

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
1 March 2001 (01.03.2001)

PCT

(10) International Publication Number
WO 01/15196 A1

(51) International Patent Classification⁷: H01J 13/00,
G06F 15/16, 17/30, 17/60, H04L 9/00, 9/32

Wasef; 17326 Canvas Street, Canyon Country, CA 91351
(US). LUCAS, James, E., IV; 15349 Mahan Court, Moor-
park, CA 93021 (US).

(21) International Application Number: PCT/US00/23101

(74) Agents: MACPHERSON, Alan, H. et al.; Skjerven, Mor-
rill, MacPherson, Franklin & Friel LLP, 25 Metro Drive,
Suite 700, San Jose, CA 95110 (US).

(22) International Filing Date: 22 August 2000 (22.08.2000)

(25) Filing Language: English

(81) Designated States (national): AU, CA, CN, JP.

(26) Publication Language: English

(84) Designated States (regional): European patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE).

(30) Priority Data:
09/379,167 23 August 1999 (23.08.1999) US

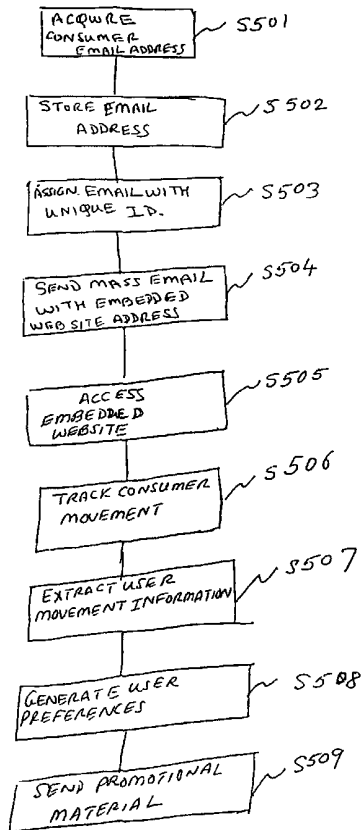
(71) Applicant: USER TRENDS [US/US]; Suite 929, 1801
Avenue of the Stars, Los Angeles, CA 90067 (US).

Published:
— With international search report.

(72) Inventors: EISEN, Bruce; 10551 Wilshire Boulevard, No.
1603, Los Angeles, CA 90024 (US). PADAYAO, Roger;
17422 Covello Street, Van Nuys, CA 91406 (US). KASSIS,

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: DISTRIBUTING PROMOTIONAL AND ADVERTISING MATERIAL BASED UPON INTERNET USAGE



(57) Abstract: Process steps are provided for electronically sending promotional and advertising materials (FIG. 5), (FIG. 8) and (FIG. 11) based upon consumer preferences (S508) by providing a unique identifier to a consumer's electronic mail address (S501), (S502), (S503) and (901) and sending electronic mail includes a plurality of embedded Internet web sites (S504). Thereafter, the consumer accesses the plurality of embedded Internet web sites in response to the sent electronic mail, and consumer movement (S506) within the plurality of accessed embedded Internet web sites is tracked. Promotional material (S805) & and (S1104) can then be sent to the consumer based upon the tracked consumer movement (S802) and (S1102) without the consumer's electronic mail address, within the embedded Internet web sites. Process steps are also provided to track consumer movement without the consumer's electronic mail address (FIG. 8) and (FIG. 11), if the consumer makes a purchase with a credit card (907) while at the seller's web site. The IP address is linked to the credit card to track consumer movement within the web site (FIG. 10) and (FIG. 11).



WO 01/15196 A1

DISTRIBUTING PROMOTIONAL AND ADVERTISING MATERIAL BASED UPON
INTERNET USAGE

FIELD OF THE INVENTION

5 This invention relates to electronic commerce and more particularly, to a method for sending promotional material based upon consumer movement within a web site.

BACKGROUND

10 The Internet connects thousands of computers world wide through well known protocols, for example, Transmission Control Protocol (TCP)/Internet Protocol (IP), into a vast network. A computer needs a unique Internet Protocol (IP) address to communicate once connected to the Internet. Information on the Internet is stored world wide as computer files, mostly written in the Hypertext Mark Up Language ("HTML"). The collection of all such publicly available computer files is known as the World Wide Web
15 (WWW).

 The WWW is a multimedia-enabled hypertext system used for navigating the Internet and is made up of hundreds of thousands of web pages with images, text and video files, which can be displayed on a computer monitor. Each web page can have connections to other pages, which may be located on any computer connected to the
20 Internet.

 The WWW is based on the concept of hypertext, where connections from parts of text to other documents can be hidden behind words and phrases. The connections to hypertexts are referred to as hypertext links and they allow users to read documents in any order desired.

25 The WWW also uses hypermedia that connects links to pictures, sounds and any other data files, which can be stored on a computer. Conventionally, hypermedia connects data files regardless of their format.

 A typical Internet user uses a client program called a "Web Browser" to connect to the Internet. A user can connect to the Internet via a proprietary network, such as America
30 Online or CompuServe, or via an Internet Service Provider, e.g., Earthlink.

 A Web Browser may run on any computer connected to the Internet. Currently various browsers are available of which two prominent browsers are Netscape Navigator and Microsoft Internet Explorer.

The Web Browser receives and sends requests to a web server and acquires information from the WWW. A web server is a program that, upon receipt of a request, sends the requested document to the requesting user.

5 A standard naming convention known as Uniform Resource Locator (“URL”) has been adopted to represent hypermedia links and links to network services. Most files or service can be represented with a URL. URLs enable Web Browsers to go directly to any file held on any WWW server. A URL typically consists of three parts: the transfer format (the protocol type), the host name of the machine which holds the file (WWW server name) and the path name to the file.

10 Information from the WWW is accessed using well-known protocols, including the Hypertext Transport Protocol (“HTTP”), the Wide Area Information Service (“WAIS”) and the File Transport Protocol (“FTP”), over TCP/IP protocol. The transfer format for standard WWW pages is Hypertext Transfer Protocol (HTTP).

15 The Internet is also integrated with television, smart phones and other electronic devices, making electronic commerce a viable option for thousands of consumers and businesses alike. In a typical electronic commerce transaction, a consumer visits the web site of a seller, views an electronic image of a product or witnesses a product demonstration via a video/audio stream and may purchase a product or services by using a credit or debit card.

20 With the increasing popularity of the Internet, electronic mail (“email”) has become a popular way to communicate. Email allows users to send text, pictures, video and audio recordings to a recipient or to a group of recipients.

25 Typically, a user will create an email message using an email program running on a computer that is or can be connected to a network of computers. The email message can include text, recorded and live video, audio files, image files and embedded web site links. Email messages also include sender’s email address. A user electronically transmits email messages to a recipient or a group of recipients. The recipient(s) can read and reply to email messages using an email program running on a computer.

30 The Internet is commonly used to send and receive email messages from anywhere in the world. Every user has a unique email address. The general form of an email address is given as: User@Domain. com. Domain is defined as the domain name service (“DNS”) that implements the protocol used for email transfer. The protocol used for

electronic mail on the Internet is called the Simple Mail Transfer Protocol (“SMTP”), where a user invokes SMTP to send an email.

Retailers and business entities today can conduct large-scale business in the electronic commerce environment and communicate with thousands of consumers via email messages. Advertising materials to consumers can also be sent via email messages
5 that can contain text, images, video clips and web site addresses.

Currently, consumers receive electronic advertising material either as a part of a mass email transmission (“email blast”), or when a consumer provides an individual profile. Both the foregoing options have limitations. Mass email blasts may not consider
10 what an individual consumer desires or prefers. Furthermore, getting consumers to provide individual profiles is difficult because consumers may not willingly provide personal information.

Hence, what is needed is a method and system that efficiently and intelligently transmits advertising/promotional material by tracking individual user preferences.
15

SUMMARY

The present invention addresses the foregoing by providing a method for electronically sending promotional material based upon consumer preferences. A unique identifier is assigned to a consumer electronic mail address and an electronic mail is sent to
20 the consumer, wherein the electronic mail includes a plurality of embedded Internet web sites. Thereafter, the consumer accesses the plurality of embedded Internet web sites, and consumer user movement within the plurality of the accessed embedded Internet web sites is tracked.

Consumer movement within the web site is stored in a log file and the log file data
25 is used to generate a master database, wherein the master database comprises of a plurality of segments including an electronic look up segment, consumer information segment, promotional material segment, URL segment, credit card segment and purchase information segment. The master database is queried to obtain user tastes and preferences. Based upon the query results, promotional material is sent to the consumer.

