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PROVISIONAL APPLICATION COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION under 37 CFR 1.53(c).

Docket Number 295342US8PROV

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☐ Additional inventors are named on separately numbered sheets attached hereto.

TITLE OF THE INVENTION (500 CHARACTERS MAX)

SYSTEM, METHOD, APPARATUS, AND COMPUTER MEDIA FOR DISTRIBUTING TARGETED ALERTS

CORRESPONDENCE ADDRESS

Customer Number

22850

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ENCLOSED APPLICATION PARTS

- ☒ Specification *Number of Pages:* 18 ☐ CD(s), Number
- ☒ Drawing(s) *Number of Sheets:* 16 ☒ Other (specify): Request for Small Entity Status, Serial Number Card
- ☒ Application Data Sheet

METHOD OF PAYMENT

- ☒ Application Size Fee (\$250 per each additional 50 sheets over 100): Number of Pages Filed: 34
- ☒ Applicant claims small entity status. See 37 CFR 1.27.
- ☐ A check or money order is enclosed to cover the Provisional Filing Fees
- ☒ Credit card payment form is attached to cover the Provisional Filing Fees in the amount of \$100.00
- ☐ The Director is hereby authorized to charge filing fees and credit any overpayment to Deposit Account Number 15-0030
- PROVISIONAL FILING FEE AMOUNT \$100.00

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒ No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are:

Respectfully Submitted,

8/24/06
DATE

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PROVISIONAL APPLICATION FILING ONLY

Meta EX1010
IPR2024-00528
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DOCKET NO.: 295342US8PROV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Shane LUNDY, et al.

SERIAL NO.: New Application

FILED: Herewith

FOR: SYSTEM, METHOD, APPARATUS, AND COMPUTER MEDIA FOR
DISTRIBUTING TARGETED ALERTS

REQUEST FOR SMALL ENTITY STATUS

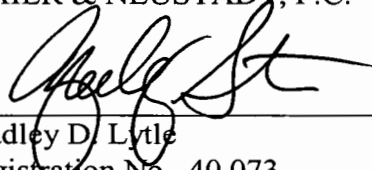
This application qualifies for small entity status.

Date: _____

8/24/06

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(OSMMN 05/03)

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TITLE OF THE INVENTION

SYSTEM, METHOD, APPARATUS, AND COMPUTER MEDIA FOR DISTRIBUTING TARGETED ALERTS

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

[0001] The present invention relates to a method, system, apparatus, and computer program product for distributing Dynamic Content Alerts (DCA) to end users that are consuming IP enabled content. Dynamic Content Alerts includes, but is not limited to, weather conditions, forecast, NWS Alerts, Amber Alerts, DHS Alerts, FEMA Alerts, Traffic Incidents, Traffic Conditions, Traffic Forecast, Sports Scores, Stock Information, News, etc. The DCA will be from 1 second to 15 minutes to get to the end user.

DESCRIPTION OF THE RELATED ART

[0002] Consumer behavior has changed extensively over the last 30+ years, as shown by the graph in Fig. 1. The graph in Fig. 1 shows information consumption patterns, by medium, as a percent of market share, for the period 1970-2005. In the 1970's, consumers obtained information from television, radio, and telephone. Furthermore, information consumption patterns for these media have remained constant over the last 35 years, as shown in Fig. 1. However, technology has been rapidly expanding over the last 35 years, and new media have been consistently emerging. These new media include cable (1980's), cell phone (1990's), internet (1990's), and broadband (2005).

[0003] The Emergency Broadcast System (EBS) historically was used to relay information to consumers via radio and television. In 1994, EBS was replaced by the Emergency Alert System (EAS). EAS is the test script occasionally heard on broadcast stations or local cable systems.

[0004] Since January 1, 1997, all AM, FM and TV broadcast stations have been using the EAS. Also, since December 31, 1998, cable systems that have 10,000 or more subscribers are part of the EAS.

[0005] The EAS uses digital technology to distribute messages. This allows for many improvements in providing emergency information to the public. The EAS system provides state and local officials with a method to quickly send out important local emergency

information targeted to a specific area. The information can be sent out through a broadcast station and cable system even if those facilities are unattended. Also, the EAS digital signal is the same signal that the National Weather Service (NWS) uses on NOAA Weather Radio (NWR). This allows NWR signals to be decoded by the EAS equipment at broadcast stations and cable systems. Broadcasters and cable operators can then retransmit NWS weather warning messages almost immediately to their audiences.

[0006] However, with the diversity in information consumption patterns that exists today, EAS is no longer an effective program.

[0007] Internet advertising, when compared to convention television and radio advertising, brings with it its own distinct advantages and set of rules for success. The Internet, as an advertising medium, scores over the conventional media on two counts:

- In its ability to provide for interactive communication where the advertiser can establish a two-way communication with the consumer.
- In its ability to target communication to a specific target segment.

[0008] Figure 13 shows an example of a background scheme of combining content with advertisements. In the example of Figure 13, content provider A 1806 makes available two types of content over the Internet 1804. In particular, content provider A 1806 makes available content A programmed for advertisements X 1814 and content A2 programmed for advertisements Y 1816. Similarly, content provider B 1808 makes available content B programmed for advertisements X 1818 and content B programmed for advertisements Y 1820. Further in the example of Figure 13, advertising aggregator 1810 provides plural types of advertising, for example advertisements X1 1822 and advertisements X2 1824. In addition, advertising aggregator Y 1812 provides advertisements Y1 1826 and advertisements Y2 1828.

[0009] Further, in this example, content is displayed on, or presented from a user interface 1802, after it is retrieved over the Internet 1804. For example, if a user requests content A from content provider A, content A programmed for advertisements X 1814 may be sent to a user interface available to the user. In addition, the content A is programmed to cause the user interface to also retrieve advertisements X from advertising aggregator X 1810. Thus, the user interface 1802 may also request advertisement A from advertising aggregator X. Upon receipt of a request for advertisements X, advertising aggregator X 1810 makes a decision to provide at least one of advertisements X1 1822 and advertisements X2 1824 to the user making that request. Thus, in the present example, content on user interface 1802 is

displayed as content A plus the advertisement selected by advertisement aggregator X. Alternatively, upon receipt of request for content A by content provider A 1806, content provider A 1806 may choose to send content A programmed for advertisements Y 1816 and subsequently advertising aggregator Y 1812, upon receiving a request for advertisements from the user interface of the user may choose to send advertisements Y1 1820 or advertisements Y2 1828. Thus, in this background example, the user interface 1802 displays or presents a combination of the content requested by the user plus an advertisement selected by the content provider and/or an advertising aggregator.

[0010] Thus, in the background scheme of Figure 13, the selection of advertisements to be displayed with content is made by parties other than the user and therefore the advertising is less effective and the user experience is diminished.

[0011] Other background schemes have attempted to address this problem by making an advertisement selection based on general selection information collected about or from the user.

[0012] These background schemes discussed above cannot provide dynamic real-time information to consumers. The system shown in Fig. 13 has pre-formatted advertisements Y1, Y2, X1, and X2. There is no mechanism in place to combine dynamic real-time information (i.e., an alert for a tornado warning) with an advertisement, so as to provide the dynamic real-time information to a large audience in a relevant area.

[0013] Furthermore, other conventional schemes have communicated information, such as school closures, via email to registered users. However, such a system may provide information to a small audience, and the information provided is not real-time information. Further, such systems require that users check their email to receive the information. The present inventors recognize that emailing emergency alert notices would not be as effective as providing real-time alerts.

SUMMARY OF THE INVENTION

[0014] The present invention is directed to address the above-identified and other limitations with conventional systems.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] A more complete appreciation of the invention and many of the attendant advantages thereof will be readily obtained as the same becomes better understood by reference to the

following detailed description when considered in connection with the accompanying drawings, wherein:

[0016] Fig. 1 shows a graph of information consumption patterns by medium;

[0017] Fig. 2A shows an exemplary embodiment of a system of the present invention;

[0018] Fig. 2B shows another exemplary embodiment of a system of the present invention;

[0019] Fig. 2C shows a flow chart for an embodiment of the invention;

[0020] Fig. 2D shows a flow chart for an embodiment of the invention;

[0021] Fig. 3 is a screen shot of a web page that includes an exemplary targeted alert of the present invention;

[0022] Fig. 4 is an exemplary targeted alert shown in the web page of Fig. 3;

[0023] Fig. 5 is exemplary screen shot of web site of a sponsor;

[0024] Fig. 6 is a block diagram of an embodiment of multimedia content output in the present invention;

[0025] Fig. 7 is a block diagram of another embodiment of multimedia content output in the present invention;

[0026] Fig. 8 is a block diagram of another embodiment of multimedia content output in the present invention;

[0027] Fig. 9 is a block diagram of another embodiment of multimedia content output in the present invention;

[0028] Fig. 10 is a block diagram of another embodiment of multimedia content output in the present invention;

[0029] Fig. 11 is a block diagram of an embodiment of a content distribution system in the present invention;

[0030] Fig. 12 is a block diagram of an embodiment of a computer used to implement the present invention; and

[0031] Fig. 13 is a block diagram of a conventional advertising system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0032] Referring now to the drawings, wherein like reference numerals designate identical or corresponding parts throughout the several views, and more particularly to Fig. 2A thereof, which shows an example of a system for providing alerts to Internet users.

[0033] A user (not shown) uses browser 102 to connect to the Internet. Browser 102 sends a request to content provider 120. Content provider 120, in response to the request, constructs a web page including content 121 and ad tags. Ad server 108 uses the ad tags to insert ad 109

into content 121 by providing ad 109 to browser 102. However, if predetermined conditions are met (i.e., DCA server 150 detects the occurrence of an event through sensors 151) DCA server 150 sends an automatic insertion order to ad server 108. The automatic insertion order causes the ad server to add DCA message 152 to ad 109. Alternatively, DCA message may be added to a new custom advertisement.

[0034] Server 150 stores and generates dynamic content. Dynamic content includes, but is not limited to, weather information, traffic information, stock market information, sports information, news, DHS, Amber and FEMA alerts, etc. The system shown in Fig. 2A matches dynamic content and creates an automatic insertion order. The automatic insertion order is a script, which when executed, determines if a DCA is displayed to a user via an advertisement. The automatic insertion order is sent through multiple ad serving application program interfaces.

