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(54) Title: METHODS AND SYSTEMS FOR PERSONAL AUTHENTICATION

(57) Abstract: A method for creating personal authentication keys includes the steps of determining a number of RFID tags, generating a key, partitioning the key into a number of parts, the number of parts corresponding to the number of determined RFID tags, and writing each of the plurality of key parts to a corresponding RFID tag.

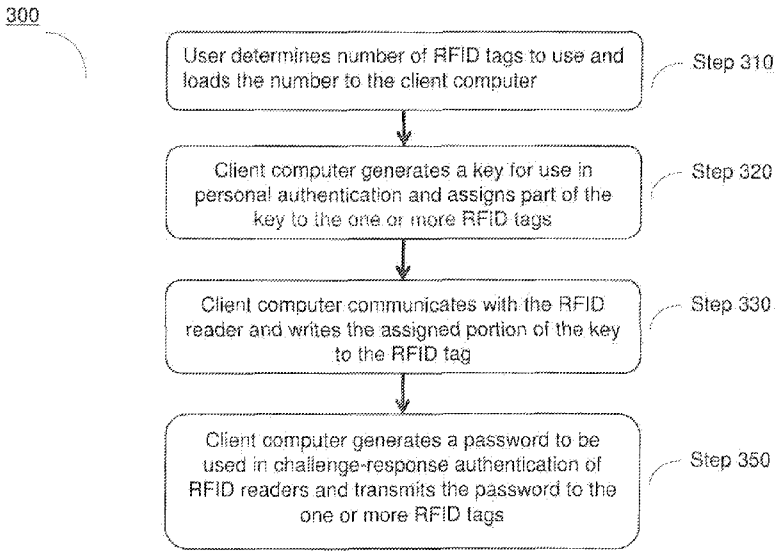


FIG. 3

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

H04W 12/06(2009.01)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)

H04W 12/06; H04L 9/08; H04L 9/28; H04L 9/32; H04L 9/30; H04L 9/00; G06K 19/00

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
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: RFID, partition, key

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008-0181398 A1 (RAVIKANTH PAPPU) 31 July 2008 See abstract; paragraphs [0022],[0025]-[0027],[0029],[0030],[0032]; claims 1, 13 and figures 2,3.	1
A	US 6118874 A (EIJI OKAMOTO et al.) 12 September 2000 See abstract; column 3 lines 15-55; claims 1,4,5 and figure 2.	1
A	US 2007-0206786 A1 (SAYAN CHAKRABORTY) 06 September 2007 See abstract; paragraphs [0042]-[0046] and figures 1a,1b,2.	1
A	US 2006-0220789 A1 (YOSHIHIRO SUZUKI et al.) 05 October 2006 See abstract; paragraphs [0036],[0039],[0043] and figures 1,4.	1

☐ 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)
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"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	Date of mailing of the international search report
26 AUGUST 2011 (26.08.2011)	**26 AUGUST 2011 (26.08.2011)**

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0181398 A1	31.07.2008	WO 2008-091978 A2	31.07.2008
		WO 2008-091978 A3	12.02.2009
US 6118874 A	12.09.2000	JP 10-274926 A	13.10.1998
		JP 3656688 B2	08.06.2005
US 2007-0206786 A1	06.09.2007	EP 1872308 A2	02.01.2008
		EP 1872594 A2	02.01.2008
		EP 1872597 A2	02.01.2008
		EP 1872598 A2	02.01.2008
		EP 1872599 A2	02.01.2008
		EP 1872600 A2	02.01.2008
		EP 1872601 A2	02.01.2008
		EP 1872602 A2	02.01.2008
		EP 1929450 A2	11.06.2008
		EP 1929796 A2	11.06.2008
		EP 1932124 A2	18.06.2008
		EP 1932370 A2	18.06.2008
		EP 1977402 A2	08.10.2008
		EP 2009574 A1	31.12.2008
		EP 2017761 A2	21.01.2009
		EP 2017761 A3	11.02.2009
		US 2006-0238302 A1	26.10.2006
		US 2006-0238303 A1	26.10.2006
		US 2006-0238304 A1	26.10.2006
		US 2006-0238305 A1	26.10.2006
		US 2006-0253415 A1	09.11.2006
		US 2007-0046431 A1	01.03.2007
		US 2007-0159330 A1	12.07.2007
		US 2007-0206797 A1	06.09.2007
		US 2007-0207792 A1	06.09.2007
		US 2008-0022160 A1	24.01.2008
		US 2008-0042830 A1	21.02.2008
		US 7570164 B2	04.08.2009
		US 7659819 B2	09.02.2010
		WO 2006-116012 A2	02.11.2006
		WO 2006-116012 A3	02.11.2006
		WO 2006-116084 A2	02.11.2006
		WO 2006-116084 A3	02.11.2006
		WO 2006-116085 A2	02.11.2006
		WO 2006-116085 A3	02.11.2006
		WO 2006-116086 A2	02.11.2006
		WO 2006-116086 A3	02.11.2006
		WO 2006-116235 A2	02.11.2006
		WO 2006-116235 A3	02.11.2006
		WO 2006-116236 A2	02.11.2006
		WO 2006-116236 A3	02.11.2006
		WO 2006-116237 A2	02.11.2006
		WO 2006-116237 A3	02.11.2006

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/059905

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		WO 2006-116238 A2	02.11.2006
		WO 2006-116238 A3	02.11.2006
		WO 2007-027220 A2	08.03.2007
		WO 2007-027220 A3	08.03.2007
		WO 2007-027297 A2	08.03.2007
		WO 2007-027297 A3	08.03.2007
		WO 2007-027302 A2	08.03.2007
		WO 2007-027302 A3	08.03.2007
		WO 2007-027885 A2	08.03.2007
		WO 2007-027885 A3	08.03.2007
		WO 2007-078329 A2	12.07.2007
		WO 2007-078329 A3	12.07.2007
US 2006-0220789 A1	05.10.2006	CN 100442311 C	10.12.2008
		CN 1813258 A	02.08.2006
		EP 1622066 A1	01.02.2006
		EP 1622066 B1	06.10.2010
		JP 4516525 B2	04.08.2010
		US 7812706 B2	12.10.2010
		WO 2004-097728 A1	11.11.2004