30 In another aspect of the invention, consumer credit card information is acquired and consumer’s movement within a web site is tracked by storing consumer’s IP address corresponding to consumer’s credit card information in a log file. Data stored in the log file is used to generate a master database, wherein the master database comprises of a

plurality of segments including an electronic look up segment, consumer information segment, promotional material segment, URL segment, credit card segment and purchase information segment. The master database is queried to obtain user tastes and preferences. Based upon the query results, promotional material is sent to the consumer.

5 The present invention has the advantage over existing systems because it allows sellers to target potential customers effectively by using intelligent information regarding consumer tastes and preferences, obtained efficiently by analyzing consumer movement within a web site.

10 This brief summary has been provided so that the nature of the invention may be understood quickly. A more complete understanding of the invention can be obtained by reference to the following detailed description of the preferred embodiments thereof in connection with the attached drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

15 Figure 1 is block diagram of a computing system with a computer connected to the Internet to carry out the inventive technique.

 Figure 2 is a block diagram of the architecture of the computing system of Fig. 1.

 Figure 3 is a block diagram showing a network topology to carry out the inventive technique.

20 Figure 4 is a topology of a network for electronic mail transfer.

 Figure 5 is a basic flow chart showing computer executable process steps for sending promotional material to consumers.

 Figure 6A is a topology of a network to implement process steps of Figure 5.

25 Figure 6B is an example of an electronic mail sent to a consumer according to one aspect of the present inventive technique.

 Figure 6C shows an example of a seller's web site.

 Figure 7A is an example of a log file generated to track consumer movement within a web site with a unique identifier tagged to consumer email address, according to one aspect of the present inventive technique.

30 Figure 7B is an example of a log file generated to track consumer movement within a web site using credit card information according to one aspect of the present inventive technique.

Figure 8 is a detailed flow diagram showing computer executable process steps to create a master database according to one aspect of the present invention.

Figure 9 is an example of a master database according to one aspect of the present invention.

5 Figure 10 is a flow diagram showing computer executable process steps to create a URL segment of the master database.

Figure 11 is a flow diagram showing computer executable process steps for sending promotional material based upon consumer credit card information.

10 Use of the same reference symbols in different figures indicates similar or identical items.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 is a block diagram of a computing system for executing computer executable process steps according to the present invention, which includes a host computer 10, a
15 monitor 11, and a printer 12. Monitor 11 may be a CRT type, a LCD type, or any other type of color or monochrome display. Printer 12 may be any type of printer such as an inkjet printer, laser printer, thermal printer, dot matrix, or the like for printing Internet documents. Also provided with computer 10 is a keyboard 13 for entering text data and user commands, and a pointing device 14 for processing objects displayed on monitor 11.

20 Computer 10 includes a computer-readable memory medium such as a rotating disk 15 for storing readable data. Besides other programs, disk 15 stores email programs, log files for tracking user movement within a web site, application programs including web browsers by which computer 10 connects to the Internet, accesses web pages, stores files on disk 15, displays data in those web pages on monitor 11, and print data on printer 12.

25 Computer 10 can also access a computer-readable floppy disk storing data files, application program files, and computer executable process steps embodying the present invention or the like via a floppy disk drive 16. A CD-ROM interface (not shown) may also be provided with computer 10 to access application program files and data files stored on a CD-ROM.

30 A modem, an integrated services digital network (ISDN) connection, or the like also provides computer 10 with an Internet connection 17 to the World Wide Web (WWW). The Internet connection 17 allows computer 10 to download device drivers, data

files, image files, log files, application program files and computer-executable process steps embodying the present invention.

Figure 2 is a block diagram showing the internal functional architecture of computer 10. As shown in Fig. 2, computer 10 includes a CPU 201 for executing computer-executable process steps and interfaces with a computer bus 209. Also shown in 5 Figure 2 are a printer interface 202, a WWW interface 203, a display device interface 204, a keyboard interface 205, a pointing device interface 206 and disk 15.

As described above, disk 15 stores operating system program files, application program files, web browsers, log files and device drivers. Some of these files are stored on 10 disk 15 using an installation program. For example, CPU 201 executes computer-executable process steps of an installation program so that CPU 201 can properly execute the application program.

A random access main memory ("RAM") 207 also interfaces to computer bus 209 to provide CPU 201 with access to memory storage. When executing stored computer-executable process steps from disk 15 (or other storage media such as floppy disk 16 or 15 WWW connection 17), CPU 201 stores and executes the process steps out of RAM 207.

Read only memory ("ROM") 208 is provided to store invariant instruction sequences such as start-up instruction sequences or basic input/output operating system (BIOS) sequences for operation of keyboard 13.

Figure 3 shows a topology of a computer network with computers similar to 20 computer 10, connected to the Internet. For illustration purposes, only three computers X, Y and Z are shown connected to the Internet 302 via Web Interface 203 through a gateway 301, where gateway 301 can interface N number of computers. Web interface 203 may be a modem, network interface card or a unit for providing connectivity to other computer 25 systems over a network using protocols such as X.25, Ethernet or TCP/IP, or any device that allows directly or indirectly, computer-to-computer communications.

It is noteworthy that the invention is not limited to a particular number of computers. Any number of computers that can be connected to the Internet 302 or a network may be used.

Figure 3 further shows a second gateway 303 that connects a network of web 30 servers 304 and 305 to the Internet 302. Web servers 304 and 305 may be connected with each other over a computer network. Web servers 304 and 305 can provide content to a

user from database 306 and 307. Also shown in Figure 3 is a client side web server 308 that can be provided by an Internet service provider.

Figure 4 shows the topology of a network that allows sending emails to consumers using computer 10, or a similar computer that can be connected to a network and/or the Internet. In Figure 4, computer 10 is connected to a mail server 402 via a communication server 401. Mail server 402 is connected to other computer networks including the Internet 302. Mail server 402 receives email messages with advertising and promotional materials and causes email messages to be sent to consumers with an email address.

Tracking consumer movement within a website:

Figure 5 is a flow diagram showing computer executable process steps according to the present invention for tracking consumer movement within a web site. Generally, the Figure 5 process steps include acquiring a plurality of consumer email addresses, applying a unique identifier to each acquired email address, sending emails with a web site address to a consumer having a unique email identifier, initiating a web site by the consumer in response to the sent email, tracking consumer movement within the website, creating a consumer profile based upon the consumer's movement within the web site, and sending promotional material based upon the consumer's profile.

More particularly, flow begins at step S501, in which a consumer's email address is acquired. The email address may be acquired at a retail store where a customer purchases merchandise ("Point of Sale"). Furthermore, email addresses may be solicited from Internet users visiting a particular web site, acquired from other businesses and databases etc.

In step S502, the acquired email address is stored in a computer system similar to computer 10 connected to the Internet 302.

Figure 6A shows a topology of a computer network to implement process steps of Figure 5. Figure 6A shows a computer 600 similar to computer 10, and connected to the Internet and having a seller's web site. Also shown in Figure 6A is a log file 601, an email database 604 that stores emails acquired in step S501, an extraction program 602 and a report generating module 603 stored on computer 600 or at different computers connected to the Internet. The foregoing file, database, program and modules can be interlinked as separate modules located at different computers connected to the Internet, or can be combined into one single program. Figure 6A further shows a Consumer M with computer 10 or a computer similar to computer 10 connected to the Internet 302.

In step S503, the acquired email address is provided with a unique identifier. The unique identifier can be information related to the consumer, or a random alphanumeric character. The unique identifier does not affect the consumer's ability to receive and send email.

5 In step S504, an email blast with the seller's web site address is sent to consumers whose email addresses have a unique identifier. Figure 6B shows an example of an email 604A sent to Consumer M with the email address ConsumerM@dgo.com. The email has an embedded URL 606. http://www.mystore.com/?XXXX sent by Retail Store 605. The web page associated with URL 606 can include links to other web pages located on
10 different web servers. In the example of Figure 6B, "XXXX" after the "?" is the unique identifier assigned to the email address of consumer M. It is noteworthy that the unique identifier is not limited to any particular set of alphanumeric characters.

In step S505, Consumer M accesses the web site corresponding to URL 606 either by clicking on URL 606 by pointing device 14, or by typing the URL 606 address by
15 keyboard 13.

Figure 6C shows a typical web page 611 displayed on monitor screen 11, in a web browser 607 on Consumer M's computer similar to computer 10. Figure 6C also shows various modules in web site 611, for example a products module 608 that allows Consumer M to view products or provide information regarding products, purchasing
20 module 609 that allows Consumer M to purchase any products on-line and a contact module 610 that allows Consumer M to contact the retail store. Other modules can be added to web site 611. The foregoing modules can be located on different computers connected to the Internet.

In step S506, web server 600 logs the URL address with a unique identifier and a
25 corresponding IP address for Consumer M's computer, tracks Consumer M's movement within web site 611 and stores all the data associated with Consumer M's IP address in a log file. Consumer M's movement is tracked by first identifying the IP address with a unique identifier, and thereafter, the IP address is tracked when Consumer M visits the various links within web site 611.

