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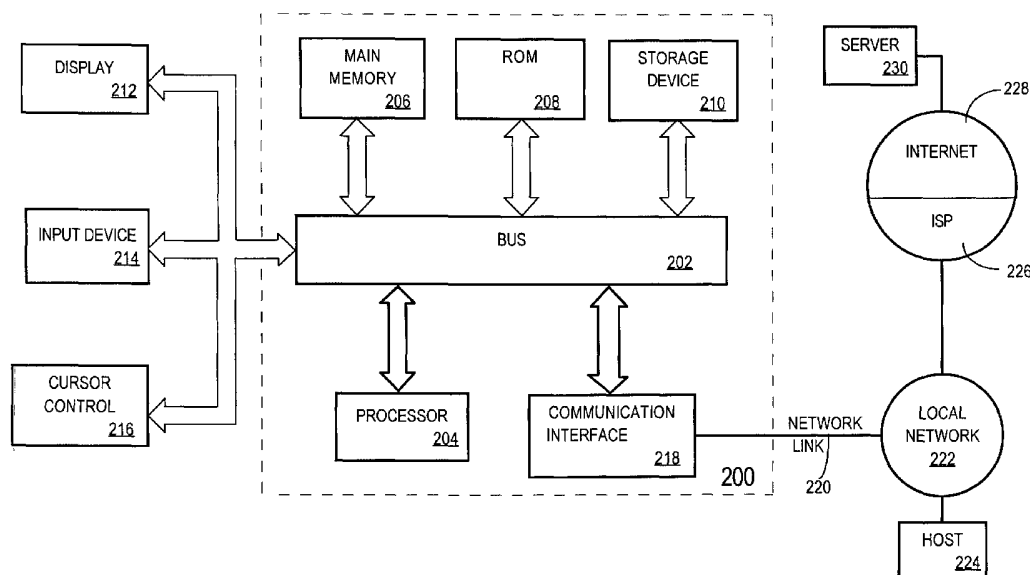
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9 October 2003

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.

(54) Title: CONTENT BASED BILLING



(57) Abstract: A method and apparatus for content-based billing is provided. Techniques are provided for intercepting, modifying, and retransmitting a request between various entities engaged in content-based billing in the context of the World Wide Web. Various techniques such as HTTP proxy servers, wireless protocol gateways, routers, and level 41 switches may be used for intercepting the request. The request maybe modified based on numerous factors such as profile information, levels of service, and requested content. The entities that engage in content-based billing include but are not limited to users (including mobile users), content providers, access providers (including HTTP proxy servers).



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/04768

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L29/06

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)
IPC 7 H04L

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 practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 79434 A (HANDEL CLIFFORD LEE ;INTERNET DYNAMICS INC (US); MAY ANTHONY ALLAN) 28 December 2000 (2000-12-28) page 2, line 17 - line 24 page 3, line 13 - line 20 page 4, line 29 -page 5, line 16 page 85, line 26 -page 88, line 11 page 90, line 9 -page 91, line 22 ---	1-12, 14-17, 38-47, 49-52
A	WO 00 46963 A (MCCONNELL RICHARD ;MURPHY DENIS (GB); APION TELECOMS LIMITED (IE)) 10 August 2000 (2000-08-10) page 5, line 7 - line 8 -----	4-7, 39-42



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but 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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 March 2003

Date of mailing of the international search report

16. 06. 2003

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VEEN, G

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 02/04768

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-12, 14-17, 38-47

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-12, 14-17, 38-47, 49-52

Communication system wherein services provided to a client are identified and the client charged accordingly.

2. Claims: 13,48

Communication system wherein a message is routed based on its source's service class.

3. Claims: 18-28, 53-63

Communication system maintaining profiles of the communicating parties.

4. Claims: 29-35, 64-70

Communication system which verifies whether a requester is able and willing to pay before providing the requested service

5. Claims: 36, 37, 71, 72

Communication system which verifies whether a service provider is an authorized partner before the service is provided

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/04768

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0079434	A	28-12-2000	WO 0079434 A1	28-12-2000
WO 0046963	A	10-08-2000	AU 2316000 A	25-08-2000
			CA 2361726 A1	10-08-2000
			CN 1339213 T	06-03-2002
			EP 1147640 A1	24-10-2001
			WO 0046963 A1	10-08-2000
			US 2002015403 A1	07-02-2002