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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR RFID ANTENNAS

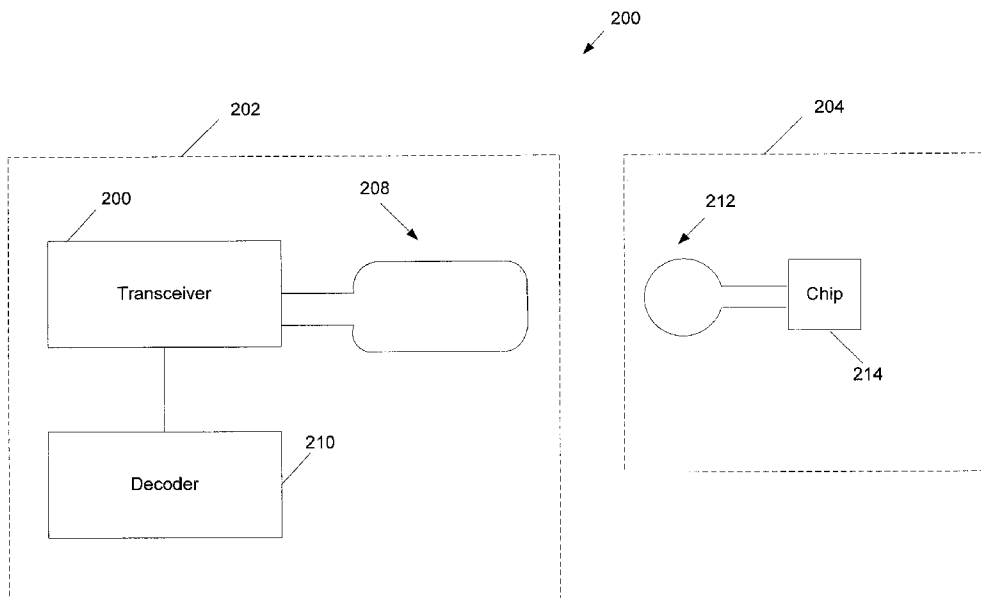


FIGURE 2

(57) Abstract: A radio frequency identification (RFID) system include a reader and a tag. The RFID reader includes at least one reader antenna, the reader antenna is configured as a lossy loop antenna with a beam coverage area. The RFID tag includes a loop antenna, the tag loop antenna cooperates with the reader antenna to receive and transmit radio frequency signals between the reader antenna and the tag antenna when the tag is located with a near field distance from the reader antenna.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/085441**A. CLASSIFICATION OF SUBJECT MATTER****G06K 19/07(2006.01)i**

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 : G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Utility Models and applications for Utility Models since 1975; IPC above
Japanese Utility Models and applications for Utility Models since 1975; IPC aboveElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKIPASS(KIPO internal) "probe", "substrate", "silicon", "segment", "stopper", "joint"**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-2006-0015233 A (FUJITSU LIMITED) 16 February 2006 See the whole document.	24 - 33
A	KR 10-0425067 B1 (3B SYSTEM INC.) 31 March 2004 See abstract and figures 4-8.	1 - 23
A	US 6107921 A (NOEL H. EBERHARDT et al.) 22 August 2000 See abstract and figure 1-8.	1 - 23

 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

"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 cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"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

"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

"&" document member of the same patent family


Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2007/085441

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:

I. Claims 1-23 directed to a RFID system and reader having reader antenna comprising a flexible substrate with a conductive material deposited onto the substrate.

II. Claims 24-33 directed to a RFID tag comprising a loop antenna and chip.

- 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.:

- 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

Information on patent family members

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