30 Figure 7A shows an example of a log file 700 with an IP address 701, an email unique identifier 703 and the date and time of Consumer M's visit 702 to the web site that provides the duration of the visit. Information logged can include all the web page

addresses of the web sites that Consumer M visits, wherein the web sites includes web pages located on a plurality of web servers, duration of the visits, and product purchased.

In step S507, extraction module 602 extracts information corresponding to the IP address 701 with a unique identifier 702. Information from the log file 700 can be
5 extracted in real time while Consumer M is on-line or at any predetermined time interval.

In step S508, report-generating module 603 generates a report based upon Consumer M's movement within web page 611. Factors considered in creating the report include the type of modules visited, e.g., whether the user visited the clothing module, wine module or other product modules, duration of the visit and if the user purchased any
10 item during the visit. Figure 8 below describes detail process steps to create a master database for generating such a report.

In step S509, a second email is sent to Consumer M based upon Consumer M's tastes and preferences determined by analyzing Consumer M's movement within web site 611.

15 Creating a master database based upon a consumer's movement within a web site:

Figure 8 describes process steps to create a master database based upon consumer movement within a web site. The master database provides information regarding consumer choices and preferences.

In step S801, extraction module 602 acquires log file 601.

20 In step S802, extraction module 602 extract's consumer movement information within a web site tracked by a consumer's unique identification number and recorded in log file 601.

In step S803, a master database is created based upon the extracted information.

Figure 9 shows a typical database 900 that can be created from the extracted
25 consumer information. Figure 9 shows an email look up segment 901 that has email addresses and corresponding unique identification numbers for all consumers with tagged email addresses. A user information segment 902 includes details regarding consumer background including consumer identification number, telephone number, address, referral type, date the record was created, date consumer identification was deactivated and reason
30 for deactivation and key codes corresponding to keywords associated with web sites that the consumer has visited.

Figure 9 also shows a promotion segment 903 that includes information regarding promotional material sent to consumers. The promotion segment 903 includes consumer

identification number, promotion identification number, date a particular promotion was sent, date the promotion was visited by the consumer, amount of time spent at the web site while visiting the promotion and any specific areas the consumer visited and key codes associated with key words corresponding to defined URLs.

5 Figure 9 further shows a purchasing segment 904 that provides transaction details when a consumer purchases products while at a web site that may be located at any web server. Purchasing module 904 includes information regarding consumer identification number, a promotion identification number, date of purchase, product name, product type, product identification code, cost and quantity purchased.

10 Also shown in Figure 9 are a URL segment 905, a referral segment 906 and a credit card segment 907. URL segment 905 includes URL addresses, keywords corresponding to URL addresses and key codes associated with the keywords.

 Figure 10 describes process steps for developing URL segment 905. Step S1001 obtains URL addresses with corresponding keywords. There are various ways to obtain
15 URL addresses with keywords. For example, a seller could provide a list of URLs with associated keywords, or web sites associated with particular URLs can be manually visited and analyzed for determining keywords, or an automatic Internet crawler mechanism may be used to automatically obtain web sites associated with particular URL's and then analyzed for keywords.

20 In step S1002, assign unique key codes to keywords obtained in step S1001. For example, a single numeric key code can be assigned to a group of keywords in the website with a URL address. The key code assigned in URL segment 905, as shown in Figure 9 is also a data field in promotion segment 903.

 Referral segment 906 includes information regarding consumer identification
25 numbers, referral source identification information and the dates the consumers are referred.

 Credit card segment 907 includes information regarding credit card type, date of purchase, amount spent and merchandise or services bought. Figure 11 describes in detail how Credit Card segment 907 is populated and utilized according to the present invention.

30 In step S804, master database 900 is queried to generate a user profile for sending promotional material. Various query options can be used to gather consumer information. For example, information regarding consumers that have purchased a product may be obtained from purchasing module 904. Information regarding consumers that have spent a

minimum amount of time at the web site can be obtained from promotion segment 903. Keyword search can be performed by using key codes after acquiring key codes from URL segment 905 and then conducting a search in promotion segment 903. Hence master database 900 may be queried in different ways to obtain information regarding consumer taste, habit and preferences. Master database 900 can also be used to deactivate consumers who do not respond to any promotional materials or do not purchase any items, or have an invalid email address or if removal is requested by the consumer.

In step S805, promotional material is sent to consumers based upon consumer preferences obtained after querying master database 900.

10 Credit card segment:

Figure 11 shows computer executable process steps for tracking consumer movement within a seller's web site based upon user credit card information.

In step S1101, acquire consumer credit card information including consumer name and address. This information may be acquired when a consumer visits a seller's web site and purchases any item including merchandise or services. The consumer provides a credit card number, consumer name and consumer address. If the consumer provides an email address, then process steps of Figure 5 can be applied to send promotional materials.

In step S1102, track consumer movement after consumer has purchased an item from seller's website with a credit card. Consumer's movement is tracked by tracking consumer's IP address linked to Consumer's credit card information, and storing consumer movement in a log file similar to the log file shown in Figure 7B. The log file shown in figure 7B includes consumer's IP address 704, date and time of consumer visit 705, credit card number 706, credit card type 707, product number 708, quantity purchased 709, cost 710 and product description 711.

25 In step S1103, generate consumer profile using credit card segment 907, similar to process step S508 of Figure 5 and step 804 of Figure 8.

In step S1104, send promotional material to consumer. Promotional material may be send electronically if email address was acquired in step S1101 or via regular mail since the street address was acquired in step S1101.

30 Although the present invention has been described with reference to specific embodiments, these embodiments are illustrative only and not limiting. Many other applications and embodiments of the present invention will be apparent in light of this disclosure and the following claims.

CLAIMS

1. A method for electronically sending promotional material based upon consumer tastes and preferences comprising the steps of:
 - providing a unique identifier to the consumer's electronic mail address;
 - 5 sending electronic mail to the consumer with the electronic mail address having the unique identifier, wherein the electronic mail includes a plurality of embedded Internet web site addresses with the unique identifier;
 - accessing, by the consumer the plurality of embedded Internet web sites in response to the sent electronic mail, wherein the plurality of embedded web sites can be
 - 10 located on a plurality of web servers;
 - tracking the consumer's movement within the plurality of the accessed embedded Internet web sites; and
 - sending promotional material to the consumer based upon the tracked consumer movement within the embedded Internet web sites.
- 15 2. The method according to Claim 1, further comprising the step of:
 - acquiring the consumer's email address.
3. The method according to Claim 2, wherein the electronic mail address is acquired
- 20 at the point of sale location.
4. The method according to Claim 2, wherein the electronic mail address is acquired electronically.
- 25 5. The method according to Claim 1, wherein the unique identifier for the electronic mail address is an alphanumeric tag.
6. The method according to Claim 1, wherein the plurality of accessed Internet web sites include a plurality of links to other web pages that can be located at a plurality of web
- 30 servers.
7. The method according to Claim 6, wherein the plurality of links to other web pages includes a link to a web page from where the consumer can purchase merchandise.

8. The method according to Claim 6, wherein the plurality of links to other web pages includes a link to a web page from where the consumer can electronically view images of merchandise.

5

9. The method according to Claim 6, wherein the plurality of links to other web pages includes a link to a web page from where the consumer may electronically contact a seller.

10. The method according to Claim 1, wherein the consumer movement within the plurality of accessed embedded Internet web sites is stored in a log file.

10

11. The method according to Claim 10, wherein the log file includes the addresses of the plurality of web sites accessed by the consumer.

12. The method of Claim 10, wherein the log file includes information regarding the number of times the consumer accesses a particular web site.

15

13. The method of Claim 10, wherein the log file includes information regarding any purchase the consumer makes while visiting the accessed web site.

20

14. The method according to Claim 10, wherein the log file includes the duration of the consumer's visit to a particular web site.

15. The method according to Claim 10, further comprising the steps of:
developing a consumer master database based upon the log file;
querying the master database; and
determining consumer preferences.

25

16. The method according to Claim 15, wherein the master database includes a plurality of segments including an email look up segment that includes a listing of a plurality of consumer electronic mail addresses with corresponding unique identifiers.