[0035] A new ad will be generated and served when the user performs an action on the website that causes the page to refresh and serve new advertising.

[0036] Each ad call results in a call to the DCA server, which performs an IP check to determine a location of the user. A person of ordinary skill in the art knows how to determine a physical location from an IP address, and further explanation will not be provided. If the automatic insertion order previously stored on the real-time alert server 150 and the location are a match, dynamic content identified by the real-time alert server is passed into the advertisement and delivered to the user. For example, if the real-time information indicates there is a severe thunderstorm warning for zip code 20878, the automatic insertion order may include a script that performs the following logical operation: if the user is located in zip code 20878, then display an advertisement that includes the thunderstorm warning (including dynamic real-time information). Then, if the IP check determines that the user is in zip code 20878, an advertisement on a webpage the user is viewing includes the above-noted advertisement and alert regarding the thunderstorm.

[0037] Prior user registration is not always required. However, another embodiment of the present invention relates to dynamic alerting based on end user preferences. End user preference registration could be registered on any site that is delivering alerts that allow end user preferences for delivery such as email, sms, phone, and in the future DCA

[0038] An embodiment of the system includes a dynamic content targeting module, that interfaces with third party ad servers, such as OAS and Double Click. Then, if certain conditions are satisfied (i.e., if the weather conditions, forecast alerts, etc. are met and there is

a user on one of these sites that there is a partnership with) then dynamic real-time content may be displayed to a user in an affected area through a webpage advertisement.

[0039] [If we use DCA as a defined term, this is not needed]

[0040] Fig. 3 is a screen shot of a web page that includes an alert message in accordance with an embodiment of the present invention. In this example, web page 301 includes content 304 supplied by Lycos™ and advertisements 302 supplied by Monster.com™ 302. IFrame 300 includes dynamic real-time information and sponsor information, in accordance with the present invention. In this example, there is a severe weather alert in the geographic area of the user that retrieves the web page 300, as indicated by the inserted message “You have a severe weather alert in your area. This message is brought to you by State Farm.” Fig. 4 is an example of the advertisement that includes alert message. As shown in Fig. 4, the alert message includes sponsor information by State Farm™ and information about the severe weather alert.

[0041] Fig. 2C shows a flow chart of the interactions between the components such as those shown in the embodiment of Fig. 2A.

[0042] In another exemplary embodiment shown in Fig. 2B, a user (not shown) uses browser 102 to access Internet 106. Browser 102 may be any browser, such as Internet Explorer, Mozilla, Netscape Navigator, etc. Furthermore, the browser may run on any processor, such as an Intel Pentium Processor, an Apple processor, AMD, etc. Furthermore, the client device running the browser may be a desktop computer, a laptop, a PDA, a cell phone, watch, TV or any other device capable of connecting to the Internet.

[0043] Internet 106, in this example, provides the user access to content provider A 112 or content provider B 118. Content provider A provides a user with content A 114 and content provider B provides the user with content B 120.

[0044] After connecting to Internet 106, a desired web page (content A 114) is downloaded to browser 102 from content provider A 112. Web pages can include iFrames, or a floating frame inserted into a web page, which is associated with a tag used in web page design. Using an iFrame, a second HTML document can be embedded in a first HTML document. An example of the use of an iFrame is an advertisement that is seen on a side area of a web page.

[0045] When the user uses web browser 102 to download a web page that includes advertisements, the web browser is making a request for content and a request for an advertisement. For example, if the browser is receiving content A 114, the content includes a script, when accessed by the server causes the server to retrieve an advertisement from a

remote ad server 108. In alternative embodiments, the ad server does not need to be remote. The ad server may be included in content provider A, or the information stored in the ad server 108 may be stored locally on the client device.

[0046] Server 108 is connected to DCA server 122, which accesses real time information that is useful for the user. This information may include stock quotes, sports scores, traffic information, weather information, emergency alerts (including natural disasters, terrorist attacks, and Amber alerts). Using the example of weather information, the information can be dynamic real-time information. By real-time, the information may be current as of one second and up to 15 minutes old. In the case of weather information data such as wind speed, pressure, temperature, wind direction, rate of rain fall, plus/minus one second is made possible by 8,000 WeatherBug™ Tracking Stations and more than 1,000 cameras primarily based at neighborhood schools and public safety facilities across the U.S. WeatherBug™ (a brand of AWS Convergence Technologies Inc.) maintains the largest exclusive weather network in the world.

[0047] For example if temperature for zip code 20878 is provide as the dynamic real-time information, the information is accurate as of one second to 15 minutes from when it is retrieved. In other embodiments, the temperature data is continuously refreshed on the browser so as to display dynamic real-time information to the user. However, the refresh rate can be modified so as to not interfere with the user's access to content 114.

[0048] In the example of weather alerts, server 108 retrieves dynamic real-time information from a variety of sources; the WeatherBug network, NWS and other 3rd party content providers. The weather information can include temperature, wind speed, wind direction, humidity, pressure, rate of rain fall, amount of rain fall, severe weather alerts, pollen alerts, lightening, etc.

[0049] In one embodiment of the present invention, the dynamic real-time information is displayed in a 300 x 250 rich media advertising unit. However, any size advertising unit can be used. In another embodiment of the present invention, there is a sponsor for the dynamic real-time information. For example, a severe weather warning for zip code 20878 is displayed along with a message stating "brought to you by Company D."

[0050] The name of Company D shown in the advertisement may be a hyperlink. If the user clicks the hyperlink, the user's browser would retrieve information from the website of Company D. In another embodiment of the present invention, the website of Company D may provide the user with additional information regarding the dynamic real-time information included in the advertisement. Furthermore, this additional information is may

be included in an iFrame, or on a fully hosted web site by either party, so as to have the ability to not obscure the information provided in Company D's website.

[0051] Fig. 5 shows an example of a webpage served by Company D's website (in this example Company D is State Farm™). As shown in Fig. 5, the State Farm website provides the user with additional information about the severe weather alert included in the advertisement shown in Figs. 3 and 4.

[0052] Whether the user clicks on the hyperlink in the advertisement, Company D, by sponsoring the advertisement, has created awareness of the event (the dynamic real-time information, which may be a severe weather alert). Furthermore, the user can now associate Company D as a provider of valuable information.

[0053] In the example using weather information, weather information for the geographical location of the user may be the most useful and valuable to the user. However, the user may also be interested in the weather for another locale (such as a work location, an alternate residence, a residence of a family member, vacation spot, etc...).

[0054] In an alternate embodiment of the present invention, the user may be registered with the system shown in Fig. 2B, and the system may store or retrieve a characteristic of the user, such as the user's name, zip code, location, a direct request for specific information, etc. Using the characteristic of the user, database 130 can be accessed by real-time alert server 122, so as to retrieve an alert location, type, or other alert parameters based on user preferences stored in database 130.

[0055] In addition, database 130 can include the type of information the user wants to see (i.e., weather, sports, stock information, etc.). The type of information the user wants to see can be stored in correspondence with the characteristic of the user. For example, if the characteristic is a zip code, the data base 130 can store instructions to provide all users in that particular zip code with real-time dynamic weather alerts and/or scores for the local sporting teams.

[0056] In another embodiment, server 108 combines dynamic real-time information obtained from DCA server 122 and advertisement sponsor database 110. In one embodiment, one sponsor is the exclusive sponsor of all alerts used in conjunction with content provider A or with the type of alerts (i.e., sponsor X1 sponsors all traffic alerts, sponsor X2 sponsors all weather alerts, sponsor X3 sponsors Amber alerts, etc). In another embodiment, the sponsors may be cycled through (i.e., each sponsor is used for one hour or based on specific alert types such as Winter Weather Advisories). In another embodiment, each sponsor only sponsors certain dynamic content type. In an example using weather information, if the dynamic real-

time temperature information is displayed to the user, the sponsor is selected based on this data.

[0057] For example, server 108 executes the following logical process: if the temperature is above 90 degrees, then display sponsor X1 (a brand of a popular soft drink), if the temperature is below 70 degrees, then display sponsor X2 (an advertisement for weather stripping), and otherwise display sponsor X3 (an advertisement for clothing).

[0058] Figure 6 shows an example of a multimedia content output 702 according to an embodiment of the present invention. Multimedia content output 702 includes a visual display 704 (e.g., a browser window on a computer or a page in a magazine). The visual display 704 shows content 706 and an alert 708, which is included in an advertisement. Each of the content 706 and the alert 708 are visible on at least a portion of the visual display 704. In this example the content 706 is a content requested by a user and the alert 708 includes advertisement having dynamic real-time information and information pertaining to the sponsorship of the advertisement. The dynamic real-time information is information that is relevant to the user, and is selected in a manner as discussed above. Although the alert is shown as being separate from the content 706, one of skill in the art will know that an advertisement may be superimposed on the content, for example, as a window placed over the content, or a banner advertisement in an Internet page placed alongside or around the requested content. One example of such an advertising graphical user interface is described in U.S. Patent Application Serial No. 09/813,751, filed March 21, 2001 entitled "Method for Enhancing the Effectiveness of Advertising Delivery Over Interactive Media", the entire contents of which is incorporated herein by reference.

[0059] As a further example, as shown in Figure 7, alert 806 may be superimposed over content 804. Alternatively, as shown in the example of Figure 8, a mixed content and alert 904 may include both content and advertisements. Further, the display of content in advertisements is not limited to the examples shown and other possible combinations of advertisement and content are also included in the present invention.

[0060] Furthermore, the present invention is not limited to Internet based systems. For example, the present invention can be used in a satellite based system (such as a satellite phone system or a satellite television system) or a terrestrial broadcast system (i.e., television or radio).

[0061] Figure 9 shows an example of a multimedia content output 1002 that presents a video stream 1004 to the user. Video stream 1004 includes content 1006 and alert 1008, which is

included in an advertisement. Thus, in the present example, video frames of content 1006 are intermixed with video of alert 1008 (e.g., an advertising video).

[0062] For example, the multimedia content output 1002 may be an example of a video window or user's computer, and video stream 1004 may be the video content received over the Internet channel which includes a desired program (e.g., content 1006).

