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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 February 2001 (22.02.2001)

PCT

(10) International Publication Number
WO 01/13253 A2

(51) International Patent Classification[7]: G06F 15/00

(21) International Application Number: PCT/US00/21733

(22) International Filing Date: 10 August 2000 (10.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/148,583	13 August 1999 (13.08.1999)	US
09/526,549	16 March 2000 (16.03.2000)	US

(71) Applicant: THE E.W. SCRIPPS COMPANY [US/US]; 312 Walnut Street, Suite 2800, Cincinnati, OH 45201-5380 (US).

(72) Inventor: FRANXMAN, Glen, H.; 458 Glenview Court, Edgewood, KY 41017 (US).

(74) Agents: DONNER, Irah, H. et al.; Hale and Dorr LLP, 1455 Pennsylvania Avenue, N.W., Washington, DC 20004 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— *Without international search report and to be republished upon receipt of that report.*

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

WO 01/13253 A2

(54) Title: COMPUTER ARCHITECTURE AND PROCESS OF SEARCHING AND DISPLAYING PRINT ADVERTISEMENTS OVER THE WORLD WIDE WEB AND/OR INTERNET ORIGINATED FROM NEWSPAPERS AND OTHER PAPER-BASED PRINT MEDIA

(57) Abstract: A system and/or process for providing content delivery via a compter network. The system includes at least one media operating unit communicating with a Web server, which is communicating with the computer network. Each media operating unit includes a press interface proxy server communicatable with one or more advertisement sources so as to receive at least one input image. The press interface proxy server parses at least a text field from each input image. An image conversion server receives from the press interface proxy server the one or more input images and at least the parsed text field, and generates output images from each input image. Each of the output images includes a respective resolution of the input image. The image conversion server transmits the output images and at least one computer network address associated with the media operating unit to the Web server.

COMPUTER ARCHITECTURE AND PROCESS OF SEARCHING AND DISPLAYING PRINT ADVERTISEMENTS OVER THE WORLD WIDE WEB AND/OR INTERNET ORIGINATED FROM NEWSPAPERS AND OTHER PAPER-BASED PRINT MEDIA

FIELD OF THE INVENTION

The present invention pertains, in general, to a computer architecture and/or process for providing content delivery of information via, for example, a computer network or other mechanism/medium, and, in particular to a computer architecture and/or process for searching and displaying print advertisements originated from newspapers and other paper-based media over the World Wide Web ("WWW" or "Web") and/or the Internet, or vice versa.

BACKGROUND OF THE INVENTION

Internet content and/or service providers often derive revenue by displaying advertisements to users. For example, when a user accesses a Web page on the World Wide Web, an advertisement is displayed to the user as part of the Web page. Advertisements are also shown to users of proprietary on-line services, such as the America Online network.

Traditionally, a newspaper or other information publisher posting its advertisements on-line has experienced little or no trouble with the classified section. Because classified advertisements are typically already text-based, such advertisements generally only require a text dump of the classified data from a system that is storing the classified data. The publisher is then required to manage the classified ads which have been uploaded onto a Web site on the Web.

I have recognized that publishers of content have specific problems in managing and publishing advertisements on the Web from advertisers who submit display ads which generally originate from print advertisements that comprise images/pictures and text. Advertisers actually pay more to advertise in the newspaper using these print display ads than they would pay for standard banner ads, for instance, and therefore, I have determined that it is very important that these advertisements are managed in an effective and efficient manner.

These print display ads include the images in the on-line ads that are seen throughout, for example, the printed newspaper that all the text actually flows around. I have determined, however, that display ads are supplied to the newspaper in a format that really is

not conducive for use with respect to the Internet, bandwidth-constrained networks, and bandwidth-constrained connections to a standard computer network, such as mobile, wireless Internet connections. The display ads are very high resolution and are designed for a printing press generally having its own unique formatting requirements, and not the Internet or other electronic media.

Accordingly, I have recognized that it would be desirable to provide, as a service to the advertisers, the ability to take the ads that ran in the newspaper and put them on the Internet which means, to the advertiser, additional exposure or opportunities to sell the object of the advertisement.

Advantageously, the present invention is capable of managing these print originated advertisements in an effective and efficient manner, that facilitates and streamlines the electronic advertising industry, for example, the Internet. The present invention further enhances the consumer's ability to navigate through the advertisements providing a more effective advertising tool, thereby increasing the effectiveness of the advertising for the consumer. The present invention can further be used in the reverse, i.e., as a tool to streamline electronic advertisements and to convert the electronic advertisements into advertisement appropriate for print and/or paper media/advertisements.

The following patents represent related art, and are hereby incorporated by reference:

U.S. Patent No. 5,860,073 to Ferrel et al. discloses a style sheet having display regions that do not contain content, including text or graphics, at the time the style sheet is applied. The text is poured into the display region when the title is rendered on a customer's computer so that style sheet properties can be altered without affecting the content.

U.S. Patent No. 5,950,173 to Perkowski discloses a system and method for collecting and transmitting product-related information over the Internet to consumers in a retail shopping environment. Perkowski's system includes a kiosk having an automatic bar code scanner symbolically links a product's preassigned Universal Product Code or Manufacture Identification Number portion thereof with a Uniform Resource Locator (URL) of at least one Web page related to the product. for display on a display screen in the kiosk.

U.S. Patent No. 5,819,301 to Rowe et al. discloses a method and apparatus for providing an optimized page-based electronic document file and downloading the optimized file. Page contents are contiguously written in the optimized file and a page offset table is provided in the optimized file for locating individual pages or objects within a page of the document without downloading other pages or other objects on a page in the document.

U.S. Patent No. 4,429,385 to Cichelli et al. discloses a broadcast-based information retrieval system for access to one-way, cyclically broadcast, sequential databases of messages. Cichelli et al.'s information retrieval system includes receivers that have frame-grabber and pattern matching electronics for selecting broadcast frames or messages.

U.S. Patent No. 5,105,184 to Pirani et al. discloses displaying and integrating commercial advertisements of small, medium, or full-page size with different screen types. U.S. Patent No. 5,283,731 to Lalonde et al. discloses a computerized classified ad system that receives incoming calls, which are either faxes or voice calls for placing an ad or searching for a text ad. Lalonde et al.'s interactive voice response system is coupled to a telephone network so as to a voice or fax message is delivered to a user of the system. The voice or fax message includes data concerning ads that match the user's ad search terms.

U.S. Patent No. 5,305,195 to Murphy discloses a system for providing high quality video advertising information into an interactive system having a plurality of remotely located terminals connected to a commercial computer via a server. Murphy's system provides such advertising information during a waiting period while a user's automated teller machine or terminal device is working on a task. Each terminal includes a hard disk, which stores compressed video information containing a video advertising message transmitted over telephone lines from a respective server. The compressed video information is decoded prior to display on the terminal. U.S. Patent No. 5,557,721 to Fite et al. discloses a method and apparatus for displaying advertisements and printing coupons on remote systems of a distributed data processing system. A host system downloads display files, command files, and transaction files describing the advertisements to be displayed and coupons to be printed to a remote system. The remote system keeps statistics on the number of times each

advertisement is displayed and the number of times each coupon is printed, and periodically relays these statistics to the host system via a modem and a transmission line.

Fite et al.'s remote system is a reverse vending machine which accepts empty beverage containers in return for a plurality of methods of remuneration. While the beverage containers are being inserted into the reverse vending machine, Fite et al.'s system displays static or animated advertisements and public service announcements.

U.S. Patent No. 5,724,521 to Dedrick discloses a method and apparatus for providing electronic advertisements to end users in a consumer best-fit pricing manner that includes an index database, a user profile database, and a consumer scale matching process. The index database provides storage space for titles of electronic advertisements. The user profile database provides storage for a set of characteristics which correspond to individual end users of the apparatus. The consumer scale provides a mechanism by which a metering server can determine how valuable the end users coupled to that server are to an advertiser. The advertiser indicates how much it is willing to pay for access to those end users, based on the consumer characteristics of those end users.

U.S. Patent No. 5,740,549 to Reilly et al. discloses an information and advertising distribution system. The system includes an information server having an information database. The information database stores advertisements for display when subscriber's workstation meets pre-defined idleness criteria.

U.S. Patent No. 5,745,882 to Bixler et al. discloses a method and instructions for allowing a buyer and advertiser to interface with an electronic classified advertising system accessible via the public switched telephone network. Individual buyers or sellers or larger entities call into the system to either place ads or to access the ads on the system. Users elect to receive a fax of selected ads or to be notified when a new ad arrives in the system which meets desired search criteria.

U.S. Patent No. 5,748,931 to Jones et al. discloses an information display system. Image data and separate text data is received from a publisher. Jones et al.'s image data requires enhancement of visual quality and are sharpened to improve the definition and make it clearer for display. Jones et al. displays the text of an article in the left hand part of the display and the image

of the page on which the article on the right hand side of the display. The image of the page is characterized as a page preview. The left hand side of the display may also include a processed image, which originated from the image portion on the page preview. The images are processed by processing encapsulated postscript files to form 72 DPI bitmaps.

U.S. Patent No. 5,835,923 to Shibata et al. discloses a newspaper on-demand transmission system for broadcast television transmission of newspapers from multiple newspaper companies. The transmission system formats newspaper information into information suitable for transmission and viewing of a newspaper. The newspaper information, is converted into electronic newspaper information through a newspaper page editing and transmitting device. The newspaper editing and transmitting device codes each article in a newspaper by identifying and ranking hierarchically sub-articles, which consist of an article's headline, photograph, caption for a photograph, and text.