30

17. The method according to Claim 15, wherein the master database includes a consumer information segment that contains consumer related information.
18. The method according to Claim 15, wherein the master database includes a promotional material segment that includes information regarding promotional materials.
19. The method according to Claim 15, wherein the master database includes a purchasing segment that includes information regarding purchases made by the consumers.
20. The method according to Claim 15, wherein the master database includes a URL segment that includes a plurality of URLs with corresponding keywords and plurality of keycodes associated with the keywords.
21. The method according to Claim 15, wherein the master database includes a credit card segment that includes consumer credit card number, date and amount of purchase by consumer.
22. Computer executable process steps stored in a computer readable medium, the process steps for electronically sending promotional material based upon consumer tastes and preferences, the process steps comprising of:
- providing a unique identifier to the consumer's electronic mail address;
 - sending electronic mail to the consumer with the electronic mail address having the unique identifier, wherein the electronic mail includes a plurality of embedded Internet web site addresses with the unique identifier;
 - accessing, by the consumer the plurality of embedded Internet web sites in response to the sent electronic mail, wherein the plurality of embedded web sites can be located on a plurality of web servers;
 - tracking the consumer's movement within the plurality of the accessed embedded Internet web sites; and
 - sending promotional material to the consumer based upon the tracked consumer movement within the embedded Internet web sites.

23. Computer executable process steps according to Claim 22, further comprising the process step of:

acquiring the consumer email address.

5 24. Computer executable process steps according to Claim 23, wherein the electronic mail address is acquired at the point of sale location.

25. Computer executable process steps according to Claim 23, wherein the consumer electronic mail address is acquired electronically.

10

26. Computer executable process steps according to Claim 22, wherein the unique identifier for the electronic mail address is an alphanumeric tag.

15 27. Computer executable process steps according to Claim 22, wherein the plurality of accessed Internet web sites includes a plurality of links to other web pages that can be located at a plurality of web servers.

20 28. Computer executable process steps according to Claim 27, wherein the plurality of links to other web pages located at a plurality of web servers includes a link to a web page from where the consumer can purchase merchandise.

25 29. Computer executable process steps according to Claim 27, wherein the plurality of links to other web pages includes a link to a web page from where the consumer can electronically view images of merchandise.

30 30. Computer executable process steps according to Claim 27, wherein the plurality of links to other web pages includes a link to a web page from where the consumer may electronically contact a seller.

31. Computer executable process steps according to Claim to 22, wherein the consumer movement within the plurality of the accessed embedded Internet web sites is stored in a log file.

32. Computer executable process steps according to Claim according to 31, wherein the log file includes the addresses of the plurality of web sites accessed by the consumer.
33. Computer executable process steps according to Claim 31, wherein the log file
5 includes information regarding the number of times the consumer accesses a particular web site.
34. Computer executable process steps according to Claim 31, wherein the log file
10 includes information regarding any purchase the consumer makes while visiting in the accessed web site.
35. Computer executable process steps according to Claim 31, wherein the log file includes the duration of the consumer's visit to a particular web site.
- 15 36. Computer executable process steps according to Claim 31, further comprising the process steps of:
developing a consumer master database based upon the log file;
querying the master database; and
determining consumer preferences.
- 20 37. Computer executable process steps according to Claim 36, wherein the master database includes a plurality of segments including an email look up segment that includes a listing of a plurality of consumer electronic mail addresses with corresponding unique identifiers.
- 25 38. Computer executable process steps according to Claim 36, wherein the master database includes a consumer information segment that contains consumer related information.
- 30 39. Computer executable process steps according to Claim 36, wherein the master database includes a promotional material segment that includes information regarding promotional materials.

40. Computer executable process steps according to Claim 36, wherein the master database includes a purchasing segment that includes information regarding purchases made by the consumers.
- 5 41. Computer executable process steps according to Claim 36, wherein the master database includes a URL segment for storing plurality of keywords associated with plurality of URLs, and the plurality of key codes associated with plurality of keywords.
- 10 42. Computer executable process steps according to Claim 36, wherein the master database includes a credit card segment that includes consumer credit card number, date and amount of purchase by consumer.
43. A method for sending promotional material based upon consumer taste and preferences, comprising the steps of:
- 15 acquiring consumer credit card information;
 tracking consumer movement within a plurality of web sites located at a plurality of web servers, and
 sending promotional material to the consumer based upon the tracked consumer movement within the web site.
- 20 44. The method of Claim 43, wherein the credit card information is acquired when a consumer purchases an item from a seller's web site.
45. The method according to Claim 43, wherein the credit card information includes
25 consumer name.
46. The method of Claim 43, wherein the credit card information includes consumer mailing address.
- 30 47. The method of Claim 43, wherein the credit card information includes consumer email address.

48. The method of Claim 43, wherein the consumer movement is tracked by an IP address corresponding to the consumer's credit card information and stored in a log file.

49. The method of Claim 48, wherein the log file includes information regarding the purchase the consumer makes while visiting the accessed web site.

50. The method of Claim 48, wherein the log file includes the duration of the consumer's visit to a particular web site.

51. The method of Claim 48, further comprising the steps of:
developing a master database based upon the log file;
querying the master database; and
determining consumer preferences.

52. The method according to Claim 48, wherein the master database includes a plurality of segments including an email look up segment that includes a listing of a plurality of consumer electronic mail addresses with corresponding unique identifiers.

53. The method according to Claim 48, wherein the master database includes a consumer information segment that contains consumer related information.

54. The method according to Claim 48, wherein the master database includes a promotional material segment that includes information regarding promotional materials.

55. The method according to Claim 48, wherein the master database includes a purchasing segment that includes information regarding purchases made by the consumers.

56. The method according to Claim 48, wherein the master database includes a URL segment that includes a plurality of URLs, keywords associated with URLs and key codes associated with keywords.

57. The method of Claim 43, wherein promotional material is sent to consumer electronically.

58. The method of Claim 43, wherein promotional material is sent to consumer at consumer's mailing address.

5 59. Computer executable process steps stored in a computer readable medium, the process steps for sending promotional material based upon consumer tastes and preferences, the process steps comprising of:
acquiring consumer credit card information;
tracking consumer movement within a plurality of web sites, and
10 sending promotional material to the consumer based upon the tracked consumer movement within the web site.

60. Computer executable process steps of Claim 59, wherein the credit card information is acquired when a consumer purchases an item from a seller's web site.

15

61. Computer executable process steps according to Claim 60, wherein the credit card information includes consumer name.

20 62. Computer executable process steps according to Claim 60, wherein the credit card information includes consumer mailing address.

63. Computer executable process steps according to of Claim 60, wherein the credit card information includes consumer email address.

25 64. Computer executable process steps according to Claim 60, wherein the consumer movement is tracked by an IP address corresponding to the consumer's credit card information and stored in a log file.

30 65. Computer executable process steps according to Claim 64, wherein the log file includes information regarding the purchase the consumer makes while visiting the accessed web site.

66. Computer executable process steps according to Claim 64, wherein the log file includes the duration of the consumer's visit to a particular web site.
67. Computer executable process steps according to Claim 64, further comprising the steps of:
5 developing a master database based upon the log file;
querying the master database; and
determining consumer preferences.
- 10 68. Computer executable process steps according to Claim 67, wherein the master database includes a plurality of segments including an email look up segment that includes a listing of a plurality of consumer electronic mail addresses with corresponding unique identifiers.
- 15 69. Computer executable process steps according to Claim 67, wherein the master database includes a consumer information segment that contains consumer related information.
- 20 70. Computer executable process steps according to Claim 67, wherein the master database includes a promotional material segment that includes information regarding promotional materials.
- 25 71. Computer executable process steps according to Claim 67, wherein the master database includes a purchasing segment that includes information regarding purchases made by the consumers.
- 30 72. Computer executable process steps according to Claim 67, wherein the master database includes a URL segment that includes a plurality of URLs, keywords associated with URLs and key codes associated with keywords.
73. Computer executable process steps according to Claim 67, wherein promotional material is sent to consumer electronically.

74. Computer executable process steps according to Claim 59, wherein promotional material is sent to consumer at consumer's mailing address.

