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- (72) Inventor; and
- (71) Applicant : YANG, Xiao, Hui [CN/US]; 14466 Sobey Road, Saratoga, CA 95070 (US).
- (74) Agent: WATERS LAW GROUP, PLLC; 633 Seventh Street, Huntington, WV 25701 (US).
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(54) Title: ELECTRONIC ARTICLE SURVEILLANCE RELAY DEVICE

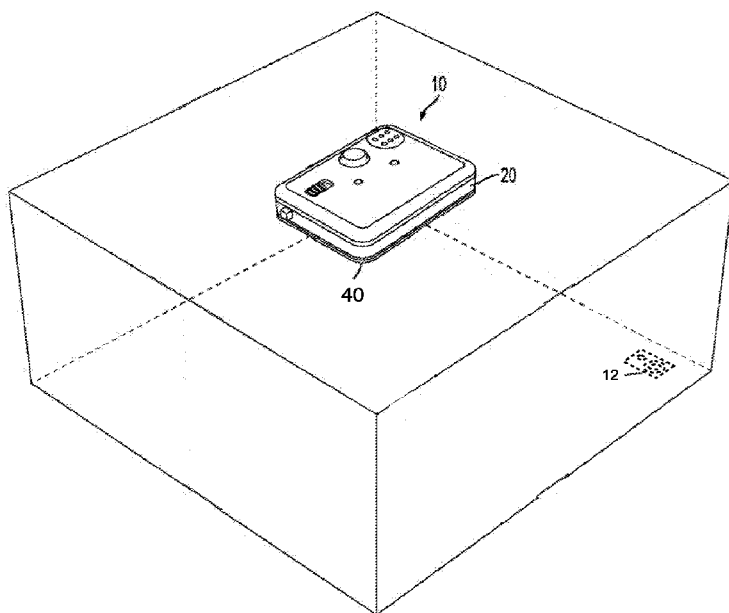


FIG. 1

(57) Abstract: An electronic article surveillance device attaches to an object having an electronic article surveillance RFID label in it. The EAS device interrogates the label for information and associates itself with the label. The device retransmits the information from the label to the broader system and over a longer range than the label can by itself. The device has a motion detector and periodically interrogates the label to insure the presence of the label, especially when motion is detected. The unexpected absence of the label is considered an alarm condition and the device will alarm in those circumstances. External devices arm and disarm the device and detach the device as well.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 14/22198

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G08B 13/14 (2014.01)

USPC - 340/572.8

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(8)-G08B13/14 (2014.01); USPC-340/572.8

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC-340/572.1,572.5,572.7,10.1,10.4

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase, Google Patents/Scholar-terms: RFID label tag package object container box EAS reader interrogator relay repeater optical mount presence motion detector installation switch sound generator monitor tag presence

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2009/0303003 A1 (Pritchard et al.) 10 December 2009 (10.12.2009), para [0024]-[0047]; figs. 1-7	1-4,8,14-17,19-20 ----- 5-7,9-13,18
Y	US 2012/0206263 A1 (Yang) 16 August 2012 (16.08.2012), para [0030]; fig. 3.	6
Y	US 5,168,263 A (Drucker) 01 December 1992 (01.12.1992), col. 3, ln 40 to col. 4, ln 19; figs. 1-5.	7,12,13,18
Y	US 2010/0315239 A1 (Yang) 16 December 2010 (16.12.2010), para [0027]-[0033]; figs.1-21.	5, 9,10
Y	US 2005/0134459 A1 (Glick et al.) 23 June 2005 (23.06.2005), para [0048]-[0049]; fig. 1	11
A	US 2010/0079253 A1 (Phipps et al.) 01 April 2010 (01.04.2010), para [0039]; fig. 4	1-20
A	US 2007/0080804 A1 (Hirahara et al.) 12 April 2007 (12.04.2007), para [0019]-[0036]; figs. 1-6	1-20
A	US 2004/0217867 A1 (Bridgelall et al.) 04 November 2004 (04.11.2004), para [0006]-[0008].	1-20
A	US 2006/0208899 A1 (Suzuki et al.), 21 September 2006 (21.09.2006), para [0006]-[0008]; fig. 20.	1-20
A	US 6,724,308 B2 (Nicholson) 20 April 2004 (20.04.2004), entire document.	1-20

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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"O" document referring to an oral disclosure, use, exhibition or other means	
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