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- (88) **Date of publication of the international search report:**
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(54) **Title:** RFID ANTENNA SYSTEM AND METHOD

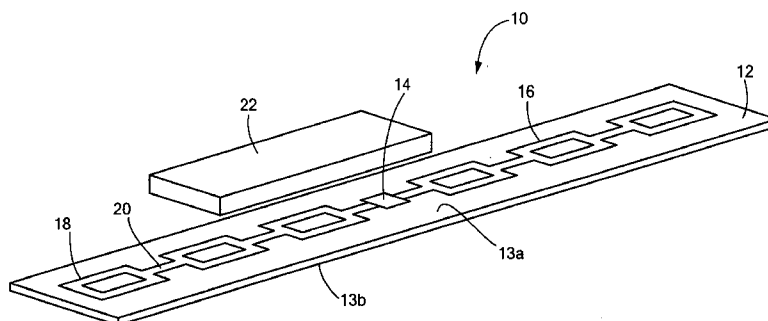


FIG. 1

(57) **Abstract:** The present invention provides an RFID device having a substrate body, and an IC component and antenna disposed thereon. The RFID device may further include one or more spacing elements, wherein at least a portion of the substrate body is adapted to be disposed around at least a portion the spacing element, thus reducing the overall size of the substrate body with proper impedance matching. The RFID device may further include an EAS element coupled to the substrate body and/or the spacing element in order to create a combination RFID/EAS device with the ability to reduce its overall footprint without sacrificing the ability to provide both identification and article surveillance functions.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/011303A. CLASSIFICATION OF SUBJECT MATTER
INV. H01Q9/28 H01Q1/22 G06K19/077

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)
H01Q G06K

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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 101 36 502 A1 (BIELOMATIK LEUZE & CO [DE]) 6 February 2003 (2003-02-06) paragraphs [0034] - [0044]	1,2,6, 11,12
Y	figures 6-9	3-5
X	JP 2005 033461 A (MITSUBISHI MATERIALS CORP) 3 February 2005 (2005-02-03) figures 2,3	1,2,11, 12
Y	EP 1 689 020 A (NORDENIA DEUTSCHLAND GRONAU [DE]) 9 August 2006 (2006-08-09) paragraphs [0004] - [0006], [0011] - [0016] figures 2a-2d	3-5
Y	US 2003/132893 A1 (FORSTER IAN J [GB] ET AL) 17 July 2003 (2003-07-17) figures 2B,2D,2F	3-5
	-/--	

 Further documents are listed in the continuation of Box C. 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
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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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Date of the actual completion of the international search

26 February 2009

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/011303

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 793 332 A (BRADY WORLDWIDE INC [US]) 6 June 2007 (2007-06-06) paragraphs [0004] - [0006], [0019] - [0030] figures 1,2	1
A	----- US 2007/096917 A1 (YANG SAN-LIEN [TW]) 3 May 2007 (2007-05-03) figure 1 -----	1-6, 11, 12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/011303

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6, 11, 12

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2008 /011303

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6,11,12

RFID device

2. claims: 7-10,13-20

RFID/EAS device

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/011303
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date																																				
DE 10136502	A1	06-02-2003	NONE																																				
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EP 1689020	A	09-08-2006	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">CA</td> <td style="width: 25%;">2534172</td> <td style="width: 10%;">A1</td> <td style="width: 50%;">28-07-2006</td> </tr> <tr> <td>JP</td> <td>2006211683</td> <td>A</td> <td>10-08-2006</td> </tr> <tr> <td>KR</td> <td>20060087466</td> <td>A</td> <td>02-08-2006</td> </tr> <tr> <td>US</td> <td>2006176236</td> <td>A1</td> <td>10-08-2006</td> </tr> </table>	CA	2534172	A1	28-07-2006	JP	2006211683	A	10-08-2006	KR	20060087466	A	02-08-2006	US	2006176236	A1	10-08-2006																				
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EP 1793332	A	06-06-2007	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">CA</td> <td style="width: 25%;">2569389</td> <td style="width: 10%;">A1</td> <td style="width: 50%;">02-06-2007</td> </tr> <tr> <td>US</td> <td>2007126588</td> <td>A1</td> <td>07-06-2007</td> </tr> </table>	CA	2569389	A1	02-06-2007	US	2007126588	A1	07-06-2007																												
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