[0063] For example, a user may be identified using a radio signal scheme to identify the user to the multimedia content output device or by correlating a location of the user with a location of the multimedia content output device or by other means of associating a passerby/user with a particular multimedia content output. Alternatively, the multimedia content output 1002 may be an example of a portable device having a video and audio display, such as a PDA or portable computer or cell phone.

[0064] Figure 10 shows a further possible embodiment of a multimedia content output according to the present invention. In this example, multimedia content output 1102 presents an audio stream 1104 which includes audio content 1106 and audio alert 1108.

[0065] For example, the multimedia content output 1102 may be an example of a user's computer, and audio stream 1104 may be the video content received over the Internet radio channel which includes a desired program (e.g., content 1106).

[0066] In another embodiment, the multimedia content output 1102 may be a portable user radio listening device and audio stream 1104 may be an example of audio information broadcast from a particular terrestrial or satellite radio station. In addition, content 1106 may be an example of a particular audio program, for example a talk radio show, and alert 1108 may be an example of an audio advertisement presented during or in between breaks on the talk radio show.

[0067] Further, although multimedia content output examples are shown with visual display images, video streams and audio streams, a particular multimedia content output according to the present invention may include the presentation of combinations of these types of media as well as other types of media.

[0068] For example, the system shown in Fig. 2B can match DCA with targeting criteria and create an automatic insertion order. The automatic insertion order is sent through an API to one or more ad serving platforms, such as DoubleClick and Advertising.com. In this embodiment, an end use can create a profile that sets a cookie, installs an application, or through some other method, that manages user preferences. Each end user will receive alerts based on their personal preferences. Fig. 2D shows a flow of information between the components of Fig. 2B.

[0069] Fig. 11 shows an embodiment of a content distribution system 1302. In the content distribution system 1302, content inserters 1306 and 1310 receive content from content providers and combine that content with an advertisement (including alert information) as indicated by stream selector 1312. Stream selector 1312 receives an advertisement/alert from an advertisement server. Stream selector 1312, in some embodiments, also receives sponsor information for the received advertisement/alert. The content and advertisement/alert (along with sponsor information) are combined and communicated to a content presenter (i.e., television, radio, cell phone, internet, PC, etc.) using communication channels 1304 and 1308.

[0070] If the user is registered, the advertisement/alert is constructed by having stream selector 1312 direct alert X1 and the sponsor information to content inserter 1306. Content inserter 1306 adds alert X1 and the corresponding sponsor information to the content that is distributed to the content presenter of the user via communication channel 1304.

[0071] Figure 12 illustrates a computer system 1701 upon which an embodiment of the present invention may be implemented. The computer system 1701 includes a bus 1702 or other communication mechanism for communicating information, and a processor 1703 coupled with the bus 1702 for processing the information. The computer system 1701 also includes a main memory 1704, such as a random access memory (RAM) or other dynamic storage device (e.g., dynamic RAM (DRAM), static RAM (SRAM), and synchronous DRAM (SDRAM)), coupled to the bus 1702 for storing information and instructions to be executed by processor 1703. In addition, the main memory 1704 may be used for storing temporary variables or other intermediate information during the execution of instructions by the processor 1703. The computer system 1701 further includes a read only memory (ROM) 1705 or other static storage device (e.g., programmable ROM (PROM), erasable PROM (EPROM), and electrically erasable PROM (EEPROM)) coupled to the bus 1702 for storing static information and instructions for the processor 1703.

[0072] The computer system 1701 also includes a disk controller 1706 coupled to the bus 1702 to control one or more storage devices for storing information and instructions, such as a magnetic hard disk 1707, and a removable media drive 1708 (e.g., floppy disk drive, read-only compact disc drive, read/write compact disc drive, compact disc jukebox, tape drive, flash memory drive, and removable magneto-optical drive). The storage devices may be added to the computer system 1701 using an appropriate device interface (e.g., small computer system interface (SCSI), integrated device electronics (IDE), enhanced-IDE (E-IDE), direct memory access (DMA), or ultra-DMA).

[0073] The computer system 1701 may also include special purpose logic devices (e.g., application specific integrated circuits (ASICs)) or configurable logic devices (e.g., simple programmable logic devices (SPLDs), complex programmable logic devices (CPLDs), and field programmable gate arrays (FPGAs)).

[0074] The computer system 1701 may also include a display controller 1709 coupled to the bus 1702 to control a display 1710, such as a cathode ray tube (CRT), for displaying information to a computer user. The computer system includes input devices, such as a keyboard 1711 and a pointing device 1712, for interacting with a computer user and providing information to the processor 1703. The pointing device 1712, for example, may be a mouse, a trackball, or a pointing stick for communicating direction information and command selections to the processor 1703 and for controlling cursor movement on the display 1710. In addition, a printer may provide printed listings of data stored and/or generated by the computer system 1701.

[0075] The computer system 1701 performs a portion or all of the processing steps of the invention in response to the processor 1703 executing one or more sequences of one or more instructions contained in a memory, such as the main memory 1704. Such instructions may be read into the main memory 1704 from another computer readable medium, such as a hard disk 1707 or a removable media drive 1708. One or more processors in a multi-processing arrangement may also be employed to execute the sequences of instructions contained in main memory 1704. In alternative embodiments, hard-wired circuitry may be used in place of or in combination with software instructions. Thus, embodiments are not limited to any specific combination of hardware circuitry and software.

[0076] As stated above, the computer system 1701 includes at least one computer readable medium or memory for holding instructions programmed according to the teachings of the invention and for containing data structures, tables, records, or other data described herein. Examples of computer readable media are compact discs, hard disks, floppy disks, tape, magneto-optical disks, PROMs (EPROM, EEPROM, flash EPROM), DRAM, SRAM, SDRAM, or any other magnetic medium, compact discs (e.g., CD-ROM), or any other optical medium, punch cards, paper tape, or other physical medium with patterns of holes, a carrier wave (described below), or any other medium from which a computer can read.

[0077] Stored on any one or on a combination of computer readable media, the present invention includes software for controlling the computer system 1701, for driving a device or devices for implementing the invention, and for enabling the computer system 1701 to interact with a human user (e.g., print production personnel). Such software may include, but

is not limited to, device drivers, operating systems, development tools, and applications software. Such computer readable media further includes the computer program product of the present invention for performing all or a portion (e.g., locally portion of distributed processing) of the processing performed in implementing the invention.

[0078] The computer code devices of the present invention may be any interpretable or executable code mechanism, including but not limited to scripts, interpretable programs, dynamic link libraries (DLLs), Java classes, and complete executable programs. Moreover, parts of the processing of the present invention may be distributed or centralized for better performance, reliability, and/or cost.

[0079] The term “computer readable medium” as used herein refers to any medium that participates in providing instructions to the processor 1703 for execution. A computer readable medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media includes, for example, optical, magnetic disks, flash memory, and magneto-optical disks, such as the hard disk 1707 or the removable media drive 1708. Volatile media includes dynamic memory, such as the main memory 1704. Transmission media includes coaxial cables, copper wire and fiber optics, including the wires that make up the bus 1702. Transmission media also may also take the form of acoustic or light waves, such as those generated during radio wave and infrared data communications.

[0080] Various forms of computer readable media may be involved in carrying out one or more sequences of one or more instructions to processor 1703 for execution. For example, the instructions may initially be carried on a magnetic disk of a remote computer. The remote computer can load the instructions for implementing all or a portion of the present invention remotely into a dynamic memory and send the instructions over a telephone line using a modem. A modem local to the computer system 1701 may receive the data on the telephone line and use an infrared transmitter to convert the data to an infrared signal. An infrared detector coupled to the bus 1702 can receive the data carried in the infrared signal and place the data on the bus 1702. The bus 1702 carries the data to the main memory 1704, from which the processor 1703 retrieves and executes the instructions. The instructions received by the main memory 1704 may optionally be stored on storage device 1707 or 1708 either before or after execution by processor 1703.

[0081] The computer system 1701 also includes a communication interface 1713 coupled to the bus 1702. The communication interface 1713 provides a two-way data communication coupling to a network link 1714 that is connected to, for example, a local area network

(LAN) 1015, or to another communications network 1716 such as the Internet. For example, the communication interface 1713 may be a network interface card to attach to any packet switched LAN. As another example, the communication interface 1713 may be an asymmetrical digital subscriber line (ADSL) card, an integrated services digital network (ISDN) card or a modem to provide a data communication connection to a corresponding type of communications line. Wireless links may also be implemented. In any such implementation, the communication interface 1713 sends and receives electrical, electromagnetic or optical signals that carry digital data streams representing various types of information.

[0082] The network link 1714 typically provides data communication through one or more networks to other data devices. For example, the network link 1714 may provide a connection to another computer through a local network 1715 (e.g., a LAN) or through equipment operated by a service provider, which provides communication services through a communications network 1716. The local network 1714 and the communications network 1716 use, for example, electrical, electromagnetic, or optical signals that carry digital data streams, and the associated physical layer (e.g., CAT 5 cable, coaxial cable, optical fiber, etc). The signals through the various networks and the signals on the network link 1714 and through the communication interface 1713, which carry the digital data to and from the computer system 1701 maybe implemented in baseband signals, or carrier wave based signals. The baseband signals convey the digital data as unmodulated electrical pulses that are descriptive of a stream of digital data bits, where the term “bits” is to be construed broadly to mean symbol, where each symbol conveys at least one or more information bits. The digital data may also be used to modulate a carrier wave, such as with amplitude, phase and/or frequency shift keyed signals that are propagated over a conductive media, or transmitted as electromagnetic waves through a propagation medium. Thus, the digital data may be sent as unmodulated baseband data through a “wired” communication channel and/or sent within a predetermined frequency band, different than baseband, by modulating a carrier wave. The computer system 1701 can transmit and receive data, including program code, through the network(s) 1715 and 1716, the network link 1714 and the communication interface 1713. Moreover, the network link 1714 may provide a connection through a LAN 1715 to a mobile device 1717 such as a personal digital assistant (PDA) laptop computer, or cellular telephone.

[0083] Numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described herein.