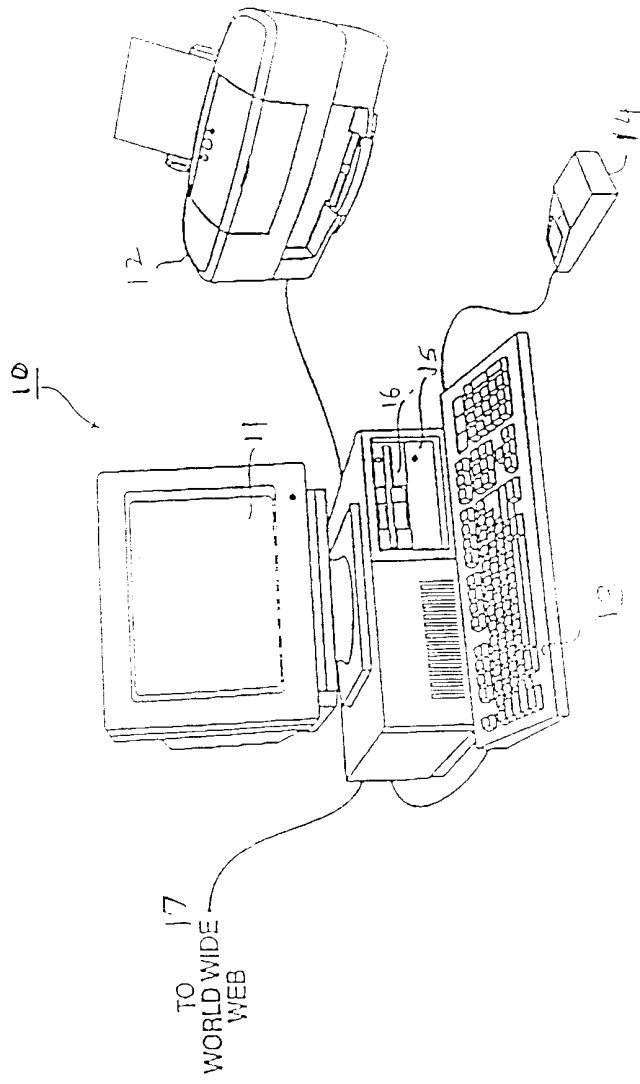


FIG. 1

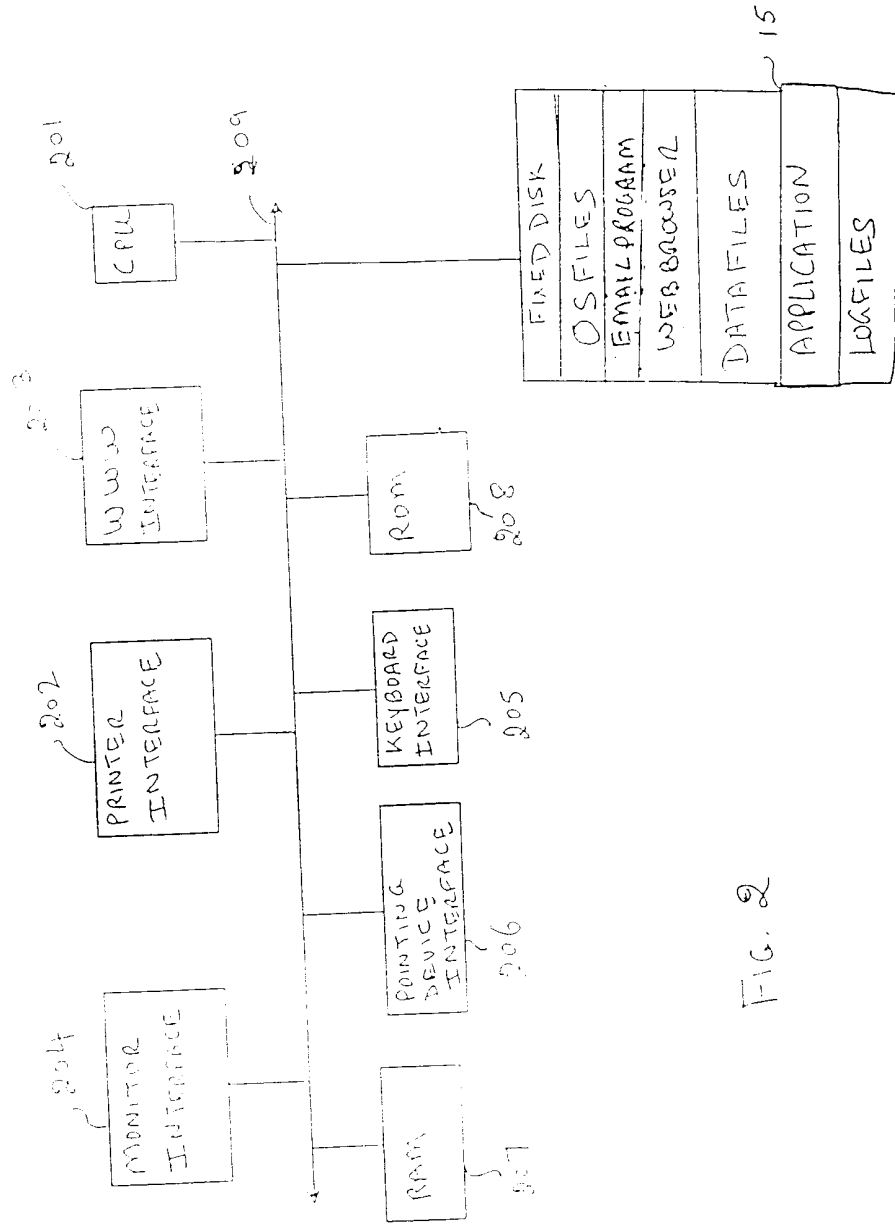


FIG. 2

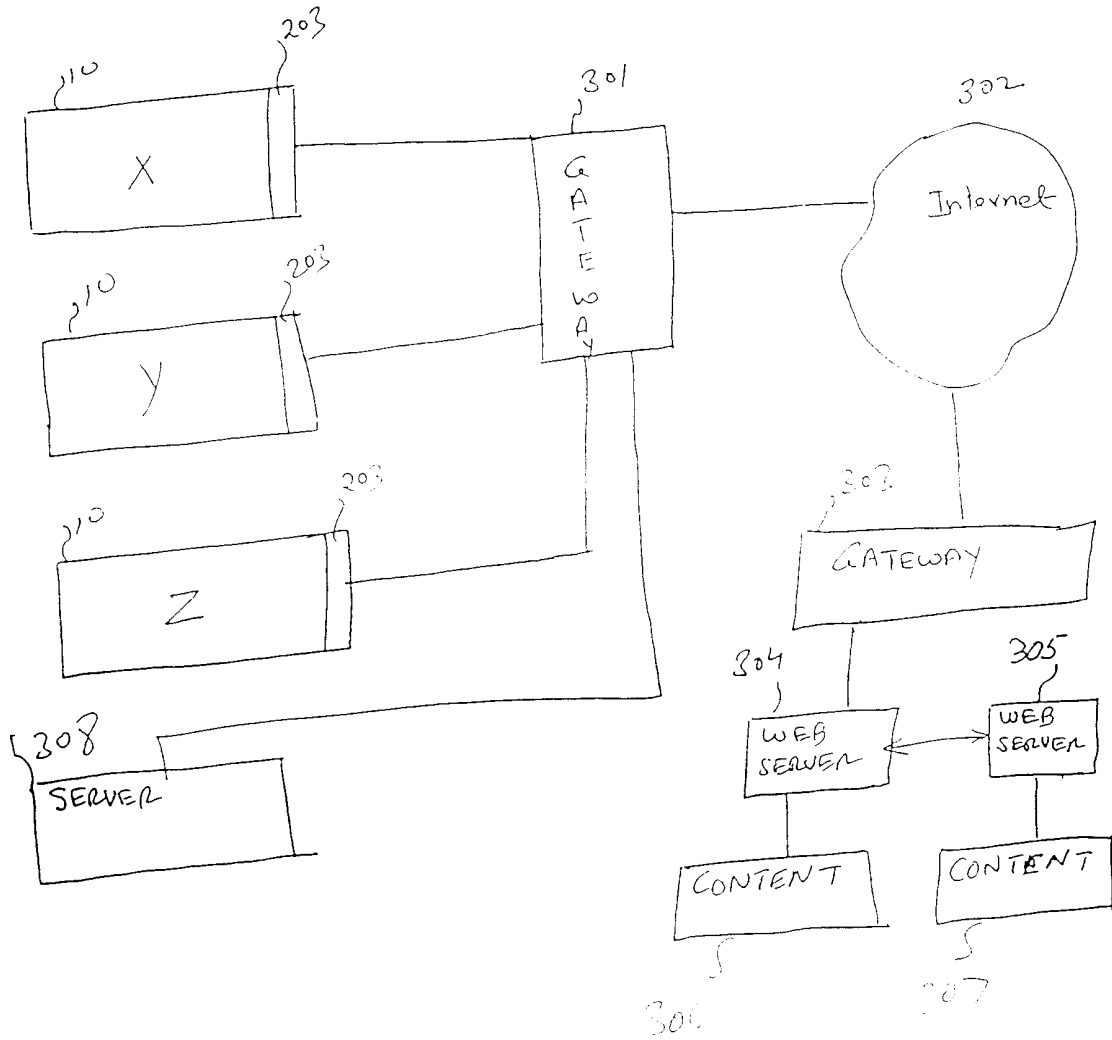


FIG. 3