Shibata et al.'s sub-articles together comprise newspaper article information, which in turn is combined with control information for use in transmitting, filing, and searching newspaper on-demand data. The control information includes date and time codes for broadcasting the newspaper on-demand data, a newspaper company code, a newspaper type code, a newspaper name code, a date of issue code, an edition code, and a page code.

In operation, a user views the articles on a page displayed in low magnification, scrolls, zooms, and/or clips a desired article, and displays the desired article thus obtained on the display device in high magnification for acquiring details of the article.

U.S. Patent No. 5,838,790 to McAuliffe et al. discloses an advertisement authentication system for detecting and preventing tampering of advertisement files downloaded from a server system to a user's client computer. The client computer and the server system are provided with a random number hashing key, an encryption key, a key-dependent hash function, and a symmetric block encryption function. The user downloads an advertisement for off-line viewing in compressed plain text format along with an encrypted fingerprint to the client's computer.

According to McAuliffe et al., the client's computer decrypts the fingerprint and compares the result to a fingerprint calculated locally

for the downloaded advertisement. Upon a failed authentication, the downloaded advertisement is deleted.

U.S. Patent No. 5,845,262 to Nozue et al. discloses a system for transferring information from a newspaper, a magazine, and an advertisement by dot data. Nozue et al. discloses a center for collecting electronic press information, transmitting same by satellite communication or terrestrial lines to electronic press information vending machines communicatable with portable terminals of users. Nozue et al. forms the dot data using a standard scanner and then compresses the data prior to transmission.

U.S. Patent No. 5,864,823 to Levitan discloses a system for delivery of commercials or other advertising information to an interested recipient's computer via a non-addressable television broadcast. The recipient themselves never see the advertising messages. Rather, the recipient's computer compares data in preliminary messages associated with the advertisements with the recipient's data profile. The computer selects and stores each advertisement whose content matches the interest of the recipient.

In view of the above references, I have recognized that there is a need for a method and/or system for converting print-ready media into a format amenable to rapid access via a standard computer network. By way of example, I have appreciated that there is a need for a computer-network transmittable advertisement generated from a print-ready format and including more than one size and/or resolution.

I have further recognized a need for a computer architecture for converting print-ready media into a format amenable to rapid access via a standard computer network. To this end, I have appreciated a need for a computer architecture including a newspaper operating unit communicatable with a Web server, which in turn is communicatable with the computer network. In such a newspaper operating unit, I have recognized a need for a press interface proxy server communicatable with one or more advertisement sources so as to receive at least one input image. In such a newspaper operating unit, I have appreciated a need for an image conversion server that at least receives one or more input images, generates output images from each input image, and transmits same to the Web server.

In addition, I have recognized a need for the conversion server to associate a manifest with the output images for each input image, and transmits that manifest associated with the output images to the

Web server. I have appreciated a need for the input image to comprise an advertisement including at least one picture and/or text. For each such advertisement, I have recognized a need for the manifest to include an advertiser name, an advertiser account identification, an advertisement identification, one or more dates of publication for the advertisement, one or more advertiser categories, and/or one or more advertisement categories. I have furhter recognized a need for the text field to include a font field, an image field, an e-mail transmission capability field, an on-line purchasing capability field, and/or an on-line coupon field.

Furthermore, I have recognized a need for each manifest to be searchable by a search engine remote from the Web server via the computer network. I have recognized, alternatively, a need for the Web server to include a search engine for searching one or more manifest characteristics.

In view of the above, I have determined that it would be desirable to provide a system and/or method for generating a higher click-through rate for interested viewers of Web advertisements than is presently available.

I have also determined that it would be desirable to provide a system and/or method for facilitating faster, more efficient, and/or more manageable loading and/or re-loading of advertisements for display on Web pages.

SUMMARY OF THE INVENTION

It is, therefore, a feature and an advantage of the instant invention to provide a system and/or method that generates a high click-through rate for interested viewers of Web advertisements. That is, for example, those viewers who are shown an image of a Web advertisement having the greatest resolution according to the present invention, will likely be those most interested in the content of the advertisement.

It is another feature and advantage of the instant invention to provide a system and/or method for facilitating faster loading and/or re-loading, for display, of Web pages having Web advertisements. That is, for example, an image of a Web advertisement with the lowest feature-recognizable resolution is initially displayed on a Web page having general, generic, and/or initial user traffic. In this example, this image includes a click-through feature to provide an interested

user a higher resolution image of the same Web advertisement. Advantageously, the first image contains a limited amount of data which is less data than the second image, thereby minimizing load time of the first image and hence the Web page having the first image.

Moreover, the instant invention, which optionally pre-generates multiple images of varying resolution, necessarily obviates generation of a user-selected image. That is, the user-selected image is simply loaded for display, for example, in a user's Web browser. Such loading facilitates faster display and an improved Web surfing experience for the user.

More specifically, the instant invention provides a system for providing content delivery via a computer network. The system includes at least one newspaper operating unit communicatable with a Web server, which is communicatable with the computer network. Each newspaper operating unit includes an open pre-press interface ("OPI") proxy server communicatable with one or more advertisement sources so as to receive at least one input image. The OPI proxy server parses at least a text field from each input image. An image conversion server receives from the OPI proxy server one or more input images and at least the parsed text field, and generates output images from each input image. Each of the output images includes a respective resolution of the input image. The image conversion server transmits the output images, the parsed text field, and at least one computer network address associated with the newspaper operating unit to the Web server.

Optionally, the image conversion server associates a manifest with the plurality of output images for each input image and transmits the manifest associated with the plurality of output images to the Web server. By way of illustration, the input image comprises an advertisement including a picture and/or text. The manifest includes for each advertisement an advertiser name, an advertiser account identification, an advertisement identification, one or more intended dates of publication for the advertisement, one or more advertiser categories, and/or one or more advertisement categories. Optionally, the at least one text field includes a font field, an image field, an e-mail transmission capability field, an on-line purchasing capability field, and/or an on-line coupon field.

In accordance with another embodiment of the instant invention, a method of providing content delivery via a computer network is

provided. The method includes the following sequential, non-sequential, or sequence-independent steps. One or more input images including a graphical image and/or text are generated at a content provider. By way of illustration, the generating step is performed by any of a variety of standard advertisement sources, such as standard scanners, standard digital cameras, standard photo CDs and stock photography, standard paint programs, and/or standard illustration programs.

Each input image is parsed at the content provider into a text field, a font field, an image field, an e-mail transmission capability field, an on-line purchasing capability field, and/or an on-line coupon field. By way of example, the parsing step is performed by an image input server or an OPI proxy server.

One or more input images are converted prior to selection by a user into a plurality of output images at the content provider. Each of the plurality of output images includes a respective resolution of the input image. The converting step, for example, is performed by an image conversion server. The output images are associated at the content provider with a manifest. By way of illustration, the associating step is performed by the image conversion server.

The output images, at least one computer network address associated with the content provider, and at least one of the associated manifest, the text field, the font field, the image field, the e-mail transmission field, the on-line purchasing field, and the on-line coupon field are transmitted from the content provider to a content aggregator. For example, the transmission is from the image conversion server to a Web hosting server. The content aggregator is accessible to the user via the computer network or other standard means.

Optionally, the instant method further includes searching by a user via a search engine the advertiser name, the advertiser account identification, the advertisement identification, the one or more intended dates of publication for the advertisement, the one or more advertiser categories, the one or more advertisement categories, and/or one or more Web site characteristics. The Web site characteristics include an e-mail transmission capability, an on-line purchasing capability, and/or an on-line coupon.

In another embodiment of the instant invention, a system for providing content delivery via a computer network is provided. The

system includes means for generating at a content provider one or more input images including a graphical image and/or text. The system also includes means for parsing at the content provider each input image into a text field, a font field, an image field, an e-mail transmission capability field, and on-line purchasing capability field, and/or an on-line coupon field.

The content provider includes any author and/or compiler of works created by other authors. For example, the content provider includes a media operating unit. The media operating unit includes, for example, a newspaper, a magazine, and advertiser circulars.

The content provider further includes, for example, an individual, group, or business that provides information for viewing or distribution on the Internet or on private or semiprivate intranets or extranets. Content, in this sense, includes not only information, but also video, audio, software, listings of Web sites, and product-specific materials such as online catalogs. The content provider, for instance, includes a service business that makes Internet information resources available to users. Content providers include online services, such as America Online and CompuServe, Internet Service Providers (ISPs), and media companies representing television, long-distance telephone, and publishing industries.

Means for converting prior to selection by a user each of the input images into output images at the content provider is provided. Each of the output images includes a respective resolution of the input image. The system further includes means for associating at the content provider the output images with a manifest.

The system also includes means for transmitting from the content provider to a content aggregator the output images, one or more computer network addresses associated with the content provider, as well as the associated manifest, the text field, the font field, the image field, the e-mail transmission field, the on-line purchasing field, and/or the on-line coupon field. The content aggregator is accessible to the user via the computer network.

The content aggregator, for example, aggregates content provided by a content provider. By way of example, the content aggregator includes an Internet portal Web site and/or a central Web hosting facility. The content aggregator includes, for example, an organization or business that groups Internet-based information by topic or area of interest, for example, sports scores, business news,

or online shopping, to provide users with a means of accessing that content from a single location. In terms of push technology and multicasting, for example, the content aggregator includes a service business that mediates between subscribers ("customers") and content providers by gathering and organizing information for broadcast over the Internet. The Content aggregator supplies subscribers with client software through which content providers broadcast (push) information via "channels" that allow users both to choose the kind of information they receive and to decide when they want it updated.

