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(54) Title: SYSTEMS AND METHODS FOR ANTI-COUNTERFEIT AUTHENTICATION THROUGH COMMUNICATION NETWORKS

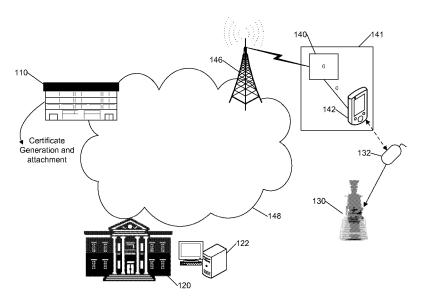


FIG. 1

(57) Abstract: An anti-counterfeit authentication system provides authentication services over available communication networks. The system assigns unique anti-counterfeit certificates to authentic items. The certificates are stored in anti-counterfeit tags that are attached to the authentic items. An authentication server provides authentication services to authentication clients over the communication networks. The authentication clients read, via tag readers, the anti-counterfeit certificates from the tags associated with items to be authenticated, provide the anti-counterfeit certificates to the authentication server which determines authenticity and supplies authentication results back to the authentication clients.





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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:(counterfeit, fake), (authentic, real, certificate, genuine), (client, user, customer, owner, consumer), (tag, label, card, ID, RFID, code), (server)

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2010-0037297 A1 (GRANT ELLIOTT et al.) 11 February 2010 See abstract, claims 7,8,10,16-18,22-24, and figures 1-3.	1-21
Y	KR 10-2007-0052092 A (SK TELECOM CO., LTD.) 21 May 2007 See abstract, claims 1-3 and figures 2-5.	1-21
A	KR 10-2005-0108667 A (LEE, KYOO TAIK) 17 November 2005 See abstract, claims 1,7 and figures 1,2.	1-21
A	US 2005-0021781 A1 (SUNDER SINGAM et al.) 27 January 2005 See abstract, claims 1,2 and figures 1,2.	1-21

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*	Special categories of cited documents:	"T"	later document published after the int

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CN 101887570 A 17.11.20 EP 1856648 A2 21.11.200 EP 2264658 A2 22.12.20 JP 2008-545282 A 11.12.20 JP 2010-283850 A 16.12.20 US 2006-0180661 A1 17.08.200 US 2007-0170240 A1 26.07.200 US 2007-0170241 A1 26.07.200 US 2007-0175974 A1 02.08.200 US 2007-0205258 A1 06.09.200 US 2007-0215685 A1 20.09.200 US 2008-0215685 A1 20.09.200 US 2008-0215685 A1 16.10.200 US 2008-0253560 A1 16.10.200 US 2008-0256367 A1 16.10.200 US 2010-0299263 A1 25.11.20 US 7614546 B2 10.11.200 US 7770783 B2 10.08.20 US 7823768 B2 02.11.20 US 7992772 B2 09.08.20 US 8155313 B2 10.04.20 US 8245927 B2 21.08.20				1 C1/US2012/02037	
CN 101887570 A 17.11.20 EP 1856648 A2 21.11.20 EP 2264658 A2 22.12.20 JP 2008-545282 A 11.12.20 JP 2010-283850 A 16.12.20 US 2006-0180661 A1 17.08.20 US 2007-0170240 A1 26.07.20 US 2007-0170241 A1 26.07.20 US 2007-0175974 A1 02.08.20 US 2007-0205258 A1 06.09.20 US 2007-0215685 A1 20.09.20 US 2008-0211841 A1 17.01.20 US 2008-0215686 A1 20.09.20 US 2008-0253560 A1 16.10.200 US 2008-0256367 A1 16.10.200 US 2010-0299263 A1 25.11.20 US 7614546 B2 10.11.20 US 7770783 B2 10.08.20 US 77992772 B2 09.08.20 US 7992772 B2 09.08.20 US 8155313 B2 10.04.20 US 8245927 B2 21.08.20 US 8245927 B2 21.08.20 US 8245927 B2 21.08.20 US 8245927 B2 21.08.20 US 8006-084090 A2 10.08.200 UKR 10-2005-0108667 A 17.11.2005 None					
KR 10-2005-0108667 A 17.11.2005 None	US 2010-0037297 A1	11.02.2010	CN 101887570 A EP 1856648 A2 EP 2264658 A2 JP 2008-545282 A JP 2010-283850 A US 2006-0180661 A1 US 2007-0170240 A1 US 2007-0170241 A1 US 2007-0205258 A1 US 2007-0215685 A1 US 2008-0215685 A1 US 2008-0253560 A1 US 2008-0253560 A1 US 2010-0299263 A1 US 7614546 B2 US 7770783 B2 US 7823768 B2 US 7992772 B2 US 8155313 B2 US 8245927 B2	05.08.2009 17.11.2010 21.11.2007 22.12.2010 11.12.2008 16.12.2010 17.08.2006 26.07.2007 02.08.2007 06.09.2007 17.01.2008 16.10.2008 16.10.2008 25.11.2010 10.11.2009 10.08.2010 02.11.2010 09.08.2011 10.04.2012 21.08.2006	
	KR 10-2007-0052092 A	21.05.2007	None		
US 2005-0021781 A1 27.01.2005 None	KR 10-2005-0108667 A	17.11.2005	None		
	US 2005-0021781 A1	27.01.2005	None		