CLAIMS:

1. A method of presenting content, comprising steps of:
determining a location associated with a user;
receiving notice of a dynamic content alert (DCA);
creating an advertisement that includes real-time information related to the dynamic content being within a predetermined range of the location associated with the user; and
presenting the advertisement to the user.
2. The method of claim 1, further comprising:
issuing an order to insert a real-time alert message into the advertisement in response to the notice if the location of the user is within the predetermined range of the location.
3. The method of claim 1, wherein the environmental event relates to at least one of temperature, wind direction, wind speed, barometric pressure, hurricanes, tornadoes, thunderstorms, flooding, and rate of rain fall, NWS Alert, Amber Alert, DHS, DOT or FEMA Alert.
4. The method of claim 1, wherein the environmental event relates to traffic conditions, incidents and forecast.
5. The method of claim 1, wherein the environmental event occurs from 1 second to 15 minutes prior to receiving the notice.
6. The method of claim 1, wherein the environmental event occurs 1 second to 15 minutes prior to receiving the notice.
- 7 The method of claim 1, wherein the advertisement includes one or more of real-time temperature, real-time wind speed, real-time wind direction, real-time barometric pressure, and real-time rate of rain fall, NWS Alerts, Amber Alerts, DHS, DOT and FEMA Alerts, etc.
8. A method presenting content, comprising steps of:
obtaining dynamic real-time information when a predetermined condition is satisfied;
including the dynamic real-time information in an advertisement;

accessing a database that stores sponsor information in correspondence with a characteristic of the dynamic real-time information;

determining, based on information stored in the database, which sponsor corresponds with the dynamic real-time information;

including the sponsor in the advertisement; and

presenting the advertisement to a user.

9. The method of claim 8, wherein the dynamic real-time information is information related to sports, information related to a financial market, or information related to weather.

10. The method of claim 8, further comprising:

determining a location associated with the user; and

the step of obtaining includes obtaining dynamic real-time information associated with the location.

ABSTRACT

A method of presenting content, including steps of: determining a location associated with a user; receiving notice of a dynamic content alert (DCA); creating an advertisement that includes real-time information related to the dynamic content being within a predetermined range of the location associated with the user; and presenting the advertisement to the user.