The system includes means for searching by a user the advertiser name, the advertiser account identification, the advertisement identification, the one or more intended dates of publication for the advertisement, the one or more advertiser categories, the one or more advertisement categories, and/or one or more Web site characteristics. The one or more Web site characteristics include an e-mail transmission capability, an on-line purchasing capability, and/or an on-line coupon.

In another embodiment according to the instant invention, a system for providing content delivery via a computer network is provided. The system includes a Web hosting server providing user-access via the computer network to output images for a content provider, the output images retaining common subject matter and varying in resolution, the output images including one or more computer network address associated with the content provider. The output images have associated therewith a manifest.

Optionally, each manifest is searchable by a search engine remote from the Web hosting server via the computer network. Alternatively, or in addition, the Web hosting server includes a search engine for searching the at least one manifest characteristic.

Optionally, the content provider includes an image input server receiving one or more input images, and an image conversion server communicatable with the image input server and converting the input image into the output images retaining common subject matter and varying in resolution.

The present invention is in some respects counter-intuitive because one current practice over the Internet revolves around providing or delivering high resolution images faster to the user, requiring more sophisticated equipment or hardware.

However, I have determined that current display technology that is being used on the Internet is substantially inferior in resolution to, for example, newspaper resolution. For example, a display monitor generally will have approximately 1024 pixels across, and it will be approximately 10 inches or more in width accommodating the 1024 pixels resulting in approximately 100 pixels per inch. The newspaper advertisement, however, has a resolution of 300 pixels per inch, i.e., 300 dpi, which is considerably more than a typical computer or video monitor resolution. Thus, more detail is derived from a printed paper/newspaper than a typical computer monitor. For example, smooth curves/lines may be printed on the newspaper, whereas on a computer screen, smooth curves are a combination of pixels that are not generally smooth.

Thus, the typical manner in which images are delivered over the Internet or other medium is focused on delivering the highest quality images over a reasonable time period so that the user can receive a higher quality image versus other Web sites. On the other hand, the present invention is an opposite approach which is designed to not send higher quality images, but to send lower quality images with text, and to allow the user to request one or more higher quality versions of the images, if interested. This, then, limits the amount of data that is sent over the Internet and/or other connected networks, thereby increasing the transmission speed of the information, and minimizing unnecessary problems that may be experienced by computers, such as locking up and the like, if too much data is sent without even being requested by a user.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other

embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there is illustrated preferred embodiments of the invention.

NOTATIONS AND NOMENCLATURE

The detailed descriptions which follow may be presented in terms of program procedures executed on a computer or network of computers. These procedural descriptions and representations are the means used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art.

A procedure is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. These steps

are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared and otherwise manipulated. It proves convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like. It should be noted, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

Further, the manipulations performed are often referred to in terms, such as adding or comparing, which are commonly associated with mental operations performed by a human operator. No such capability of a human operator is necessary, or desirable in most cases, in any of the operations described herein which form part of the present invention; the operations are machine operations. Useful machines for performing the operation of the present invention include general purpose digital computers or similar devices.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is an architecture of a standard newspaper operating unit;

Figure 2 is a high-level architecture according to an embodiment of the instant invention;

Figure 3 is a detailed architecture according to an embodiment of the instant invention;

Figure 4 is an illustrative front end application interface according to an embodiment of the instant invention;

Figure 5 is an illustrative search results display using pre-selected categories;

Figure 6 is an illustrative front end application having a sample key word search;

Figure 7 is an illustrative key word search result display;

Figure 8 is another illustrative key word search result display;

Figure 9 is an illustrative advertisement;

Figure 10 is an illustrative on-line coupon;

Figure 11 is an illustrative low-resolution version of a sample image;

Figure 12 is an illustrative intermediate resolution version of the image in Figure 11;

Figure 13 is a portion of an illustrative high-resolution version of the image in Figure 11;

Figure 14 is another portion of the illustrative high-resolution version of the image show in Figure 13;

Figure 15 is a method according to an embodiment of the instant invention;

Figure 16 is an illustrative embodiment of a computer and assorted peripherals;

Figure 17 is an illustrative embodiment of internal computer architecture consistent with the instant invention; and

Figure 18 is an illustrative embodiment of a memory medium.

DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION

The present invention provides content delivery of information, such as advertising information, or other information present to the user. I have determined that people do not necessarily browse on the Internet ("Net") for a specific number of pages. Rather, I have recognized that people browse for a specific amount of time. For example, a person spends a half hour during lunch or an hour after dinner browsing or "surfing" the Internet. I have recognized that the faster content is delivered to a customer or user, the more advertisements the customer will see during that time. I have appreciated that if the customer happens to see an ad having a minimum and/or threshold amount of information which is specifically of interest to them, then the customer can spend more of their time getting more information, and/or more details and detailed renderings of that image or ad.

For completeness, it is to be understood that the instant invention is equally applicable to any standard network of computers, of which the Internet is an example. Such networks of computers, for example, include a standard communications protocol, such as Transmission Control Protocol/Internet Protocol ("TCP/IP"), Open Systems Interconnection protocol ("OSI"), User Datagram Protocol ("UDP"), Wireless Application Protocol ("WAP"), and/or Bluetooth wireless communications protocol or any other network-type protocol, local and/or global.

The present invention allows the determination of the user's interest as fast as possible so that the user is directed to the desired location to obtain more information, such as additional information on services, products, capabilities, educational materials, and the like. The more interested the user is in the ad or image, the more likely he will be to "click through" or "drill down" to see more about it. In turn, it will be more likely that he will actually respond to that ad or image in a positive way. It is to be understood that "clicking" refers, by way of example, to user-selection of a hyperlink in a Web page to be directed to another Web page or other method of obtaining additional information.

The present invention therefore maximizes the ability to obtain better click rates than is otherwise available in today's Internet industry. For example, standard click-through charges include a different model for every business. Generally, a first charge is for what is called impressions, which include the amount of time an ad is delivered to a user just to see. This increases brand recognition and the like. Another charge is for the click-throughs. For example, a customer sees an ad and responds to it. Clicking on the ad brings the user to the advertiser's site and/or to, in the present invention, for example, an expanded or more detailed version of the ad. I have recognized that such clicking on the ad shows an interest in the particular ad, which is something which advertisers like to know and which provides quality and/or quantity feedback on the advertisement and/or the subject of the advertisement.

Accordingly, the present invention advantageously increases the amount of initial clicks during the specific amount of time spent browsing the Internet because the user does not have to wait the length of time otherwise spent waiting for generation of a Web page including graphics or font intensive Web advertisements that may provide little or no interest to the user. The user can browse more ads quicker via the instant invention and then can get to the desired information faster, thereby increasing the effectiveness of the advertisement and simultaneously the value and/or the income resulting therefrom.

The present invention incorporates my observation that images, such as ads, that are run in print media, such as a newspaper, are not designed with the Internet and/or other computer networks in mind. In contrast, advertisements on the Internet are generally designed

specifically for Internet delivery, and are generally small, square or elongated banner ads which are sometimes, for example, animated.

In the present invention, the ads include content in and of themselves. Optionally, the ads are not just "click me and go find something;" the ads optionally include the desired information instead of only a hyperlink to a Web site having the desired information. For example, real estate ads according to the instant invention optionally tout agents, and/or a number of properties that they are trying to sell. The ads optionally include "fine print", e.g., legalese at the bottom of the ad, and/or other standard matter that legally must accompany the ad.

In accordance with one embodiment, the present invention optionally makes the largest version of the ad available to users on the Web so that even fine print is readable. An image like that, on a 28.8k baud modem, for example, takes a user 5-10 minutes just to download that one detailed image. Accordingly, in the present invention, the user is able to obtain the image and/or text having the readable fine print when the user is sure that he really wants to receive the image. I have determined that, otherwise, the detailed image and/or text need not always be displayed. Rather, in the present invention, other versions of the image and/or text with less resolution are displayed, for example, on a single page, where the user can get the gist of each of the ads. The user can then click through to an image and/or text having a higher resolution to find out details of the advertisement, which may not be visually discernable in a lower resolution image.

In addition, in an embodiment of the present invention, text is extracted or copied from the files. For example, in the newspaper printing process, the advertisements are supplied to the newspaper generally in a standard, substantially print-ready format, such as a PostScript or a PDF format. Such print-ready formats include, for example, images, text, fonts, and/or the like, which makes the file smaller for the advertisers to deal with and makes it easy to edit. However, the press wants these advertisements in files that are guaranteed to print. Accordingly, I have recognized that a different file format is needed for the print press than is required for other purposes, such as, Web advertising or Web publishing.

For example, I have recognized that there are many occasions where ads do not print very well on the Web. When the ad gets to the

newspaper, the ad must be in a format that the printing press can understand. By the time files reach that format, however, the text cannot be extracted from the image, and the image with text gets printed on the print page. Any textual content of these images is thus captured before it gets "flattened out" in printing parlance.

As a matter of reference, it is helpful to describe an architecture of a standard newspaper operating unit 290, as shown in Figure 1. Standard ad sources are inputted to a open pre-press interface ("OPI") server in a manner described herein below. In general, the OPI server includes an open image distribution server. In general, a raster image processor ("RIP") is a hardware or combination hardware, software product that converts images described in the form of vector statements into rasterized images or bitmaps. The OPI server and the RIP communicate with each other, and the OPI transmits print-ready files to a printing press, not shown, as indicated in Figure 1.