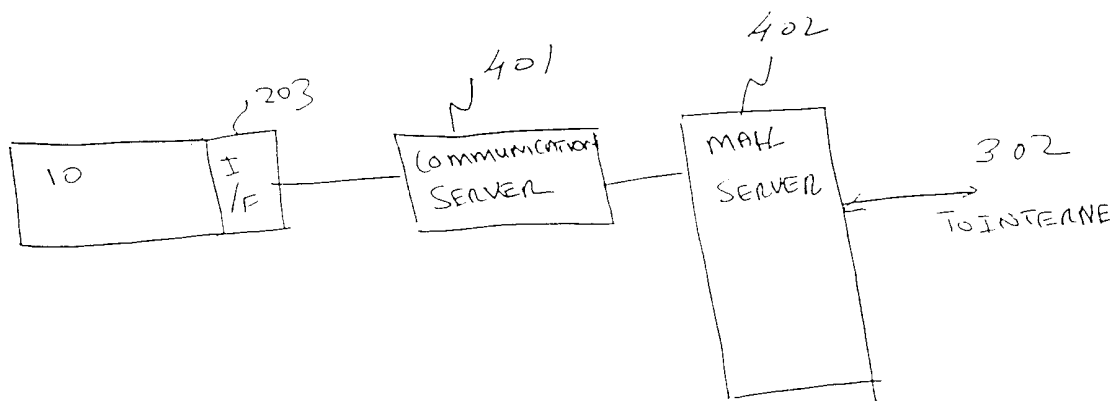


FIG 4

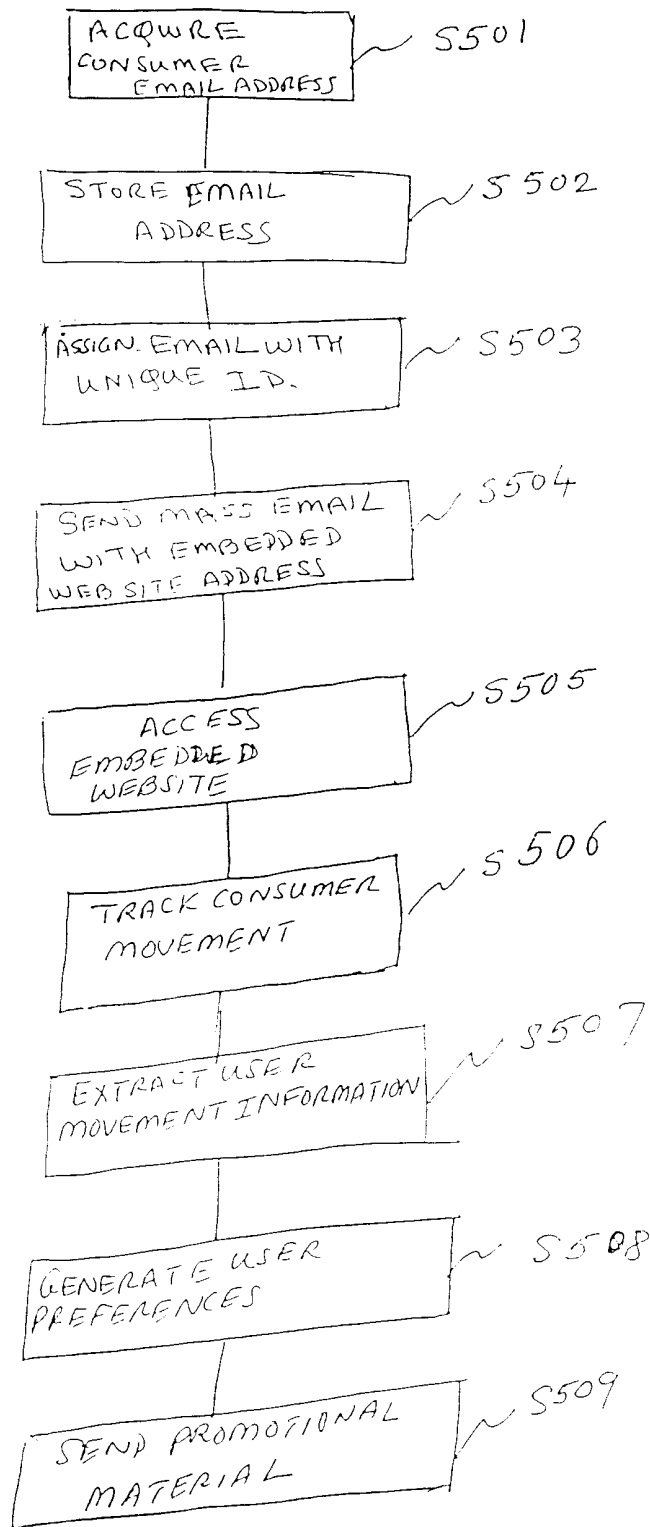


FIG 5

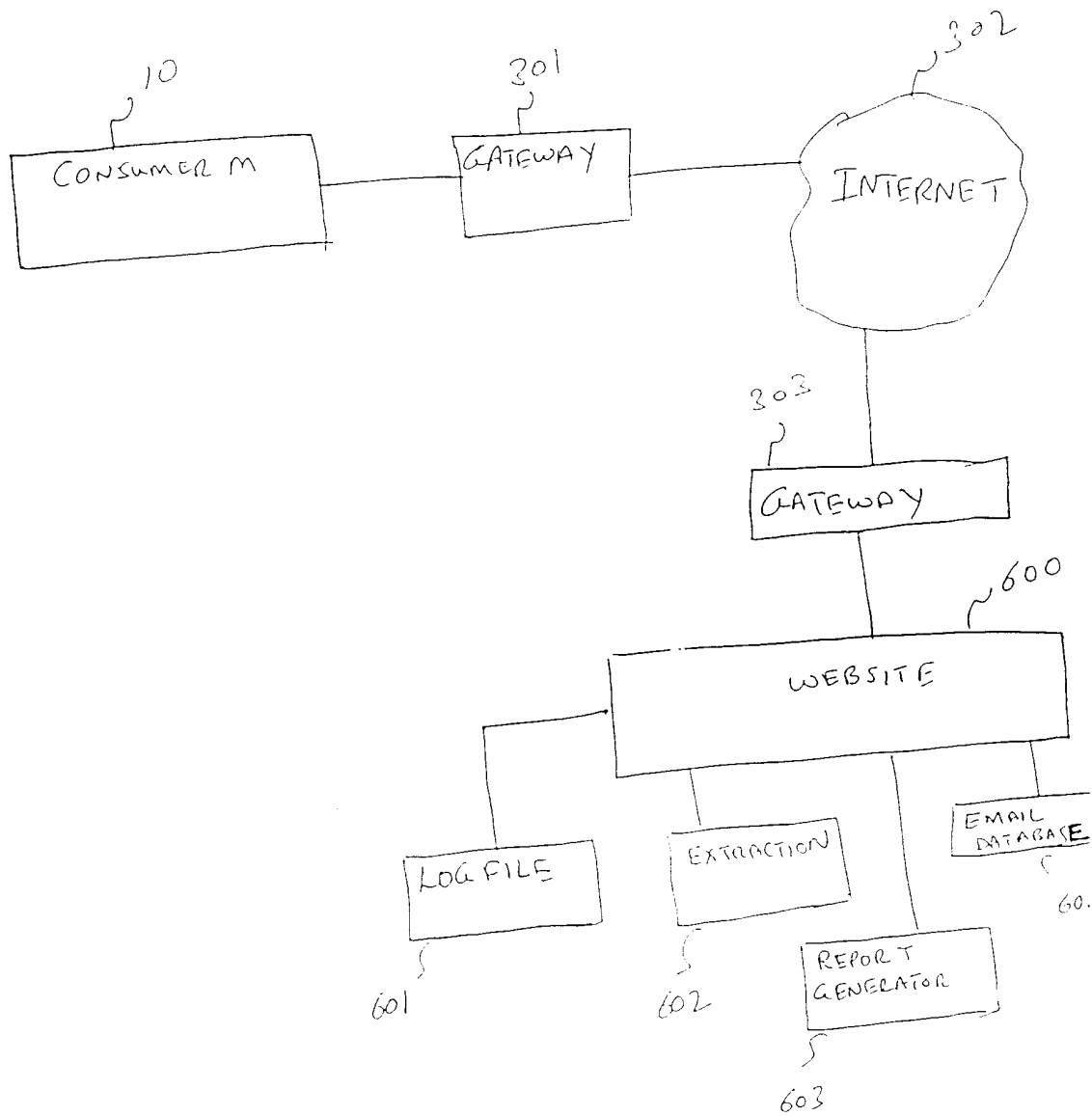
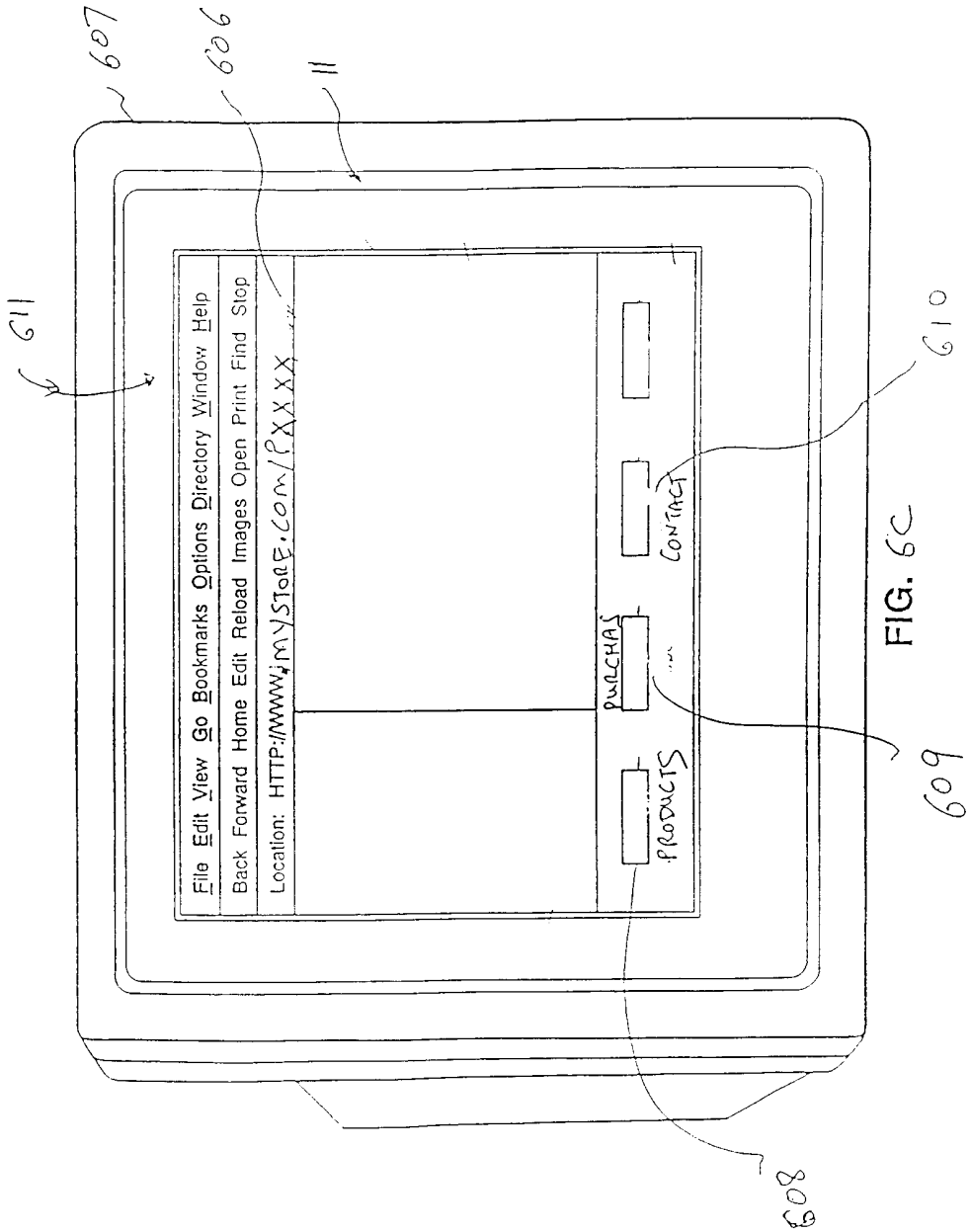