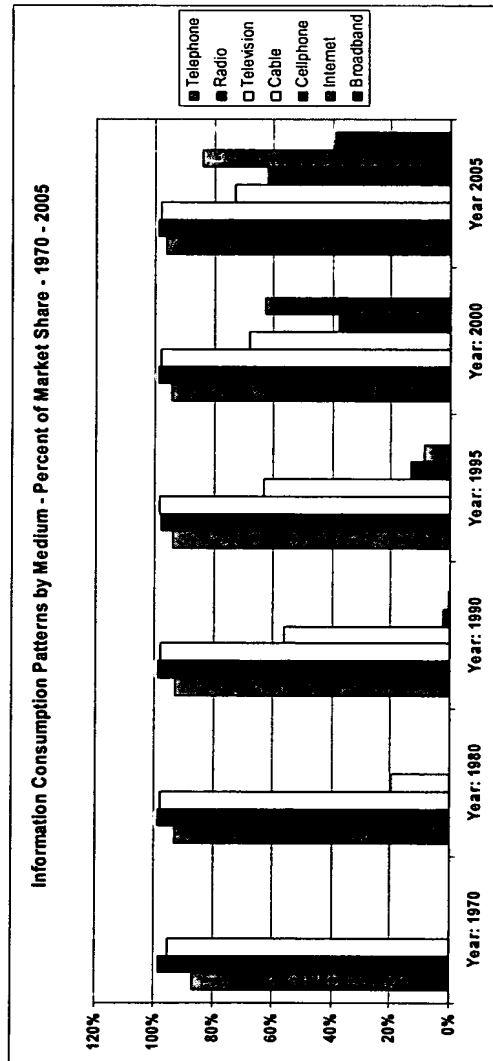


Fig. 1

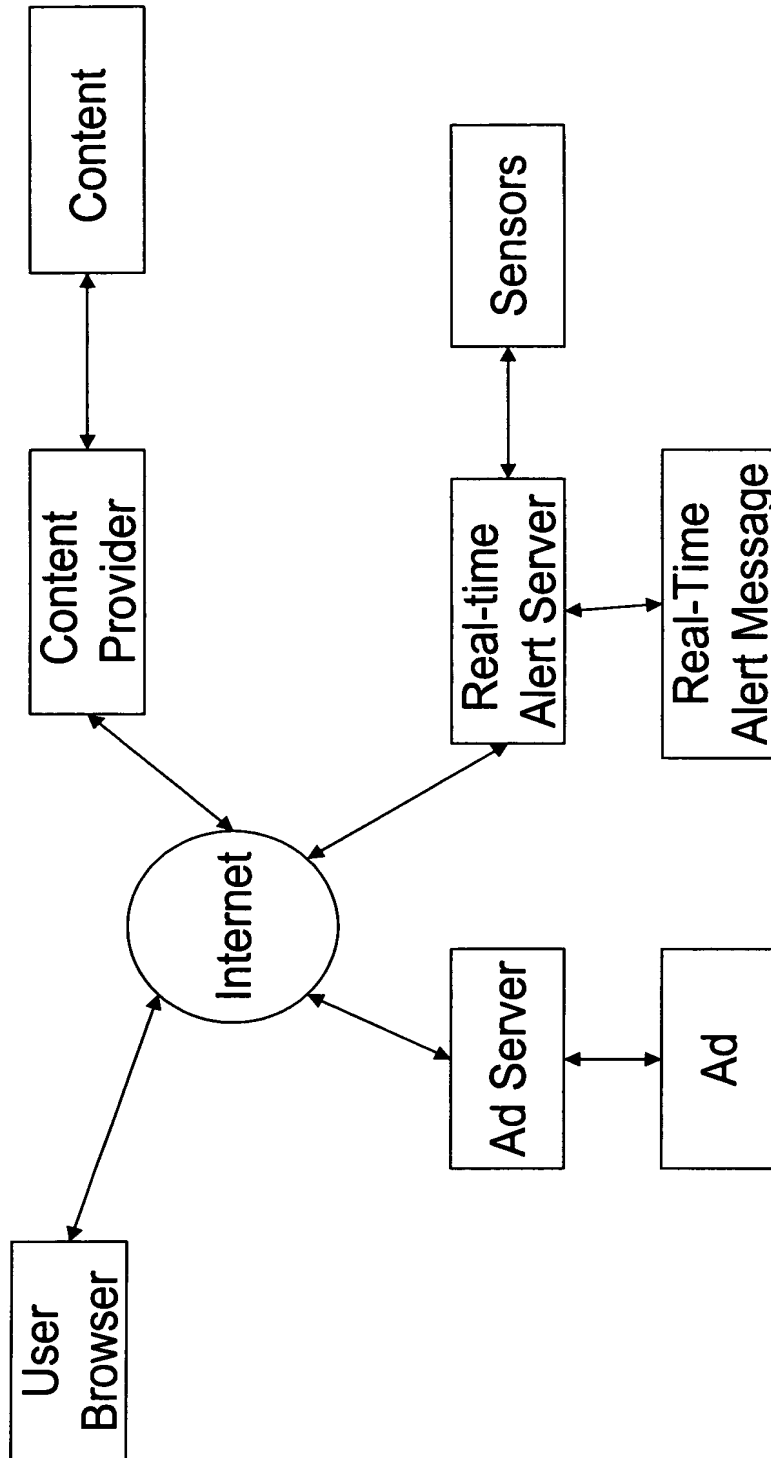


Fig. 2 A

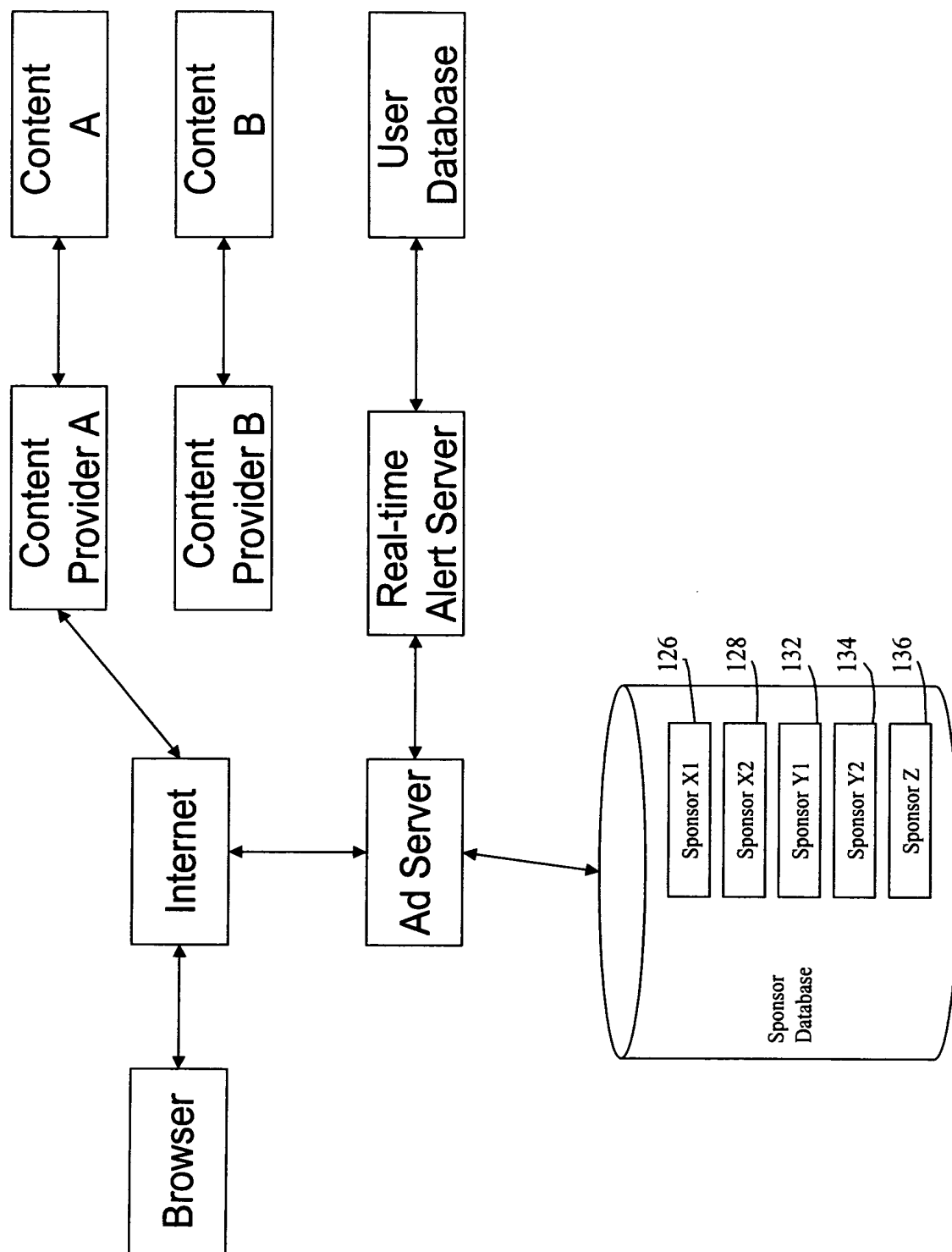


Fig. 2B



Fig. 2D

Dynamic Content Targeting w/ Personal Preferences

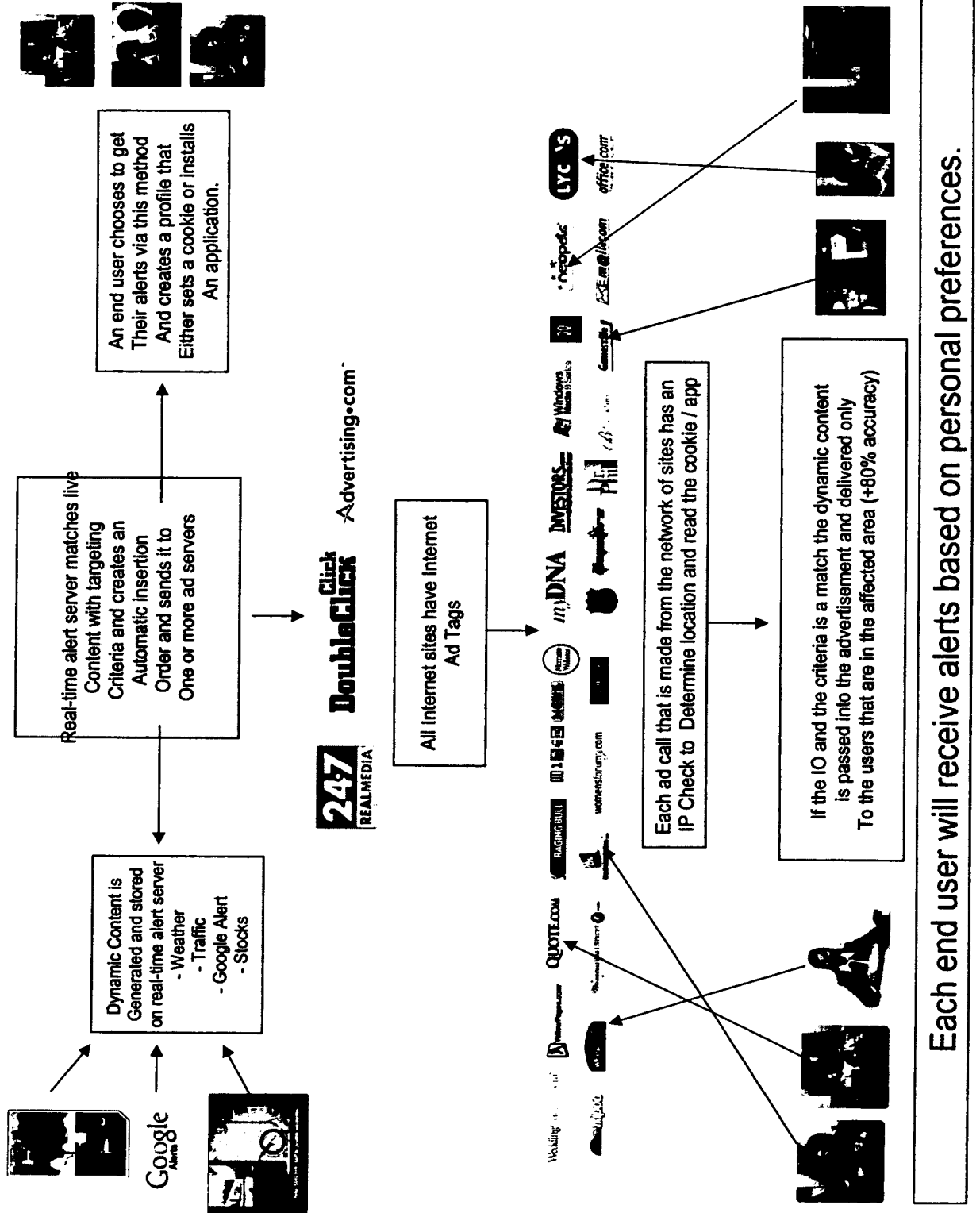


Fig. 3

Create Personalized Content

SIGN UP FOR EMAIL

Stay connected to your summer memories.

- Attach pictures, files & more
- Generous storage
- Fast, easy and totally FREE
- Create Your LYCOS Mail

BUILD A WALLPAPER

WHEEL A BIRD

CREATE A PLANET

SHARE PHOTOS

FEATURED ALBUM

Natural Radio

Astronomy Observatory

Traveling to the edges of the universe and beyond!

- View Album
- Create an album
- More Albums

FEATURED BLOG

Heidi's RFL Guide

Puppies and dogs and humans oh

For more data <http://www.lycos.com/servlets>

SEARCH

WE'LL PEOPLE YELLOW PAGES SHOPPING IMAGES & VIDEO CLASSIFIEDS

GO GET IT!

NEWS ENTERTAINMENT MUSIC GAMES

Entertainment Home Selections Movies Videos Homepages

Drinksas
Release Date: 02/27/2006

Watch Video

Top at the Box Office

- Tai, a Jaga N' Jaga: The Ballad of Ricky Bobby
- Barmaid: The Original Party Animals
- Pirates of the Caribbean: Dead Men's Chest
- Miami Vice
- The Godfather

Opening This Week

- Conversations With Other Women
- Half Nelson
- House of Sand (Casa de Areia)
- Kashi Andra Naa Ketana (Never Say Goodbye)
- Father Boy

You have a Severe Weather Alert in your area.

Local Alerts

Alerts to the National Weather Service in the United States

There is one alert issued by the National Weather Service in the United States

Flash Flood Advisory - ALERT 1

FLASH FLOOD ADVISORY REMAINS IN EFFECT UNTIL 7 PM CDT

Heavy Rain: 3.0 to 4.0 inches Aug 11 2005

Heavy Rain: 1.0 to 2.0 inches Aug 11 2005

This message brought to you by

Like a good neighbor, State Farm is there.

\$1,000

Ribetelle
Win \$1,000 a week!

Careers from

- Search Local Jobs
- Create Free Account
- Salary Wizard
- Post Your Resume
- Technology Skills
- Meet the Experts

More On LYCOS

LYCOS ADVERTISING
Quality, Low-Cost Targeted Traffic from top Internet Properties including Lycos,MSN,MSN,MSN,MSN,MSN

Advertising

**You have a Severe Weather Alert
in your area.**

Local Alerts

Alerts for Dallas County
Number of Active Alerts: 1

There is one active alert issued by the National Weather Service in Dallas County, Texas.

Flash Flood Advisory - ALERT !

FLASH FLOOD ADVISORY REMAINS IN EFFECT UNTIL 7 PM CDT.

Issue Time: 3:42 AM CDT Friday Aug 11, 2006

Valid Until: 12:00 PM CDT Friday Aug 11, 2006

Details

This message brought to you by



Like a good neighbor, State Farm is there.®

Fig. 4

Each end user that is visiting a site in the network, in the affected area will see the alert.

When the end user clicks the alert, they will be linked to a site that has the detailed alert information and any additional information about the sponsor.

Fig. 5

Text Size: **A A A**

Access account info [Log in](#) [Register](#)
Powered by Google™

Search:

Like a good neighbor, State Farm is there.®

Insurance **Mutual Funds** **State Farm Bank**

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ADVISORY REMAINS IN EFFECT UNTIL 7 PM CDT THIS EVE
Alerts for: **Dallas, TX 75201** 8/11/2006

Local Alerts Powered by WeatherBug

Alerts for Dallas County
Number of Active Alerts: 1

There is one active alert issued by the National Weather Service in Dallas County, Texas

Flash Flood Advisory - ALERT 1
FLASH FLOOD ADVISORY REMAINS IN EFFECT UNTIL 7 PM CDT.
Issue Time: 3:42 AM CDT Friday Aug 11 2006
Valid Until: 12:00 PM CDT Friday Aug 11 2006
[Details](#)