OPI is a workflow protocol that addresses problems associated with the large amount of data in image files and the productivity losses that result from manipulating such large files within a page layout application. The OPI convention defines how to embed instructions in an output file, such as a PostScript output file, to tell an output device where and how to merge various text and graphics components on a page.

To work within a standard OPI model, a user creates jobs as follows. The user designs pages for print, for instance, using standard desktop publishing programs. On these pages, the user composes the editorial content, line work, charts, ads, and/or other page elements. The user then places photos and/or other high-resolution graphics on the page using a screen-resolution preview image, which is, for example, a low-resolution TIF image created by a color-separation program, such as Photoshop by Adobe Systems Incorporated of Edinburgh, Scotland.

The preview image is alternatively called a proxy image, a "for position only" ("FPO") image, a callout file, or a view file. By way of example, low-resolution FPO images reside on a user's workstation and need not reside at the output device. In such a case, the output device need only identify, for example, the storage path and/or filename to be matched with the storage path and/or filename on the

server for the output device so that the high resolution images can be swapped for the low-resolution FPO images at the output device.

While the page is being laid out and proofed, the high-resolution images can be edited as necessary and stored on a server. The user then sends the resulting job to a standard imagesetter. The imagesetter, using standard OPI interpreter software, reads the pathname, fetches the high-resolution image from the server, and merges the image in position with the text and line work.

By way of example, service bureaus, newspapers, and/or magazines scan images with a standard scanner. They keep high-resolution versions of the scans, while color separations are prepared and transferred to an OPI server. For example, the service bureau then provides low-resolution equivalents which can be imported into documents as FPO images for a hardcopy page layout.

Working with the FPO images keeps the document size smaller than is otherwise possible and speeds up screen redrawing time during the design phase of the page layout. When artwork is sent back to the service bureau for final imaging to film, the original high-resolution files are automatically substituted for the low-resolution versions thereof. That is, the FPO files or images, are treated as placeholders for the high-resolution files that were stripped into the document or page layout at a later time to yield a final work.

I have appreciated that a standard press interface, such as described above, can be advantageously applied to the problem described above concerning on-line ad throughput. Specifically, I have recognized that low-resolution images, such as the FPO images generated, for example, by a standard press interface, are optionally suited for on-line ads. Such low-resolution images provide sufficient detail to apprize a viewer or customer as to the subject matter of the image or advertisement. Should the viewer wish to obtain more information, clicking on the image, for example, yields an image of higher resolution. The steps are optionally performed interactively to yield an image of highest available resolution, if more than two resolution versions of a same image are available. The instant invention supports standard file formats for the images, such as, Scitex .CT, RGB .TIF, CMYK .TIF, .DCS, four-color .EPS, Photo .YCC, PICT, .JPG, Joint Bi-level Image Experts Group ("JBIG"), run-length MIT or MR, .GIF, and .BMP formats.

The architecture of the instant invention will be described, by way of example, with reference to Figures 2 and 3. From a macroscopic perspective as shown in Figure 2, a number of media operating units, such as newspaper operating units 300, 302, 304, communicate with users 250, 252, 254 via a standard computer network 240, such as the Internet. For example, the instant newspaper operating units 300, 302, 304 interface with the Internet 240 via a standard Web hosting facility 210.

An embodiment of the present invention provides an architecture for implementing or delivering, for example, an originally print-ready advertisement via a standard computer network. Figure 3 shows an embodiment of the architecture of the present invention from the perspective of one of the instant newspaper operating units 300. It is to be understood that other newspaper operating units 302, 304 optionally include same or similar architectures. The architecture advantageously includes a pre-flight/OPI proxy server 100 through which all of the print-ready matter, such as artwork or images associated with, for example, a print-ready ad, passes. I have recognized that the art/image, such as for an advertisement, which is processed by a standard press interface, such as the standard open press interface or open prepress interface ("OPI"). The pre-flight server 100 receives images, such as advertisements from one or more advertisement sources 120, which optionally include a standard IBM compatible personal computer 122, a standard scanner 124, and a standard Apple Mac II personal computer. Other suitable, standard advertisement sources are acceptable.

The present invention includes an additional function and/or module that extracts or copies any text that is available from before the OPI server 110 can reduce the images to a non-usable format as in the standard process. The OPI server 110 sends the images to one or more raster image processors ("RIPs") 130. The RIPs 130 take the files that are in the format that is easily editable using standard computer word processors and reduces the files into a standard press-friendly format, where the images are no longer documents per se. Optionally, the OPI server 110 and the RIP 130 reside on one server.

Any feasible number of standard ad sources 120 may be used in the present invention. Examples of standard ad sources include standard IBM-compatible personal computers 122, standard scanners 124, and standard Apple MacIntosh personal computers 126, which present or

transmit the data for the advertisements to the pre-flight server 100 in a similar or same standard format to that presented to the OPI server 110. The pre-flight server 100 essentially acts as an OPI proxy, which sends the data downstream to the OPI server 110. For example, the OPI proxy server 100, according to the present invention, also extracts text from an image and then associates it with the image.

The OPI server 110 converts that data to a format ready for the press, described below. There is generally a standard format or various standard formats that the sources supply the data, for example, PostScript format and PDF format both of which were developed by Adobe Systems, which is acceptable for use with the instant invention. Other standard formats, alternative to the PDF and PostScript formats, such as encapsulated PostScript format, are also acceptable.

Thus, the OPI server 110 receives data of any standard format, such that the files are formatted and/or converted in a standard manner where text appearing in the image is stored as a text stream and/or text object. The text data is identifiable as being separate from the image data in that document. Even though a copy of the text is separate from the image, the text is also in the image as image data. That is, the data representing words or textual information is in the image as well as the text portion. The data is stored in the file as text and/or with the proper font. Any data stream or file that displays a PDF format, for example, advantageously and optionally draws the text for display on the fly or in real time.

An embodiment of the process of the present invention starts at the ad sources. PDF files, or files of a standard format, are sent to the pre-flight or OPI proxy server 100. The pre-flight server 100 takes that information and sends it on to the OPI server 110, after ensuring that the fonts that are used are ones that the newspaper or other source supports, for example, based on predetermined criteria associated with one or more newspaper or source specific information. Thus, the pre-flight server 100 optionally provides a check before the information is transmitted onto the press or other destination, such as the OPI server 110.

In the present invention, the pre-flight server 100 and/or software receives and analyzes the text of the ad. The pre-flight server and/or software parses the data files, recognizes the text fields, and recognizes the font parts and image parts. The parsed text is then also saved to a file which includes the ad text. The file

storing the ad text may be saved to any retrievable location. In accordance with one embodiment of the invention, the file storing the ad text is saved to the image conversion server 180, which is optionally remote from the OPI proxy server 100.

Optionally, in the instant invention, the output images of varying resolution are automatically generated in the instant invention, when new high-resolution images are placed or stored in one or more "hot folders" on, for example, the OPI proxy server 100. A "hot folder," according to the instant invention, includes a folder or directory that is continuously, periodically, or aperiodically monitored for high-resolution or predetermined resolution image files. After output image generation, the original high-resolution image and/or the generated output images are optionally moved to a respective subfolder of the input "hot folder."

Optionally, a single server includes the OPI proxy server 100, the image conversion server 180, and/or the OPI server 110. Optionally, the pre-flight server 100 and the image conversion server 180 includes a standard image compression server. For example, the image compression server uses a standard EPS/JPEG procedure to compress photos, or other print media images, to output images, each having a respective resolution. In such a configuration, front end system 160 and the image or ad sources 120 communicate with the image compression server, which in turn communicates with the Web hosting facility 210.

In accordance with one embodiment of the invention, the OPI server 110 still receives the data in essentially a standard format, and is beneficially not affected by the instant system and/or process described above. The pre-flight server 110 extracts or takes the text and stores it into one or more files at the remote image conversion server 180. For example, an ad image PostScript file 140 and/or ad text 150 are sent from the OPI server 110 to the remote image conversion server 180. By way of illustration, the remote image conversion server includes a OneVision Asura server to intercept workflow to the OPI server 110 and to capture ads before the OPI server 110 sends the ads to the RIP 130. The images are converted from, for example, PostScript format to GIF formats of various resolutions. Together the text and images are packaged with a manifest and then sent across a network, such as a WAN 200, to a central Web server 200, for example, located at a corporate Web hosting facility 210.

The remote image conversion server 180 receives the images, although other devices or configurations may be used in the present invention. In accordance with one embodiment of the invention, advantageously, the images are not obtained from the pre-flight server 100, but rather from the OPI server 110 because (1) by the time the images are in the OPI server 110 the image itself has been cleaned up for conveniently handling, and (2) the OPI server 110 optimizes the image for rendering in accordance with the rendering process of the present invention.

For example, in the present invention, the image received from the OPI server 110 is transformed into three separate display versions that are put on the Web. Therefore, I have determined, using the image from the OPI server 110 is easier. For example, the OPI server 110 has reduced the image to a flat, easily parseable, easily rendered image at that point. Accordingly, in the present invention, the PostScript image, for example, can be easily used to create multiple versions of the image, in accordance with the process of the present invention.

The images are tied to the text in any standard data file format. For example, in accordance with one embodiment, the present invention recognizes and associates the images with the text through the actual file names. The pre-flight server 100 saves the text into individual files that are named after, by way of illustration, the ad sequence or identification number with a ".txt" extension, for example. When the images are pulled out of the OPI server 110, the images are saved and retrievable via the ad sequence number, or other standard indexing mechanism. Accordingly, an indexing scheme associates the ad text which has been extracted from the PDF file with the ad image which is received from the OPI server 110.

