Title: METHOD AND APPARATUS FOR PROVIDING A KEY FOR SECURE COMMUNICATIONS

Abstract: A method and apparatus for providing a key for secure communications is provided herein. During operation a node wishing to join a network, will authenticate with an authentication server and then derive a pairwise key (e.g., a Pair-wise Transient Key (PTK)) used for encryption of unicast traffic. The node will also create its own group transient key (GTK) for use in encrypting multicast or broadcast traffic. Once the GTK is generated, it will be provided to an authenticator as part of an association request message.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC: H04L 9/00( 2006.01);G06F 17/30( 2006.01),7/04( 2006.01);G06K 9/00( 2006.01)

USPC: 713/168,169;726/2;380/284;370/331;455/41

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)

U.S. : 713/168,169;726/2;380/284;370/331;455/41 1;709/227,228

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

IEEE database, google search, ACM

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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</table>

D. 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
  * "B" earlier application or patent 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 another 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

Date of the actual completion of the international search
02 June 2008 (02.06.2008)

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18 July 2008

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