Texas State Map

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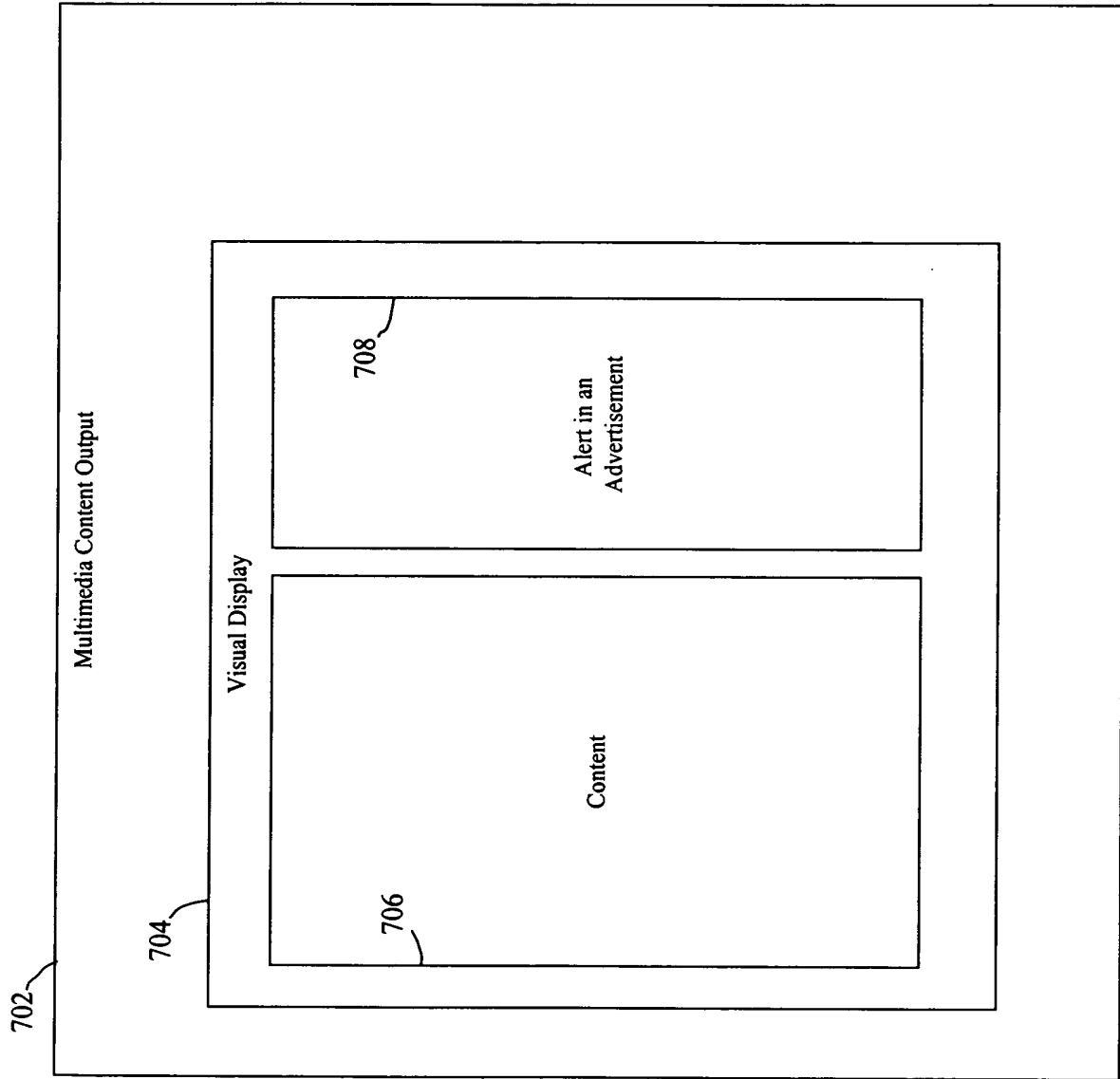


