Title: METHOD AND APPARATUS FOR NETWORK MANAGEMENT USING PERCEIVED SIGNAL TO NOISE AND INTERFERENCE INDICATOR

(57) Abstract: Method and apparatus of network management using a perceived indicator to provide physical layer measurements in a multitude of stations in the network, either by way of radio frequency power, or observed signal to noise plus interference (PSNI) from each access point, to report the measurements, to collect the measurements, and using the reported PSNI values as a signal quality indicator of delivered bit error rate or frame error rate (FER) to evaluate, reconfigure, and manage multiple stations in order to optimize the network or network performance.
Published:
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
4 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 17/00, 15/00, 1/00
US CL : 455/62, 63.1, 67.11, 67.13, 226.1-226.4, 283,296; 375/225-228
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. : 455/62, 63.1, 67.11, 67.13, 226.1-226.4, 283,296; 375/225-228

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
US-PGPUB, USPAT, EPO, IPO, DREWENT

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 6,298,242 B1 (SCHIFF) 2 October 2001, figs. 4a-b, 5, column 6 lines 43-52, column 9 line 57 to column 10 line 65, column 13 line 37, column 16 line 43 to column 17 line 25.</td>
<td>1-5, 8, 10-18, 20-25, 27-30, 32-35, 37-43</td>
</tr>
<tr>
<td>Y</td>
<td>US 2002/0102944 A1 (HAIM) 01 August 2002, figs. 7-8.</td>
<td>9, 25</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,201,954 B1 (SOLIMAN) 13 March 2001, column 5 lines 1-12</td>
<td>19, 31</td>
</tr>
</tbody>
</table>

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

Date of the actual completion of the international search 24 May 2005 (24.05.2005)

Date of mailing of the international search report 14 JUN 2005

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703)305-3230

Authorized officer
Simon Nguyen
Telephone No. 571-272-7894

Form PCT/ISA/210 (second sheet) (January 2004)