FIG 6A

To: CONSUMERM@dgo.com ~ 604
From: RETAIL STORE ~ 605
Re: Promotional material

<http://www.mystore.com/?XXXX> ~ 606

BB



9/13

| IP NUMBER | DATE AND TIME | URL |
|-----------------|------------------------------|--|
| 207.247.132.194 | [02/Jun/1999:16:13:02 -0700] | "GET/email/index.html?UTID=XXX&UTPN=5678&UTSN=9876 HTTP/1.1" 200 3503 |
| 207.247.132.194 | [02/Jun/1999:16:13:02 -0700] | "GET /email/img/quick.GIF HTTP/1.1" 200 2411 |
| 207.247.132.194 | [02/Jun/1999:16:13:03 -0700] | "GET /email/img/go.gif HTTP/1.1" 200 240 |
| 207.247.132.194 | [02/Jun/1999:16:13:03 -0700] | "GET /email/img/order.GIF HTTP/1.1" 200 3364 |
| 207.247.132.194 | [02/Jun/1999:16:13:03 -0700] | "GET /email/img/line.GIF HTTP/1.1" 200 79 |
| 207.247.132.194 | [02/Jun/1999:16:13:04 -0700] | "GET /email/img/logo.GIF HTTP/1.1" 200 2628 |
| 207.247.132.194 | [02/Jun/1999:16:13:05 -0700] | "GET /email/img/products.GIF HTTP/1.1" 200 93286 |
| 207.247.132.194 | [02/Jun/1999:16:13:09 -0700] | "GET /email/bottom.htm HTTP/1.1" 200 910 |
| 207.247.132.194 | [02/Jun/1999:16:13:09 -0700] | "GET /email/img/bg.GIF HTTP/1.1" 200 99 |
| 207.247.132.194 | [02/Jun/1999:16:13:09 -0700] | "GET /email/img/email.GIF HTTP/1.1" 200 3227 |
| 207.247.132.194 | [02/Jun/1999:16:13:09 -0700] | "GET /email/img/link_wine.gif HTTP/1.1" 200 2260 |
| 207.247.132.194 | [02/Jun/1999:16:13:09 -0700] | "GET /email/img/link_computer.gif HTTP/1.1" 200 2159 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/link_sports.gif HTTP/1.1" 200 2084 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/link_fashion.gif HTTP/1.1" 200 2067 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/link_art.gif HTTP/1.1" 200 2082 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/link_furniture.gif HTTP/1.1" 200 2171 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/links.gif HTTP/1.1" 200 674 |
| 207.247.132.194 | [02/Jun/1999:16:13:10 -0700] | "GET /email/img/h_computers.GIF HTTP/1.1" 200 7555 |
| 207.247.132.194 | [02/Jun/1999:16:13:13 -0700] | "GET /email/EmblazeVideoPro/computerv_toshiba_notbook.htm HTTP/1.1" 200 1971 |
| 207.247.132.194 | [02/Jun/1999:16:13:14 -0700] | "GET /email/img/movieframe.gif HTTP/1.1" 200 482 |

FIG. 7A

| IP NUMBER | QTY | COST | DATE AND TIME | PROD DESCR | CREDIT CARD NUMBER | TYPE | PROD # |
|-----------------|-----|--------|---------------------------|------------|---------------------|------|--------|
| 207.247.132.194 | 2 | 159.89 | - - {02/Jun/1999:16:13:02 | -0700} | 0025-5232-8545-6325 | VISA | PO521 |
| 207.247.132.194 | 1 | 649.99 | - - {02/Jun/1999:16:13:02 | -0700} | 0025-5232-8545-6325 | VISA | KL852 |
| 207.247.132.194 | 5 | 29.99 | - - {02/Jun/1999:16:18:02 | -0700} | 0025-5232-8545-6325 | VISA | JK234 |
| 102.437.242.224 | 1 | 599.99 | - - {02/Jun/1999:16:18:04 | -0700} | 8514-9856-8745-9652 | MC | PK212 |
| 102.437.242.224 | 1 | 15.23 | - - {02/Jun/1999:16:18:04 | -0700} | 8514-9856-8745-9652 | MC | UJ989 |
| | | | | | | | |