The present invention further includes a manifest 170 which is a file or report or set of files and reports that come from the front end system 160. The front end system 160 includes a front office, a billing area, and/or the like for the media operating unit or publisher, for example, a newspaper. Accordingly, by getting these reports out of the front end, an ad number is associated with an advertiser which is associatable later when the ads are published. Accordingly, the manifest 170 indicates on whose behalf the ad is being made, i.e., the advertiser. Accordingly, for example, at the image conversion server 180, pieces of information are optionally tied together, for example, an advertiser, an ad, and/or content of the ad.

A central or corporate Web hosting facility 210, according to the instant invention, receives a package of ads via, for example, the WAN 200 and unpacks the same. The images are transferred and/or copied to an optionally publicly accessible folder on the Web server 220. The text of the ads are saved or stored in the database, and URLs referencing the images are associated with corresponding text and a respective advertiser.

The central Web hosting facility 210 optionally includes a database 230 of advertisers where advertisers are placed into categories. When an ad is associated with an advertiser, the advertisement is also categorized. For example, an auto dealer is in the auto category of the database 230, so auto dealer ads are available under the auto category, to be searched by category. Text searching may also be performed to pull up just ads that contain the particular key word.

Manifests 170, according to the instant invention, allow the publisher to make associations. The manifests 170 optionally include different formats to recognize formats for one or more newspapers or print-media sources. Core information for a manifest includes, for example, the account number for the advertiser, the ad identification number or character sequence, for that the advertiser has run, and/or the date that advertisement is supposed to run in the newspaper. Such core parameters for the manifest 170 are optionally used for tracking purposes. Other core information for a manifest 170 is also acceptable.

Thus, for instance, the manifest 170 primarily associates the ad with the advertiser. The manifest 170 then provides the advertiser an ad number which a user can search on the Web, as well. For example, the user 250 can actually request advertisements by the name of an advertiser, because the user would be unaware of a specific ad number as ad numbers are rarely or never published, exposed or readily accessible to a user/viewer of the ad. Accordingly, for example, the manifest 170 is an internal document that permits a newspaper or print media division to keep track of an advertisement from production to composing to printing.

For example, the manifest 170 allows the Web user 250 to say effectively, "Show me Donald Florist advertisements." Similarly, the manifest 170 allows the Web user 250 to request, for example, all Dillard's store ads by taking the manifest 170 and matching the

manifest with the ad. So if a user 250 is looking for a Dillard's ad, all of the ads for that particular store are displayed. Thus, the remote image conversion server 180 receives the manifest 170, the ad text 150, and/or the ad image 140 and copies the image into multiple versions, such as high resolution, low resolution, and/or thumbnail images, and advantageously associates these different versions with the text and the manifest.

This information is then sent across, for example, a wide area network ("WAN") 200 or other standard network facility, to the central Web hosting facility 210. The central Web hosting facility 210 is optionally the location that is prepared to store the results for many different newspapers even though they will largely be delivered separately. Other standard storage may optionally be used, instead of, or in combination with central web hosting facility 210. The central Web hosting facility 210, for example, includes at least one Web server 220. Optionally, the central Web hosting facility 210 includes multiple, mutually communicatable Web hosting facilities. For example, if a user 250 is viewing the Naples News Web site, the user is only looking at ads from the Naples newspaper, even though the information is all coming out of the same location, namely, the central Web hosting facility 210 which optionally serves multiple newspapers and/or other media operating units.

An embodiment of a method according to the instant invention is described as follows, with reference to Figure 15. In step S100, an input image including a graphical image and/or test is generated at a content provider. In step 110, the input image is parsed at the content provider into a text field, a font field, an image field, an e-mail transmission capability field, and on-line purchasing capability field, and/or an on-line coupon field. In step S120, the input image is converted prior to selection by a user into output images at the content provider. Each of the output images include a respective resolution of the input image.

In step S130, the output images are associated at the content provider with a manifest. In step 140, the output images, the URL of the content provider, and one or more of the associated manifest, the text field, the font field, the image field, the e-mail transmission field, the on-line purchasing field, and the on-line coupon field are transmitted from the content provider to a content aggregator. In step 150, an advertisement search engine is displayed.

In step 160, the user determines selected fields relevant to the desired advertisements. In step 170, advertisement search results are displayed. In step 180, the user selects one of the advertisements in the search result. If yes, operation continues to step S190. In step 190, the user has clicked on a low-resolution image of the selected advertisement to obtain a higher resolution image of the advertisement. If yes, operation continues to step 200. In step 200, the higher resolution advertisement image is displayed.

The present invention advantageously optionally provides the function of linking a single Web site with all newspapers together. Optionally, the single Web site includes an Internet portal. The Web site has associated therewith a particular newspaper or advertiser of information so that the information specific to a given media source is generally accessible via a respective Web site. These respective Web sites are the point where the user enters the instant front end application and makes a request via the Internet 240 to the central Web server 220. By way of example, Web users can access the central Web server 220 and request ads based upon the text of the ad or the categories associated with the advertisers. The Web users will optionally be given contact information, Web-site links, and progressively more detailed renderings of advertisements which were originally intended for print distribution.

Figure 4 shows the home page or front page for a Web end or front end application 400, according to the instant invention, as seen, for example, by Web user 250. Figure 4 shows a list of the user-selectable categories 410 of advertisements stored in the database 230 from, for example, accounting to vacations. The generality or specificity of the labels for the categories are only limited by practicality and aesthetic constraints. Optionally, the user-selectable categories only include the currently active categories, namely, those categories which include current advertisements. Additionally or alternatively, the home page includes a standard search engine 420 for users or viewers to search for specific ads based on user-defined key words, as opposed to individual pre-specified categories 410, such as in the above-mentioned list. An example of a key word search is, for example, "lawn chairs" for advertisements by companies selling lawn chairs. Other examples include ad text or slogans for businesses, and/or any other types of advertisement.

By way of example, Figure 5 illustrates sample search engine results, when the selected categories 410 are Accounting and Art Galleries. Figure 5 illustrates the Accounting selection search results 430, and the Art Galleries selection search results 440. The search engine 420 includes an optional sorting routine, for example, based on how much the advertiser has spent with the newspaper. By way of illustration, because Ritz Camera and Alan Production have purchased from the newspaper a print ad online, and the Accounting selection shows print ads by their print ad icons 450.

In contrast, for example, the B.P. Kazitoris & Company has paid for a Web site link as indicated by the Web site icon 460, an e-mail facility as indicated by the e-mail icon 470, and a description 480 of the business. So, for example the sorting routine of the search engine 420 ranks this company ahead of the other companies listed in the Accounting search results 430. Alternatively, other suitable standard sorting routines, such as those based on alphabetical order or total money paid for the advertisement, are used.

Similarly, for the Art Galleries search results 440, three companies are illustrated. For example, Victor Alexander is listed before Artifacts and Antiquities. Even though both companies have a Web site, Victor Alexander, for instance, also bought an ad in that day's newspaper, and therefore Victor Alexander is displayed first.

In addition to or alternatively, the search engine 420 includes other standard search routines. For example, such a search routine optionally includes user-defined fields, i.e., where to look for a search term. Such user-defined fields include advertiser or company names, image tags, advertiser or company URLs, and/or hypertext links.

Advantageously, the instant invention also offers other optional features and/or services to companies. For example, Figure 5 illustrates search results including companies that are in the database 230, for example, by virtue of having run an ad in a member newspaper operating unit in the past. Optionally, these companies have other amenities that they have purchased, which, for example, are used as criteria for the order that they are listed in the search results.

In accordance with the present invention, there are advantageously many ways that the results of this process can be used by the Web users 250, 252, 254. For example, one way to use the present invention is for finding businesses and others to put display

ads that normally show up in the classified section of a newspaper right in-line with the other textual classified ads.

Advantageously, the present invention uses the Web site in a unique way which tells the consumer how affiliated these companies are with the Web site. For example, the ability to e-mail the company or advertiser, for example, via an e-mail icon 470, indicates that a lot of information is handled for the company. Similarly, displaying of a print ad icon 450, for example, indicates that the company actually has an advertisement in a given day's newspaper.

For example, as shown in Figure 4, the Naples Daily News Web site is framed as a site for finding businesses. The Naples Daily News uses the present invention as a front end application for essentially a directory service. For example, a potential customer may be looking for accounting companies as described above.

Figure 7 is an illustration of sample keyword search results 510, where the keyword "auto" was inputted to the search engine 420 in Figure 6. For example, what is displayed is not necessarily even just business names. It optionally also includes text of the ads, and/or other data such as related services, products, or even unrelated advertisements from advertisers who consider it likely to obtain a favorable response by virtue of being included on the user interface displaying the results of the search. Generally, this search retrieves a list of what are, by and large, automotive companies, as illustrated in Figure 7.

Alternatively, a key word search can be made for music, the results of which are shown, by way of example, in Figure 8. Optional "buy-online" icons 490 identify e-commerce Web sites where a user can buy products and/or services online. Optional "Web site" icons 460, identify Web sites that merely provide information. For example, Figure 8 includes an illustration of Richard Wolf's print ad icon 452 which is, for example, linked to a Web page, such as illustrated in Figure 9, and an illustration of Jay & Kay's music coupon icon 502, which links, for example, the user to a Web page, such as illustrated in Figure 10. In operation, the Web user 250 sees the ad including, for example, the thumbnail image format which downloads relatively quickly. The Web user 250 can read everything in the linked image, for example, as shown in Figure 10, which optionally prints legibly and/or acceptably. The present invention advantageously provides multiple resolutions of an advertisement, for example, for a company, entity or

organization listed in search engine results. By way of illustration, the advertisement includes both text and image, and/or text associated with and/or within the image, which is searchable.

