End-to-End Network Communication

A system manageable for peer to peer communication between subscribers (1, 1a), the system comprises: a) a subscriber end management device for managing digital communications with remote subscribers (1, 1a), the device comprising: an internal interface for interfacing with at least one subscriber electronic devices (3, 4), an IP address manager for formulating and submitting a request for an IP address corresponding to a remote subscriber (1, 1a) and recording a response thereto, and a packet addressee for addressing data packets to subscriber (1, 1a) using an IP address taken from the recorded response, and b) an Internet connection management device for receiving and processing said request, the device comprising: a database for storing user identification names of the subscribers in a first field and respective assigned user IP addresses in a second field, a database manager for determining assigned user IP addresses of one of the subscribers currently connected and dynamically updating the second field therewith, and a request manager for receiving external requests specifying at least one user identification request, interrogating the database and responding with respective IP addresses, thereby to provide peer to peer connections between the subscribers and end to end transaction data for billing.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04L 12/66; G06F 15/16
US CL : 370/352; 709/227

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)


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)

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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 6,108,704 A (HUTTON et al) 22 August 2000 (22.08.2000), see entire document.</td>
<td>1-8, 11-12, 14-18, 23,</td>
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<td>25-26, and 28</td>
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<td>Y</td>
<td>US 5,608,786 A (GORDON) 04 March 1997 (04.03.1997), see entire document.</td>
<td>9-10, 13, 19-22, 24,</td>
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<td>A</td>
<td>US 6,324,585 B1 (ZHANG et al) 27 November 2001 (27.11.2001), see entire document.</td>
<td>13, 24, 27, and 29</td>
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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

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"&" document member of the same patent family

Date of the actual completion of the international search: 27 July 2003 (27.07.2003)

Date of mailing of the international search report: 20 AUG 2003

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Form PCT/ISA/210 (second sheet) (July 1998)