FIG 7B

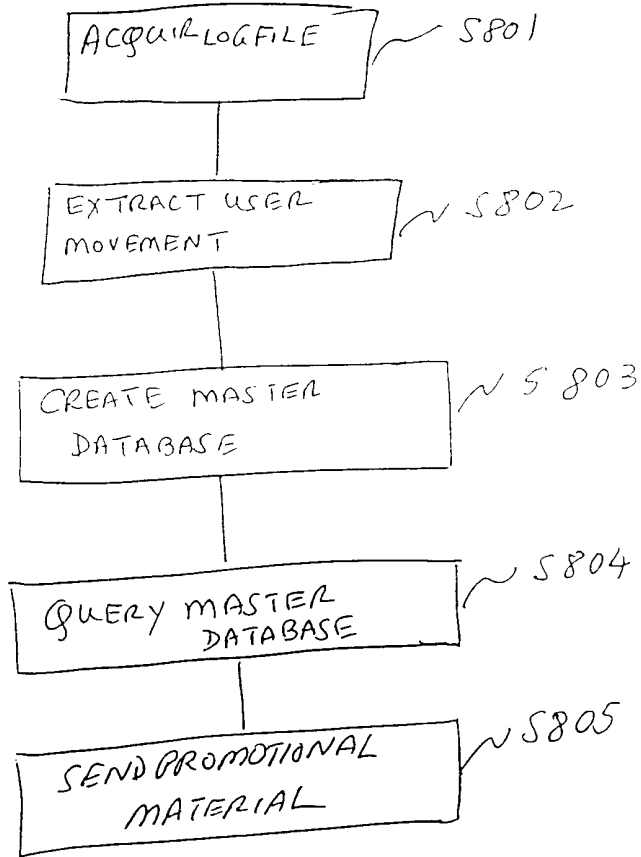


FIG 8

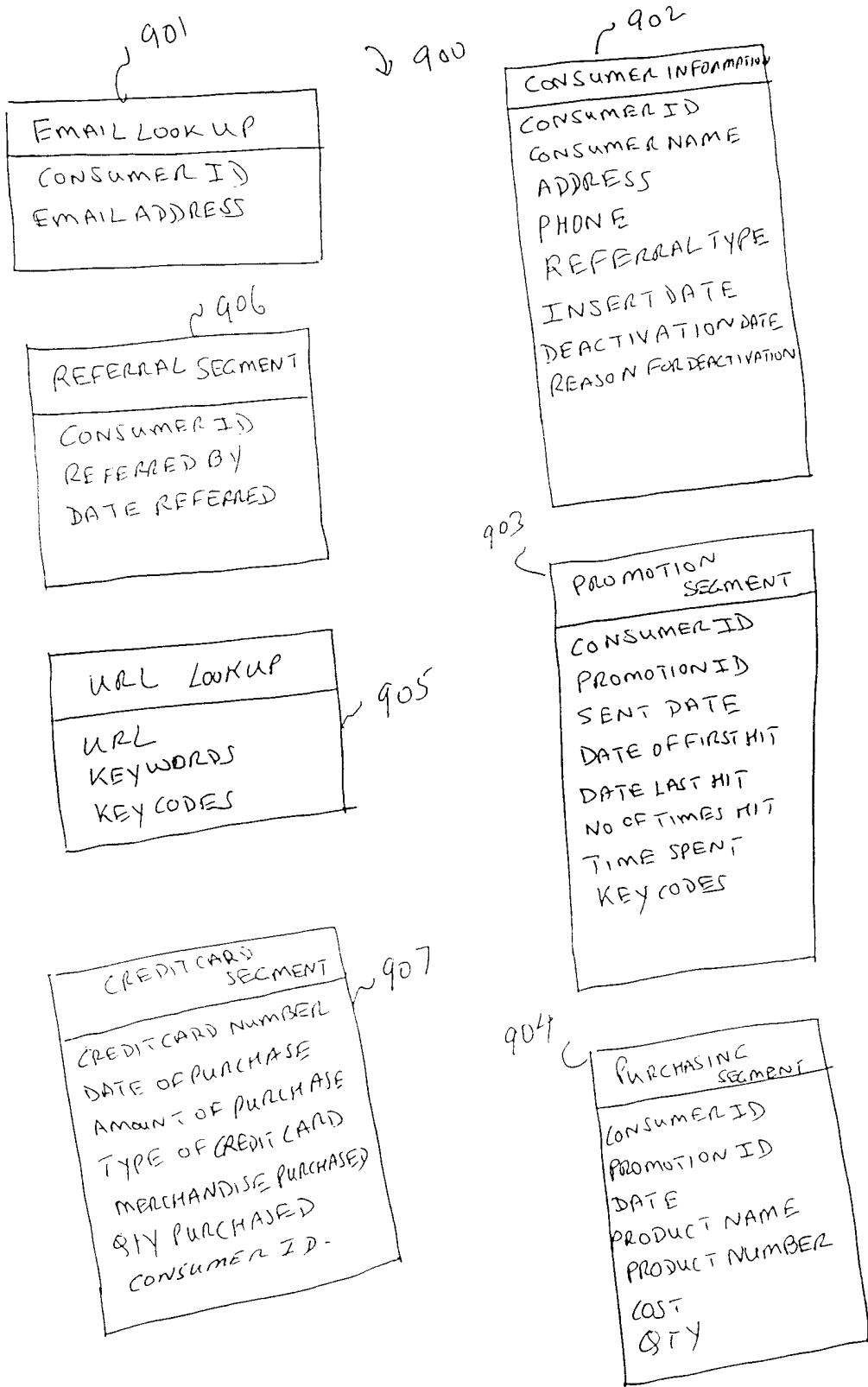


FIG 9

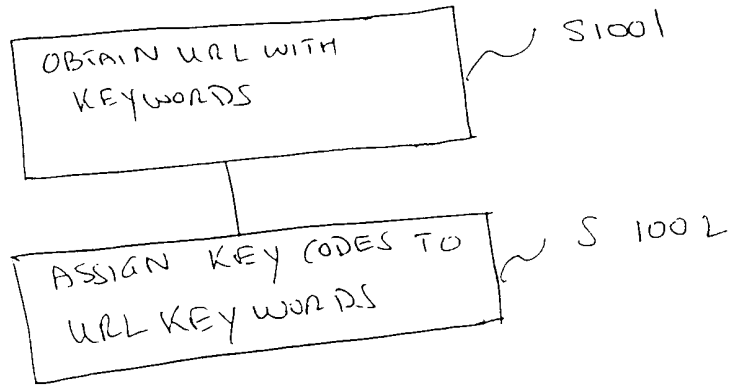


FIG. 10

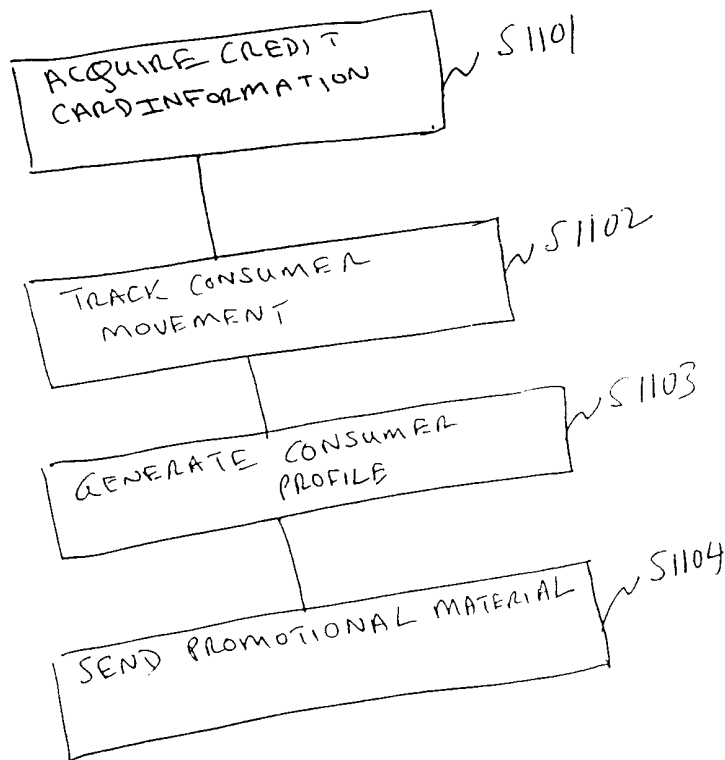


FIG. 11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/23101

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :H01J 13/00; G06F 15/16, 17/30, 17/60; H04L 9/00, 9/32

US CL :705/14, 26; 709/217, 219; 380/24, 25

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. : 705/14, 26; 709/217, 219; 380/24, 25

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)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| Y | US 5,724,521 A (DEDRICK) 03 March 1998, the ABSTRACT. | 1-74 |
| Y | US 5,710,884 A (DEDRICK) 20 January 1998, the ABSTRACT. | 1-74 |
| X | US 5,796,952 A (DAVIS et al.) 18 August 1998, the ABSTRACT, FIG. 1, col. 1, lines 15-67 & col. 2, lines 1-67. | 1-74 |
| Y,P | US 6,026,369 A (CAPEK) 15 February 2000, the ABSTRACT. | 1-74 |
| Y,P | US 6,009,410 A (LEMOLE et al.) 28 December 1999, the ABSTRACT. | 1-74 |
| Y,P | US 5,948,061 A (MERRIMAN et al.) 07 September 1999, the ABSTRACT. | 1-74 |

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

| | |
|---|--|
| * Special categories of cited documents: | *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 |
| *A* document defining the general state of the art which is not considered to be of particular relevance | *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 |
| *E* earlier document published on or after the international filing date | *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 |
| *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) | *G* document member of the same patent family |
| *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 13 OCTOBER 2000 | Date of mailing of the international search report 14 NOV 2000 |
|--|---|

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231
Facsimile No. (703) 305-3230

Authorized officer

JAMES TRAMM

Telephone No. (703) 305-9768

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/23101

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y,P | US 6,006,197 A (D'EON et al.) 21 December 1999, the ABSTRACT. | 1-74 |
| X | US 5,889,863 A (WEBER) 30 March 1999, the ABSTRACT. | 1-74 |