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(54) Title: SECURITY GATEWAY COMMUNICATION

(57) Abstract: A gateway device and methods performed therein to prevent unauthorized client devices from connecting to the host network of the gateway device is described. The gateway device does not respond right away to an individual client message sent to the gateway device. Instead, the gateway device only responds to a predetermined sequence of the client messages, which is only known to the gateway device and authorized client devices. Because the gateway device will not respond to random client messages and the likelihood that an unauthorized client device can correctly guess the predetermined sequence of the client messages is low, the risk of a malicious party being able to hack into the host network, for example, by using port scanning techniques, can be mitigated.



A. CLASSIFICATION OF SUBJECT MATTER***H04W 12/06(2009.01)i, H04W 12/08(2009.01)i, H04W 4/12(2009.01)i, H04W 88/16(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; H04B 7/26; H04W 88/02; H04L 12/56; H04W 40/00

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: gateway, communication channel, refrain, holding, response message, acknowledge message, and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6438386 B2 (JOSHI; CHANDRA et al.) 20 August 2002 See column 3, line 38- column 5, line 11; claims 1-4; figures 1, 2.	1-22
A	WO 2009-082334 A1 (TELEFONAKTIEBOLAGET L M ERICSSON (PUBL) et al.) 02 July 2009 See pages 5-9; claims 1-3; figures 3-5.	1-22
A	WO 2005-006598 A1 (SAMSUNG ELECTRONICS CO., LTD. et al.) 20 January 2005 See pages 7-8; figure 2.	1-22
A	US 2011-0122827 A1 (BJORSELL JOHAN EMIL VIKTOR et al.) 26 May 2011 See paragraphs [0126]-[0136]; claims 1-11; figures 1-3.	1-22



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

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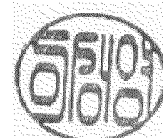
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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