For example, Figures 11-14 illustrate multiple images of a print ad display for an advertiser, in this case, Bermuda Realty. Figure 11 is an illustration of an image having a coarse resolution, whereby the advertisement has a compact size, but has a size sufficient to provide enough information for the customer to determine whether he wants to receive more information and/or greater image detail. As shown in Figure 11, Bermuda Realty has three advertisements that ran in the newspaper. A viewer or Web user 250 can get the gist of the ads from looking at the ads, but cannot get any of the real details on any of them because of the coarse resolution. The user 250 can see from the maps generally to where in Florida the ad is referring, an overview of what the floor plans are, minimal price, and/or the like depending on the advertiser's composition of the advertisement. The advertisement allows the Web user 250 or viewer to appreciate enough of the advertisement to gauge an interest in it, for example, by guessing where the bathroom might be located from a displayed floor plan.

Next, the Web user 250 clicks on the image or on a "click for larger image" virtual button for a larger view, such as illustrated in Figure 12 which is an image, for example, scaled for best viewing on a standard output device, such as a standard printer or standard video monitor. So, for example, in such a case, the image of Figure 12 is scaled to roughly a popular page and/or monitor size. In this particular case, almost everything is readable, although some things are still fuzzy. That is, the Web user, for example, has difficulty in reading the phone number, and/or other matter in small print.

By clicking on the image or clicking on an appropriate virtual button, another option is a larger or full version of the advertisement as it appears in the newspaper or actual print, such as illustrated in Figures 13 and 14. This option is readily viewed on a standard display terminal, with some difficulty. As shown in Figures 13 and 14, the image is now much clearer, and the text is much larger, etc., than in the prior two image versions. The full image version, i.e., newspaper version of dimensions approximately 11" x 17" and larger, optionally may be printed so the user has a hard-copy of the image to text advertisement, albeit in a somewhat disjointed standard format for printing large images that are larger than standard printers that can

only accommodate 8½" x 11" or 8½" x 14" images. However, larger format printers will provide excellent results for the user when capable of printing the standard newspaper size format. Nevertheless, this image is usable, and indeed, highly readable, on standard PC video displays or monitors and/or paper.

Optionally, the present invention includes a user-selectable feature whereby a selected image is printable over multiple pages. Similarly, as shown by way of example in Figure 11, the present invention optionally includes a "print ad" button 520 with hyperlinks printing the ad in a scale appropriate for a standard printer. For example, the scale is pre-defined to accommodate a large image version or allows the large scale image to be easily printed in sections that can later be pieced or connected together, for example, using tape, and/or other standard connection means. A standard sealing algorithm is used to print the appropriate sections of the image onto, for example, multiple sheets of paper used by the printer (e.g., 8½" x 11", 8½" x 14, xx" x 17", etc.), to facilitate the appropriate assembly of the sheets at a later time. Alternatively, the scale is user-defined from among the multiple resolutions of the ad image. The system optionally populates the display one way for printing, and another way for viewing, for example.

With respect to the largest image, illustrated in Figures 13-14, the user can scroll it around so as to see as much of the detail as desired. Given the size of lower resolution images, the user optionally and easily scrolls around same. Optionally, at least one of the ads is in color, which can be used advantageously to attract user interest. The displayed resolutions are optionally dynamically chosen by the Web user 250. The thumbnail or smallest image is scaled, for example, so that it has a width of 290 pixels, and a height appropriate to keep the image's original aspect ratio. For the medium resolution image, the width, for example, is roughly 600 pixels. For example, the base width of a standard monitor, is scaled to approximately 600 pixels wide by an appropriate height, again depending on the scale of the image. The full version is the size of the original image. These scales are optionally changed or configurable to suit future advances in display technology.

Advantageously, in the present invention, the text is associated with the image, and the text is searchable. Further, the present invention refines the search by up front allowing the user a textual

search so that only the lowest resolution images or thumbnails that are close matches to the user's request are presented. The present invention allows the user to search on text such as company names, company descriptions, the content of an ad, and the like. Once specific text is matched, the present invention displays the information and the associated image to the user as described above.

The files storing the images and the text optionally have separate names. In the database 230 is stored, for example, an ad number, and the site from which the ad was received. An advertiser ID indicates which advertiser ran the ad. The text of the ad and the fields for the thumbnail and low resolution are also stored, which also associates with the images.

The thumbnail image is optionally named a.gif, the low resolution image b.gif, and the like. The names of the images and text stored in the database are optionally arbitrary. Optionally, the different files are kept synchronized based on, for example, the ad ID or other index. The image and associated text is preferably keyed and/or indexed on the ad ID and the site, advertiser, newspaper and/or publisher, although other indexing schemes may be used. For example, a first newspaper operating unit optionally has an ad #1 and an ad #1 as well. But, the first newspaper operating unit cannot have two ad #1s. The site is, for example, associated with the advertiser, and it is the advertiser's site in view of the manifest including also advertiser information.

Site map data, for example, is supplied programmatically. For example, when the first newspaper operating unit's data is loaded into the database, the site map data is appropriately supplemented or amended optionally automatically at the corporate Web hosting database 230. It is optionally part of the importing process that updates the database 230.

Accordingly, the present invention associates text with images, and provides searching and displaying to a user of the image based on a text-type search that is able to access words in image advertisements. In addition, there are various alternatives where the images come from, such as the OPI or other image source. For example, the image could be received from the pre-flight server 100, and/or through other ad sources. Further, there is no requirement that the image and text converge at the remote image conversion server 180.

While the present invention has been described with respect to

an Internet model, however, the present invention has application to other and all telecommunications areas, such as broadband communication, Palm Pilots®, wireless devices, fax machines, and/or the like. For example, a user may create an outstanding order that every time a specific ad comes up having words that fit the user's search criteria, such as a specific house or a Ford Mustang®, the present invention will store that ordered information and transmit (e.g., e-mail, fax, etc.) those ads with a combination of resolutions to the customer as soon as detected or at different intervals.

Similarly, the present invention optionally compiles ads as a customized newsletter. Because the thumbnail images, for example, are pre-generated, the present invention optionally sends the users e-mails with the thumbnails of ads that fit a predetermined or user-defined profile in which they might be interested. Optionally, the e-mails including the thumbnail images include links back to the live Web site so as to download the other images resolutions if the user's interest has been piqued.

The present invention advantageously and optionally uses any number of communication resources based on the availability and/or congestion status of the communication lines. For example, in the event a first Internet Service Provider is congested, the present invention can deliver the image and text information via another standard Internet Service Provider, wireless, direct communication, and the like, and vice versa.

During the instant pre-press process, text and/or images are, for example, put into a digital format. To capture images according to the instant invention, standard scanners, standard digital cameras, and/or standard photo CDs and stock photography are used. Alternatively, standard graphics applications to create artwork from scratch or to manipulate existing digital files to create new illustrations are used. During this image capture phase, text acquisition is optionally performed, for example, by manual keying into a standard word processing application and/or by using an optical character recognition ("OCR") scanner to scan long documents of existing text.

A standard scanner takes an image, such as a photograph, a 35 mm slide, or line art, and using a light source, electronically converts the image into binary data to store the image on a standard computer. By way of illustration, depending on the original images, standard drums, standard transparencies, and/or standard flatbed desktop

scanners are optionally used. Scanners using photomultiplier tubes ("PMTs")and those using charge-coupled devices ("CCDs") are advantageously used according to the present invention.

With respect to the digital cameras, standard camera-style and standard scanning back-style digital cameras are consistent with the instant invention.

Relative to photo CDs, multiple quality levels of the same image are optionally chosen. That is, users select the specific quality needed for a particular job. As described above, images for Web display and images to be printed in a magazine have dramatically different quality requirements.

Graphics are optionally created with standard illustration or paint programs. Illustration programs use vectors, whereas paint programs use pixels. Examples of standard illustration packages include Adobe Illustrator, Micrografx Designer, ClarisDraw, CorelDraw, Deneba Canvas, and Macromedia FreeHand. Examples of standard paint programs include Adobe Photoshop, Corel PHOTO-PAINT, Fractal Design Painter, Live Picture, Macromedia xRes, and Micrografx Picture Publisher. One of ordinary skill in the art will readily recognize that standard utilities, add-ons, plug-ins and extensions work with these and other such illustration or paint programs to extend their capabilities to the advantage of the instant invention.

As mentioned above, text acquisition according to the instant invention includes, for example, manual key entry into a standard word processing application and/or scanning by a standard OCR scanner. With respect to word processing applications, preferable word processing applications include the capability to save documents in a format that can be read and imported by an optional standard page layout application for performing fine type management therein. Further, preferable word processing applications include the feature of creating tags to define formatting, creating a table of contents, and/or index tags. Advantageously, time is saved, if the page layout application can simply import the file generated by the word processing application, formatting and tags included. Examples of standard word processing applications include Microsoft Word, Corel WordPerfect, and Lotus Word Pro.

Prior to composing a document according to the instant invention, it is, of course, necessary to design it, for example, prior to completion of image capture and text creation. Standard tools for

design and layout include standard workstations, standard servers, color management systems, fonts, and/or networking equipment for image editing and/or page layout and preparation for output.

By way of illustration, an optional standard centralized file server stores high-resolution images, fonts, layouts, and completed jobs to increase productivity. Advantageously, the centralized file server is configured to include an uninterruptible power supply and hot swappable drives.

