date: 30 April 2004 (30.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/468,750 8 May 2003 (08.05.2003) US 60/471,187 16 May 2003 (16.05.2003) US 10/673,540 29 September 2003 (29.09.2003) US

(71) Applicant: RSA SECURITY INC. [US/US]; 174 Middlesex Turnpike, Bedford, MA 01730 (US).

- (72) Inventors: JUELS, Ari; 66 Addington Road, Apt. 1, Brookline, MA 02445 (US). RIVEST, Ronald, L.; 41 Academy, Arlington, MA 02476 (US). SZYDLO, Michael; 299 Highland Avenue, Apt. 3, Brighton, MA 02135 (US).
- (74) Agent: RYAN, Joseph, B.; Ryan, Mason & Lewis, LLP, 90 Forest Avenue, Locust Valley, NY 11560 (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, 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.

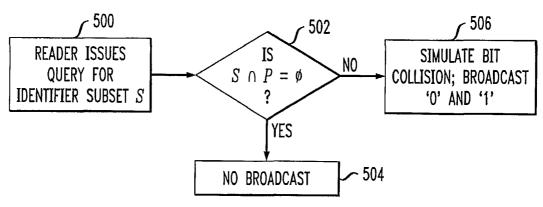
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, 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: 21 April 2005

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.

(54) Title: METHOD AND APPARATUS FOR SELECTIVE BLOCKING OF RADIO FREQUENCY IDENTIFICATION DE-VICES



(57) Abstract: Techniques are disclosed for providing enhanced privacy in an RFID system comprising a plurality of RFID devices, each having an associated identifier, and at least one reader which communicates with one or more of the devices. A blocker device is operative to receive a communication directed from the reader to one or more of the RFID devices, and to generate, possibly based on information in the received communication, an output transmittable to the reader. The output simulates one or more responses from at least one of the RFID devices in a manner which prevents the reader from determining at least a portion of the identifier of at least one of the RFID devices. The blocker device may itself comprise one of the RFID devices. In an illustrative embodiment, the output generated by the blocker device interferes with the normal operation of a singulation algorithm implemented by the reader.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/13424

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H04J 3/00 US CL : 370/345,445 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.: 370/345,445; 340/10.1, 572.1, 572.3, 568.1; 455/1				
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) Please See Continuation Sheet				
C. DOCU	JMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap	ppropriate, of the relevant passages	Relevant to claim No.	
X,E	US 2004/0100359 A1 (READE et al.) 27 May 2004,	see sections 0008, 0009, 0023, 0027,	1-5, 28-30	
 Y,E	0030, 0031.		8,9,11,12,25,26	
Y	US 6,061,344 A (WOOD, JR.) 09 May 2000, col. 4 col. 8; and col. 9, lines 1-49.	, lines 26-35; fig. 4; col. 6, lines 4-67;	8,9,11,12	
Y,E US 2004/0160324 A1 (STILP) 19 August 2004, see section 0010, 0106, 0145.		25, 26		
Further	documents are listed in the continuation of Box C.	See patent family annex.	·	
Special categories of cited documents:		"T" later document published after the inte	rnational filing date or priority	
"A" document	t defining the general state of the art which is not considered to be	date and not in conflict with the applic principle or theory underlying the inve		
_	plication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be conside when the document is taken alone		
establish specified)	t which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as t referring to an oral disclosure, use, exhibition or other means	"Y" document of particular relevance; the considered to involve an inventive step combined with one or more other such being obvious to a person skilled in the	when the document is a documents, such combination	
"P" document published prior to the international filing date but later than the		"&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report 1 4 MAR 2005		
	2005 (23.02.2005)			
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		Authorized officer Kenneth Wieder Telephone No. 703-205-4770	Zogan	

Facsimile No. (703) 305-3230
Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT	International application No. PCT/US04/13424
Continuation of B. FIELDS SEARCHED Item 3:	
USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB RFID tag transponder label	