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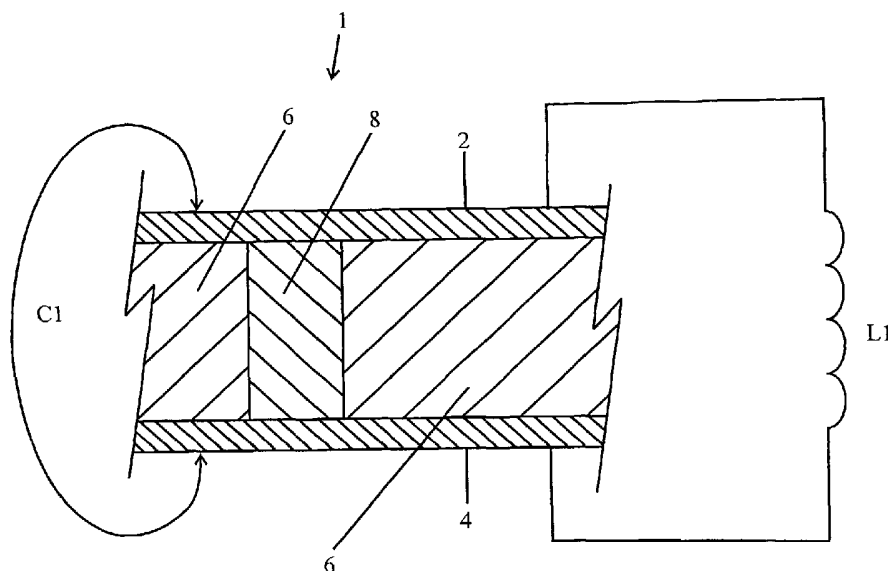
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- Declarations under Rule 4.17:**  
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*

[Continued on next page]

(54) Title: DEACTIVATABLE RADIO FREQUENCY SECURITY LABEL



(57) Abstract: A deactivation apparatus for an electronic article surveillance tag having a plurality of layers and an equivalent resonant circuit containing an inductor and a capacitor is provided. The apparatus includes: a capacitor formed by a pair of conductive capacitor plates separated apart by a dielectric layer; an inductor connected to each of the pair of capacitor plates where an electromagnetic field of a preselected frequency at a first magnitude impinging upon the tag causes the equivalent resonant circuit to resonate and produce a detectable response from the tag; and, an electrically weakened area in the dielectric layer between the pair of conductive capacitor plates where the electromagnetic field at a second magnitude higher than the first magnitude impinging upon the tag causes a conductive path through the weakened area electrically connecting the pair of capacitor plates together and deactivating the tag.



- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

*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.*

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25 November 2004

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/27865

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G08B 13/14

US CL : 340/572.3

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. : 340/572.3, 572.1, 572.2, 572.5, 572.8

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. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,567,473 (LICHTBLAU) 28 January 1986, col. 3, lines 11-28, col. 7, lines 55-64,	1, 2
---	col. 8, lines 1-14, and figures 10-13.	-----
Y		3
Y	US 4,682,154 (FEARON et al) 21 July 1987, col. 8 lines 51-66.	3
A	US 6,091,607 A (MCKEOWN et al) 18 July 2000, see entire document.	1-3
A,P	US 6,480,110 B2 (LEE et al) 12 November 2002, see entire document.	1-3

<input type="checkbox"/> Further documents are listed in the continuation of Box C.	<input type="checkbox"/> See patent family annex.
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>

Date of the actual completion of the international search	Date of mailing of the international search report
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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 Kenneth Wieder Telephone No. 703-305-4700

# INTERNATIONAL SEARCH REPORT

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**Continuation of B. FIELDS SEARCHED Item 3:**  
EAST  
dielectric