To prepare jobs for color printing and/or viewing, often a variety of devices are used according to the instant invention, including standard monitors, standard color printers and standard image setters. Each device produces a certain range of colors. The color range is often device-specific. Accordingly, hues may vary from device to device during the job processing. Advantageously, the instant invention further includes an optional standard color management system that translates these device-specific colors into a standard common visual language that can be used at substantially all stages of prepress production, with the assurance of predictable color reproduction.

For completeness, Figure 16 is an illustration of a main central processing unit for implementing the computer processing in accordance with a computer implemented embodiment of the present invention. The procedures described herein are presented in terms of program procedures executed on, for example, a computer or network of computers.

Viewed externally in Figure 16, a computer system designated by reference numeral 900 has a computer 902 having disk drives 904 and 906. Disk drive indications 904 and 906 are merely symbolic of a number of disk drives which might be accommodated by the computer system. Typically, these would include a floppy disk drive 904, a hard disk drive (not shown externally) and a CD ROM indicated by slot 906. The number and type of drives varies, typically with different computer configurations. Disk drives 904 and 906 are in fact optional, and for space considerations, are easily omitted from the computer system used in conjunction with the production process/apparatus described herein.

The computer system also has an optional display 908 upon which information is displayed. In some situations, a keyboard 910 and a mouse 902 are provided as input devices to interface with the central

processing unit 902. Then again, for enhanced portability, the keyboard 910 is either a limited function keyboard or omitted in its entirety. In addition, mouse 912 optionally is a touch pad control device, or a track ball device, or even omitted in its entirety as well. In addition, the computer system also optionally includes at least one infrared transmitter and/or infrared received for either transmitting and/or receiving infrared signals, as described below.

Figure 17 illustrates a block diagram of the internal hardware of the computer system 900 of Figure 16. A bus 914 serves as the main information highway interconnecting the other components of the computer system 900. CPU 916 is the central processing unit of the system, performing calculations and logic operations required to execute a program. Read only memory (ROM) 918 and random access memory (RAM) 920 constitute the main memory of the computer. Disk controller 922 interfaces one or more disk drives to the system bus 914. These disk drives are, for example, floppy disk drives such as 904, or CD ROM or DVD (digital video disks) drive such as 906, or internal or external hard drives 924. As indicated previously, these various disk drives and disk controllers are optional devices.

A display interface 926 interfaces display 908 and permits information from the bus 914 to be displayed on the display 908. Again as indicated, display 908 is also an optional accessory. For example, display 908 could be substituted or omitted. Communications with external devices, for example, the components of the apparatus described herein, occurs utilizing communication port 928. For example, optical fibers and/or electrical cables and/or conductors and/or optical communication (e.g., infrared, and the like) and/or wireless communication (e.g., radio frequency (RF), and the like) can be used as the transport medium between the external devices and communication port 928. Peripheral interface 930 interfaces the keyboard 910 and the mouse 912, permitting input data to be transmitted to the bus 914. In addition to the standard components of the computer, the computer also optionally includes an infrared transmitter and/or infrared receiver. Infrared transmitters are optionally utilized when the computer system is used in conjunction with one or more of the processing components/stations that transmits/receives data via infrared signal transmission. Instead of utilizing an infrared transmitter or infrared receiver, the computer system optionally uses a low power radio transmitter and/or a low power radio receiver. The

low power radio transmitter transmits the signal for reception by components of the production process, and receives signals from the components via the low power radio receiver. The low power radio transmitter and/or receiver are standard devices in industry.

Figure 18 is an illustration of an exemplary memory medium 932 which can be used with disk drives illustrated in Figures 17 and 16. Typically, memory media such as floppy disks, or a CD ROM, or a digital video disk will contain, for example, a multi-byte locale for a single byte language and the program information for controlling the computer to enable the computer to perform the functions described herein. Alternatively, ROM 918 and/or RAM 920 illustrated in Figures 17 and 18 can also be used to store the program information that is used to instruct the central processing unit 916 to perform the operations associated with the production process.

Although computer system 900 is illustrated having a single processor, a single hard disk drive and a single local memory, the system 900 is optionally suitably equipped with any multitude or combination of processors or storage devices. Computer system 900 is, in point of fact, able to be replaced by, or combined with, any suitable processing system operative in accordance with the principles of the present invention, including sophisticated calculators, and hand-held, laptop/notebook, mini, mainframe and super computers, as well as processing system network combinations of the same.

Conventional processing system architecture is more fully discussed in Computer Organization and Architecture, by William Stallings, MacMillan Publishing Co. (3rd ed. 1993); conventional processing system network design is more fully discussed in Data Network Design, by Darren L. Spohn, McGraw-Hill, Inc. (1993), and conventional data communications is more fully discussed in Data Communications Principles, by R.D. Gitlin, J.F. Hayes and S.B. Weinstain, Plenum Press (1992) and in The Irwin Handbook of Telecommunications, by James Harry Green, Irwin Professional Publishing (2nd ed. 1992). Each of the foregoing publications is incorporated herein by reference. Alternatively, the hardware configuration is, for example, arranged according to the multiple instruction multiple data (MIMD) multiprocessor format for additional computing efficiency. The details of this form of computer architecture are disclosed in greater detail in, for example, U.S. Patent No. 5,163,131; Boxer, A., Where Buses Cannot Go, IEEE Spectrum, February 1995, pp. 41-45; and Barroso,

L.A. et al., RPM: A Rapid Prototyping Engine for Multiprocessor Systems, IEEE Computer February 1995, pp. 26-34, all of which are incorporated herein by reference.

In alternate preferred embodiments, the above-identified processor, and, in particular, CPU 916, may be replaced by or combined with any other suitable processing circuits, including programmable logic devices, such as PALs (programmable array logic) and PLAs (programmable logic arrays). DSPs (digital signal processors), FPGAs (field programmable gate arrays), ASICs (application specific integrated circuits), VLSIs (very large scale integrated circuits) or the like.

The many features and advantages of the invention are apparent from the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages of the invention which fall within the true spirit and scope of the invention. Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed is:

1. A system for providing content delivery via a computer network comprising:

at least one media operating unit communicating with a Web server, which is communicating with the computer network, each media operating unit including:

a press interface proxy server communicatable with at least one advertisement source so as to receive at least one input image including at least one image and text, and parsing the text from the at least one image into separate data files; and

an image conversion server receiving from said press interface proxy server the at least one image and the text as the separate data files, and generating a plurality of output images from the at least one image, each of the plurality of output images including a respective plurality of resolutions of the image, said image conversion server transmitting the plurality of output images and the text to the Web server to provide the content delivery of the at least one input image via at least one user connected to the computer network.

2. The system according to claim 1, wherein said image conversion server associates a manifest with the plurality of output images for each input image and transmits the manifest associated with the plurality of output images to the Web server.

3. The system according to claim 2, wherein the input image comprises an advertisement, the manifest including for each advertisement at least one of an advertiser name, an advertiser account identification, an advertisement identification, at least one intended date of publication for the advertisement, at least one advertiser category, and at least one advertisement category.

4. The system according to claim 1, wherein the at least one text field includes at least one of a font field, an image field, an e-mail transmission capability field, an on-line purchasing capability field, and an on-line coupon field.

5. The system according to claim 1, wherein the at least one media operating unit includes a plurality of media operating units.

6. A method of providing content delivery via a computer network comprising:

a) generating at a content provider at least one input image including at least one of a graphical image and text;

b) parsing at the content provider each input image into at least one of a text field, a font field, an image field, an e-mail transmission capability field, an on-line purchasing capability field, and an on-line coupon field;

c) converting prior to selection by a user the at least one input image into a plurality of output images at the content provider, each of the plurality of output images including a respective resolution of the input image;

d) associating at the content provider the plurality of output images with a manifest; and

e) transmitting from the content provider to a content aggregator the plurality of output images, at least one computer network address associated with the content provider, and at least one of the associated manifest, the text field, the font field, the image field, the e-mail transmission field, the on-line purchasing field, and the on-line coupon field, the content aggregator being accessible to the user via the computer network.

7. The method according to claim 6, wherein the input image includes an advertisement, the manifest including for each advertisement at least one of an advertiser name, an advertiser account identification, an advertisement identification, at least one intended date of publication for the advertisement, at least one advertiser category, and at least one advertisement category.

8. The method according to claim 7, further comprising:

searching by a user via a search engine at least one of the advertiser name, the advertiser account identification, the advertisement identification, the at least one intended date of publication for the advertisement, the at least one advertiser category, the at least one advertisement category, and at least one Web site characteristic.

9. The method according to claim 8, wherein the at least one Web site characteristic includes at least one of an e-mail transmission capability, an on-line purchasing capability, and an on-line coupon.

10. A system for providing content delivery via a computer network comprising:

means for generating at a content provider at least one input image including at least one of a graphical image and text;

means for parsing at the content provider each input image into at least one of a text field, a font field, an image field, an e-mail transmission capability field, and on-line purchasing capability field, and an on-line coupon field;

means for converting prior to selection by a user the at least one input image into a plurality of output images at the content provider, each of the plurality of output images including a respective resolution of the input image;

means for associating at the content provider the plurality of output images with a manifest; and

means for transmitting from the content provider to a content aggregator the plurality of output images, at least one computer network address associated with the content provider, and at least one of the associated manifest, the text field, the font field, the image field, the e-mail transmission field, the on-line purchasing field, the on-line coupon field, the content aggregator being accessible to the user via the computer network.

11. The system according to claim 10, wherein the input image includes an advertisement, the manifest including at least one of at least one advertiser name, an advertiser account identification, an advertisement identification, at least one intended date of publication for the advertisement, at least one advertiser category, and at least one advertisement category.