Fig. 6

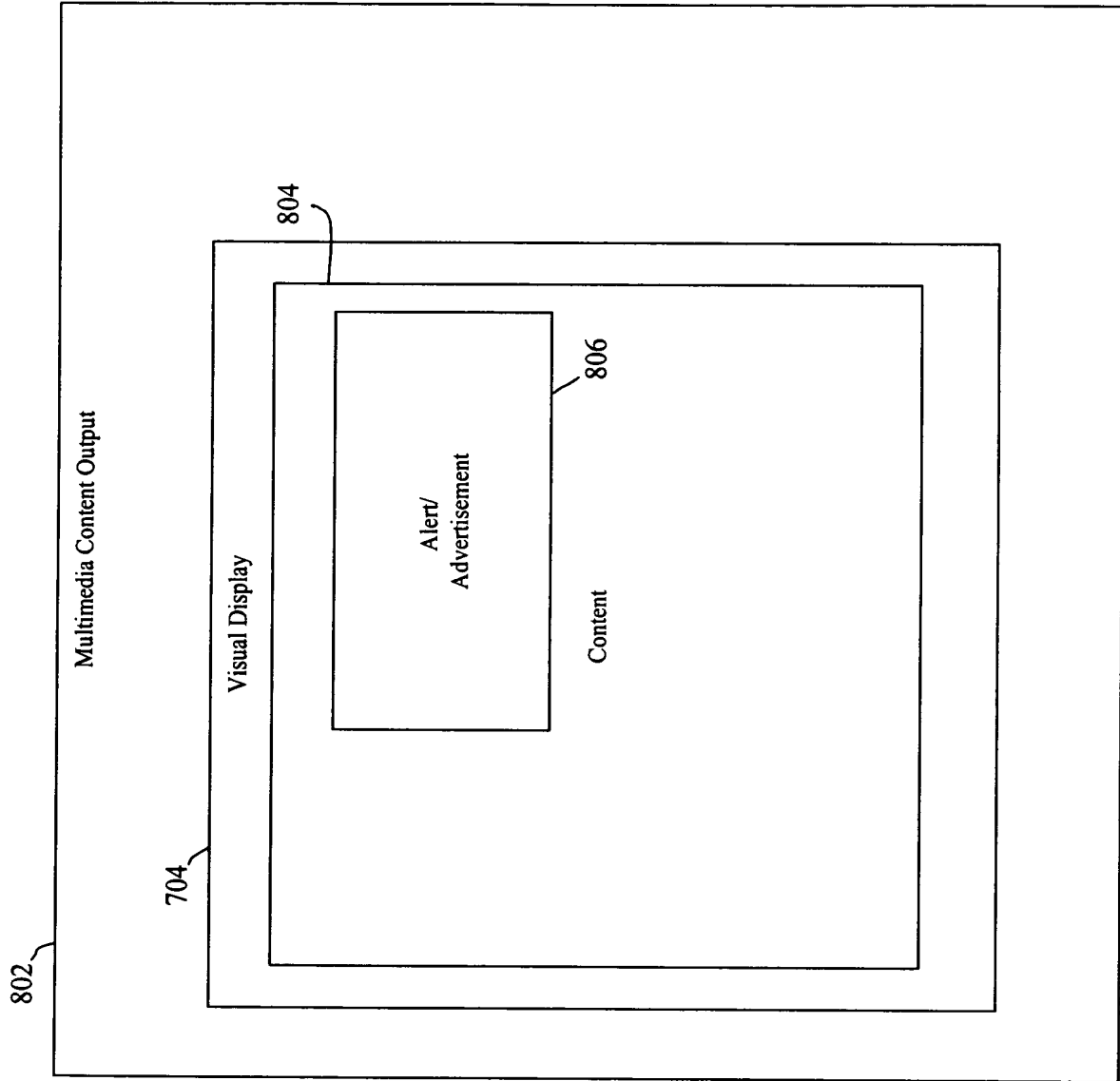


Fig. 7

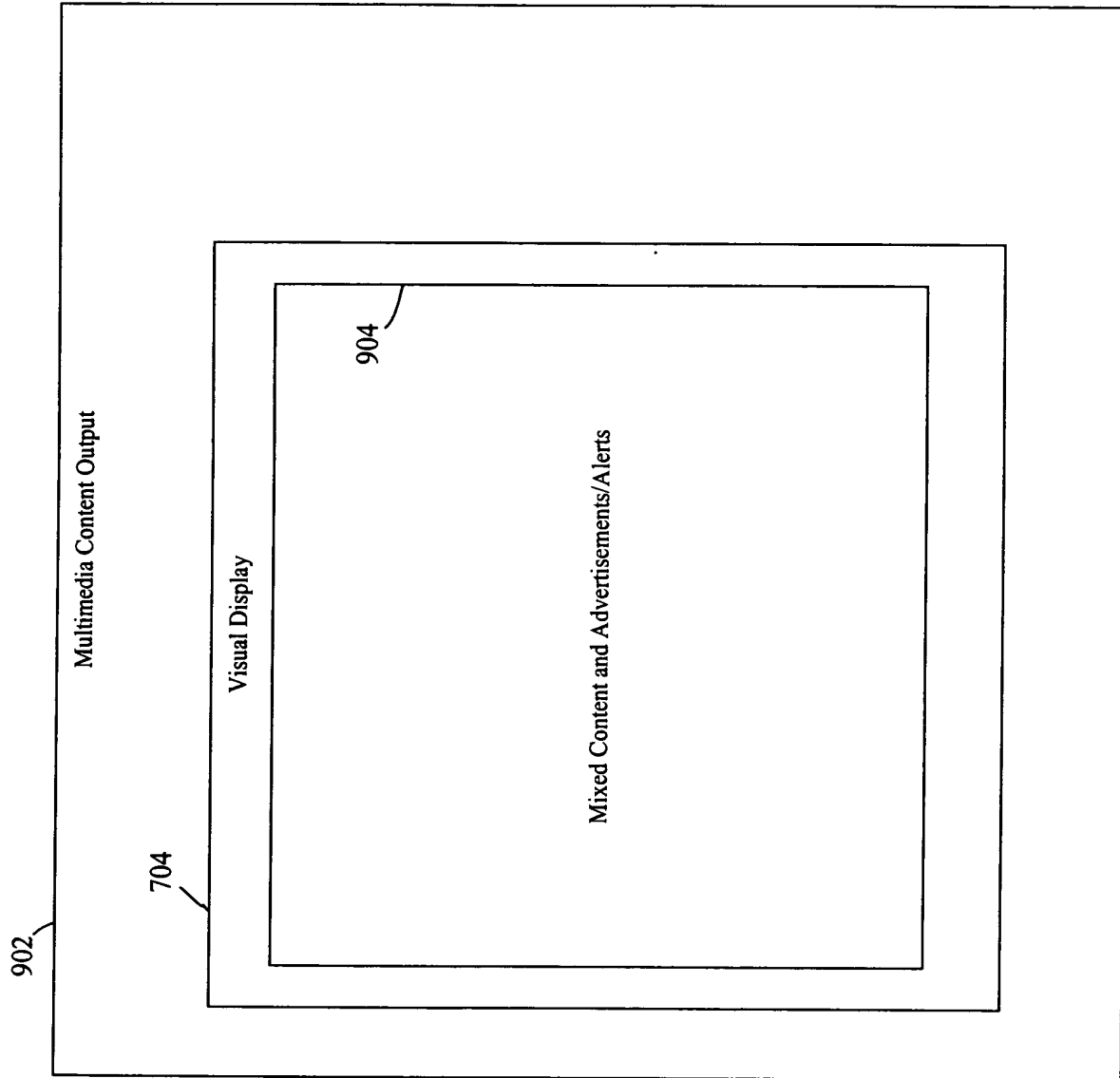


Fig. 8

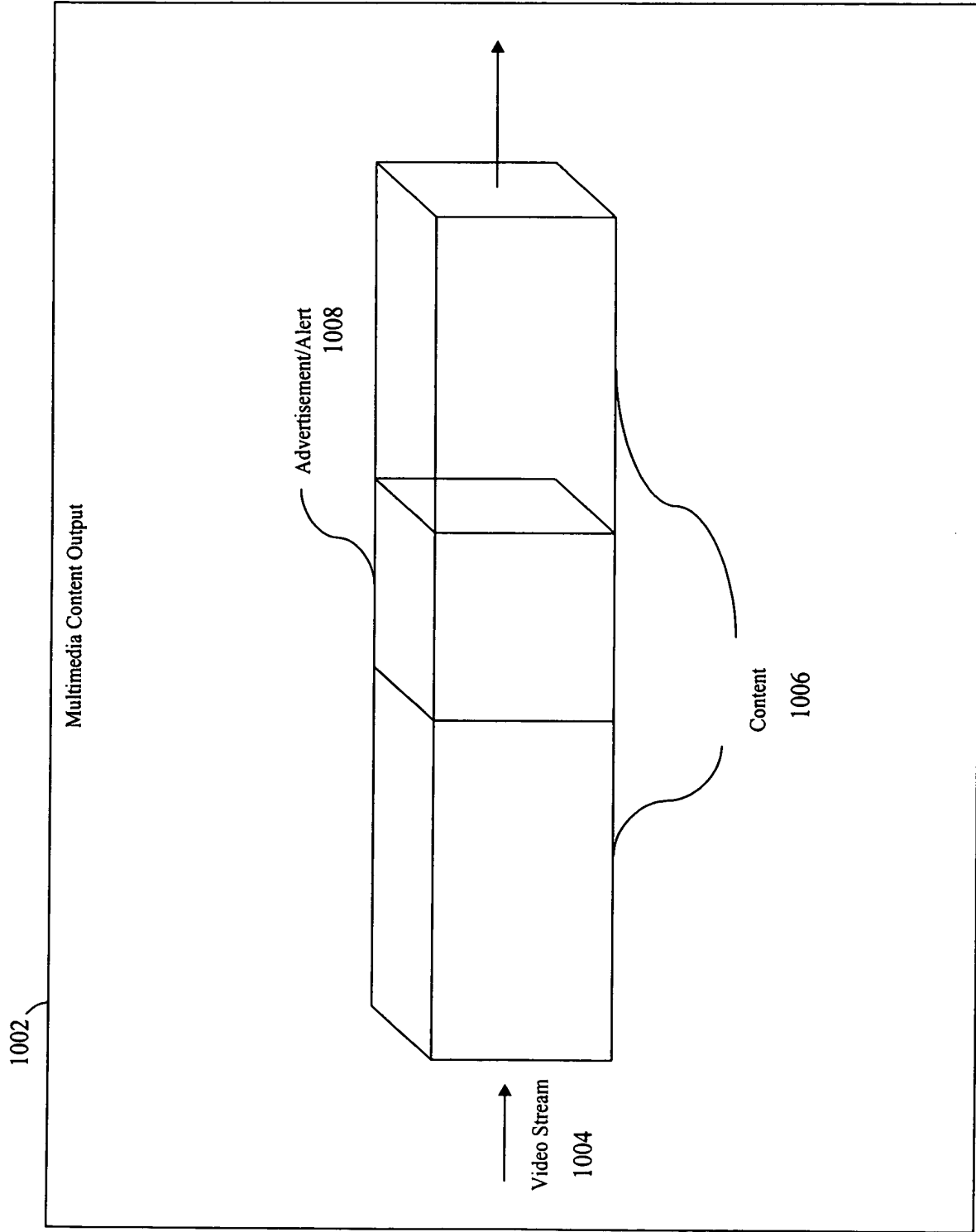


Fig. 9

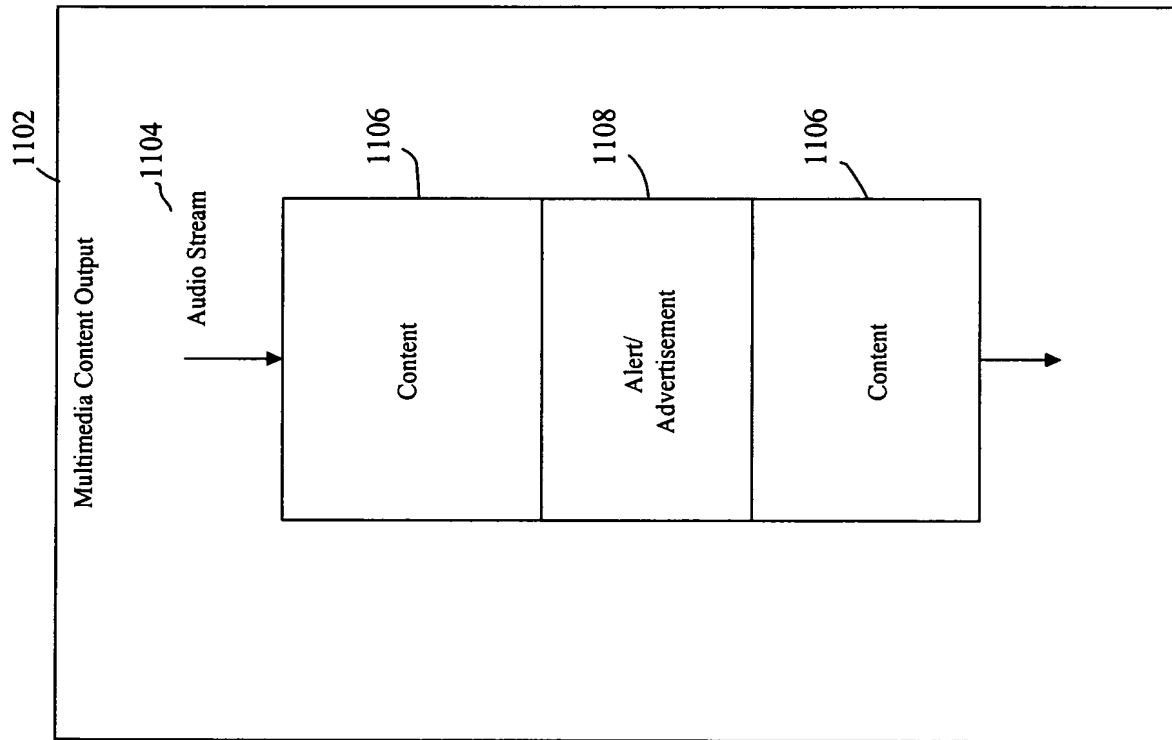


Fig. 10

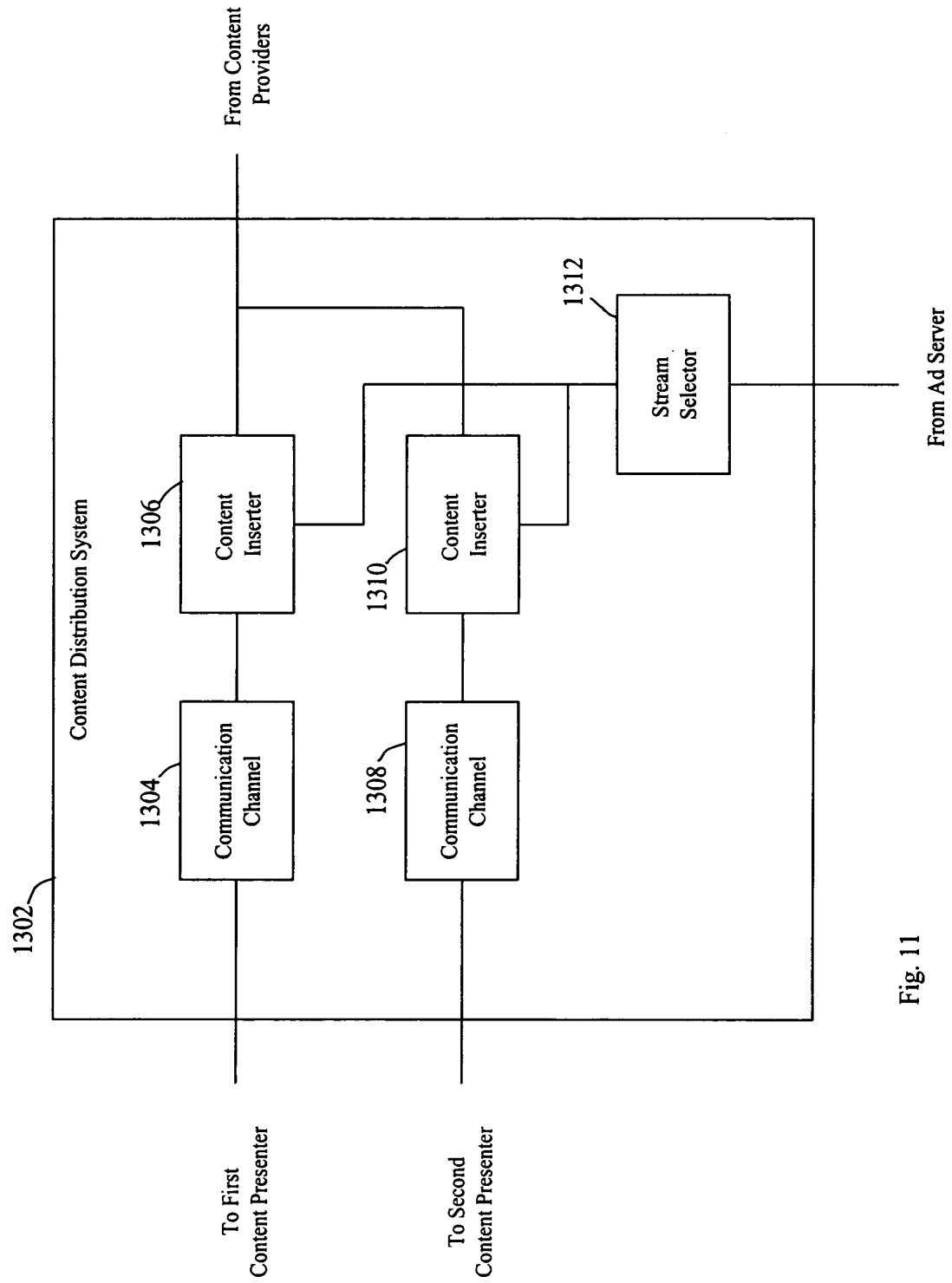


Fig. 11

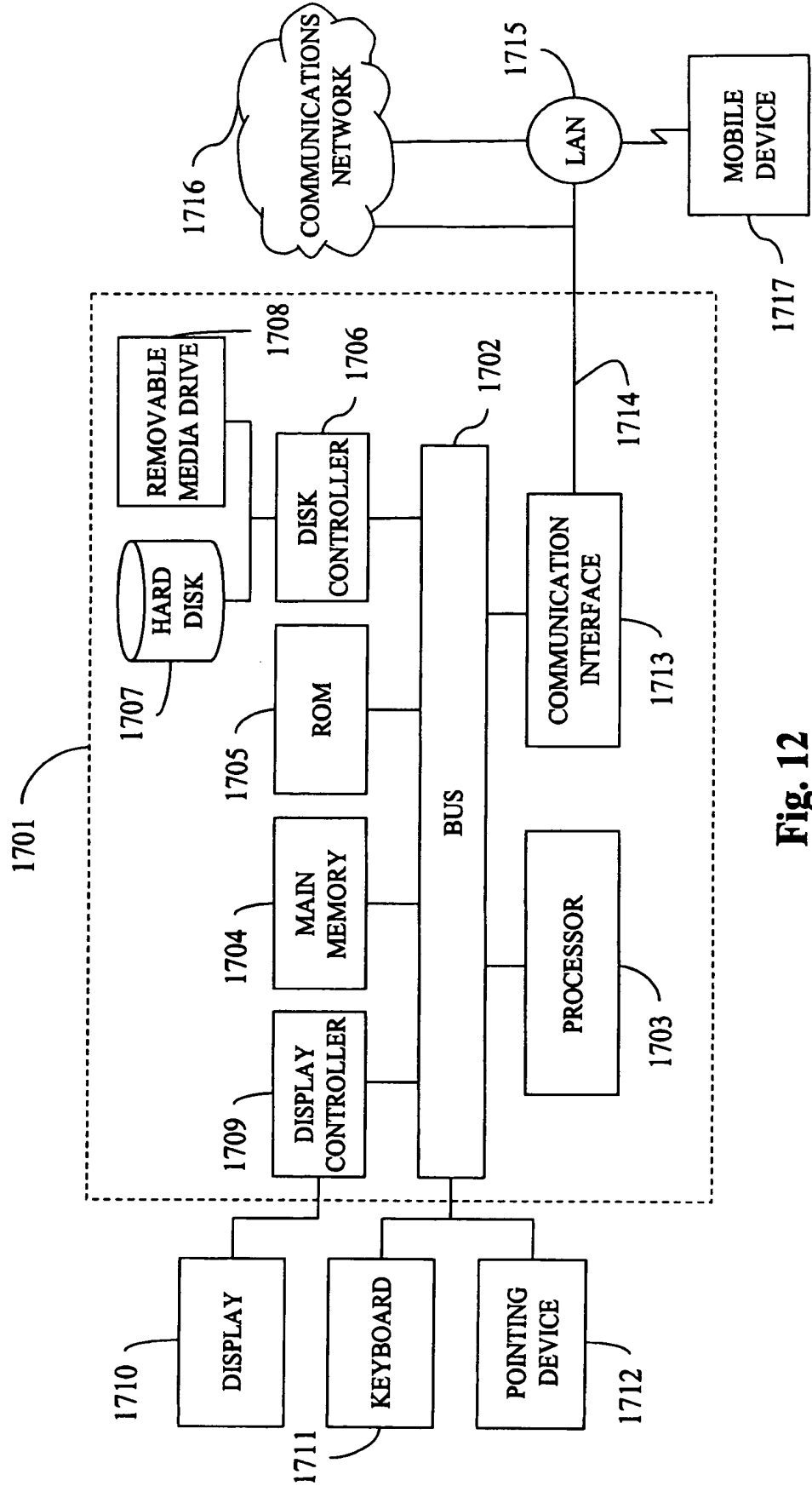


Fig. 12

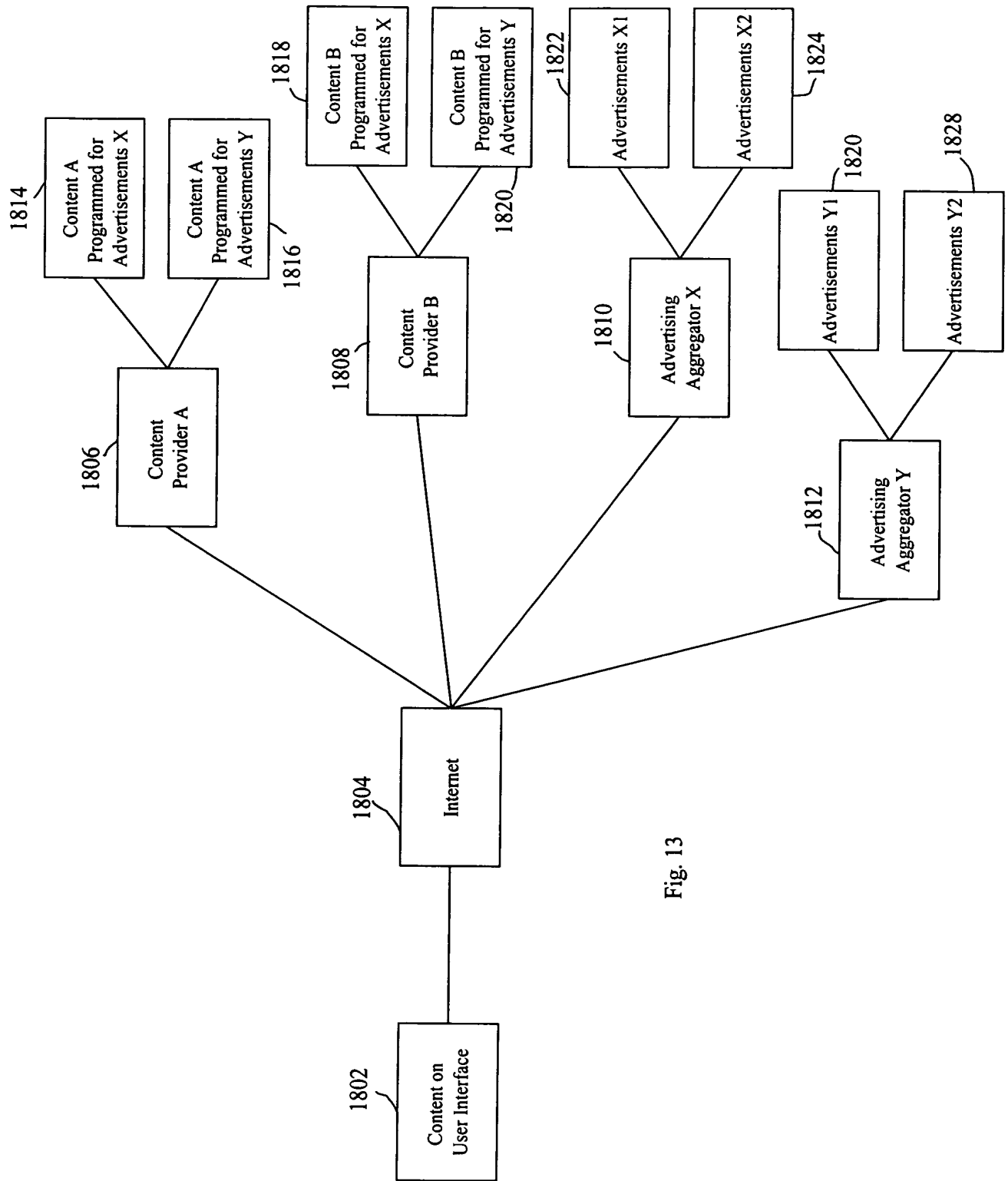


Fig. 13

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01 FC:2005 100.00 DP

PTO-1556
(5/87)

APPLICATION DATA SHEET

APPLICATION INFORMATION

Application Type::	PROVISIONAL
Subject Matter::	UTILITY
CD-ROM or CD-R?::	NONE
Title::	SYSTEM, METHOD, APPARATUS, AND COMPUTER MEDIA FOR DISTRIBUTING TARGETED ALERTS
Attorney Docket Number::	295342US8PROV
Total Drawing Sheets::	16
Small Entity?::	YES

INVENTOR INFORMATION

Applicant Authority Type::	INVENTOR
Primary Citizenship Country::	U.S.A.
Status::	FULL CAPACITY
Given Name::	Shane
Family Name::	LUNDY
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State or Province of Residence::	MD
Country of Residence::	U.S.A.
Street of Mailing Address::	3 Arch Place No. 130
City of Mailing Address::	Gaithersburg
State or Province of Mailing Address::	MD
Country of Mailing Address::	U.S.A.
Postal or Zip Code of Mailing Address::	20878

Applicant Authority Type:: INVENTOR
Primary Citizenship Country:: Israel
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Family Name:: FIRSTENBERG
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State or Province of Residence:: MD
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City of Mailing Address:: Rockville
State or Province of Mailing Address:: MD
Country of Mailing Address:: U.S.A.
Postal or Zip Code of Mailing Address:: 20852

CORRESPONDENCE INFORMATION

Correspondence Customer Number:: 22850

REPRESENTATIVE INFORMATION

Representative Customer Number:: 22850

DOMESTIC PRIORITY INFORMATION

FOREIGN PRIORITY INFORMATION

ASSIGNMENT INFORMATION

Assignee Name:: AWS CONVERGENCE
TECHNOLOGIES, INC.
Street of Mailing Address:: 12410 Milestone Center Drive
City of Mailing Address:: Germantown
State or Province of Mailing Address:: MD
Country of Mailing Address:: U.S.A.
Postal or Zip Code of Mailing Address:: 20876