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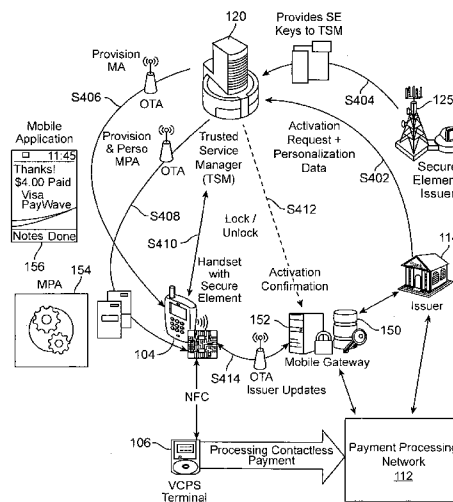


FIG. 2

(57) Abstract: A system, method, and server computer configured to authenticate a consumer device. The consumer device is authenticated via a mobile gateway using challenge-response authentication. If the consumer device is successfully authenticated, a secure channel is established between the consumer device and a first entity. The secure channel allows for secure communication between the consumer device and the first entity.

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**A. CLASSIFICATION OF SUBJECT MATTER****H04L 9/32(2006.01)i, G06Q 20/00(2006.01)i, H04W 12/06(2009.01)i, H04W 12/04(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)

H04L 9/32; H04W 4/12; H04M 3/22

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) &amp; Keywords: authentication, challenge, response and authentication server.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	KRISHNA SANKAR, SRI SUNDARALINGAM, ANDREW BALINSKY, DARRIN MILLER. Cisco Wireless LAN Security, Cisco Press, 2004, ISBN 1-58705-154-0, PP.157-192. See figure 7-1,7-6,7-7 and pages 158,163-170.	1-3,8-9,12-14 ,16-17 4-7,10-11,15,18-20
Y	A. MENEZES, P. VAN OORSCHOT, S. VANSTONE. Handbook of Applied Cryptography, CRC Press, 1996. See pages 36-37,546-547 and figure.1.16,13.1.	1-3,8-9,12-14 ,16-17
A	KR 10-2005-0103681 A (KTFREETEL CO., LTD.) 01 November 2005 See abstract, figure 4-7 and claims 1-9.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 10-2005-0103681 A	01.11.2005	None	