12. The system according to claim 11, further comprising:

means for searching by a user at least one of the advertiser name, the advertiser account identification, the advertisement identification, the at least one intended date of publication for

the advertisement, the at least one advertiser category, the at least one advertisement category, and at least one Web site characteristic.

13. The method according to claim 12, wherein the at least one Web site characteristic includes at least one of an e-mail transmission capability, an on-line purchasing capability, and an on-line coupon.

14. A system for providing content delivery via a computer network comprising:

a Web hosting server providing user-access via the computer network to a plurality of output images for a content provider, the plurality of output images retaining common subject matter and varying in resolution, the plurality of output images including at least one computer network address associated with the content provider, the plurality of output images having associated therewith a manifest.

15. The system according to claim 14, wherein the plurality of output images comprise an advertisement, and
the manifest comprises for each advertisement at least one manifest characteristic including at least one of an advertiser name, an advertiser account identification, an advertisement identification, at least one intended date of publication for the advertisement, at least one advertiser category, and at least one advertisement category.

16. The system according to claim 15, wherein each manifest is searchable by a search engine remote from the Web hosting server via the computer network.

17. The system according to claim 15, wherein the Web hosting server includes a search engine for searching the at least one manifest characteristic.

18. The system according to claim 14, wherein the content provider includes an image input server receiving at least one input image, and an image conversion server communicatable with the image

input server and converting the input image into the plurality of output images retaining common subject matter and varying in resolution.

19. A system for providing content delivery via a computer network comprising:

at least one print media operating unit communicating with a Web server, which is communicating with the computer network, each print media operating unit including:

an image compression server receiving at least one input print media image and compressing the at least one print media image to generate a plurality of output images, each output image including a respective resolution of the input print media image, said image compression server transmitting the plurality of output images and a manifest associated with the plurality of output images to the web server.

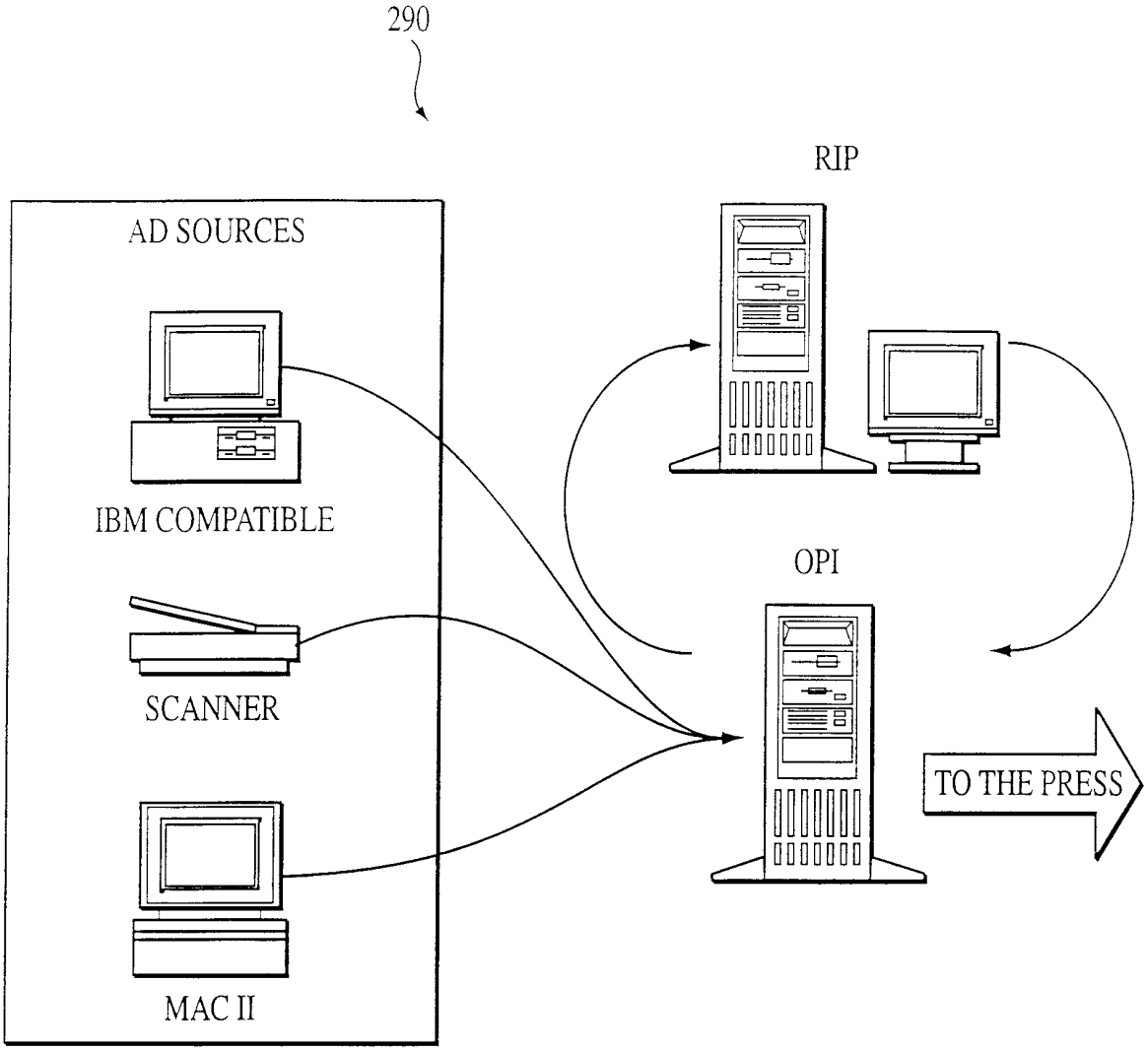

FIG. 1
PRIOR ART

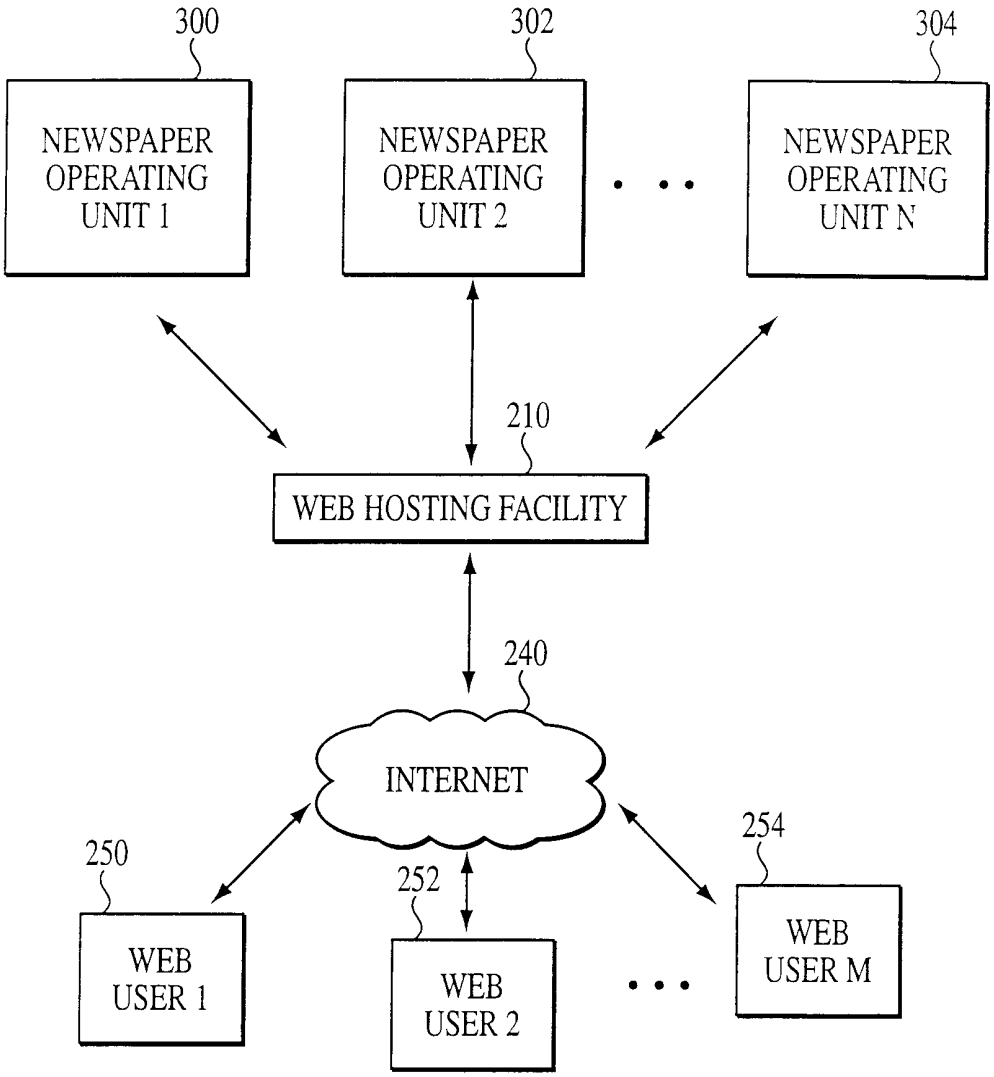
300
302
304
NEWSPAPER OPERATING UNIT 1
NEWSPAPER OPERATING UNIT 2
NEWSPAPER OPERATING UNIT N
210
WEB HOSTING FACILITY
240
INTERNET
250
252
254
WEB USER 1
WEB USER 2
WEB USER M

FIG. 2

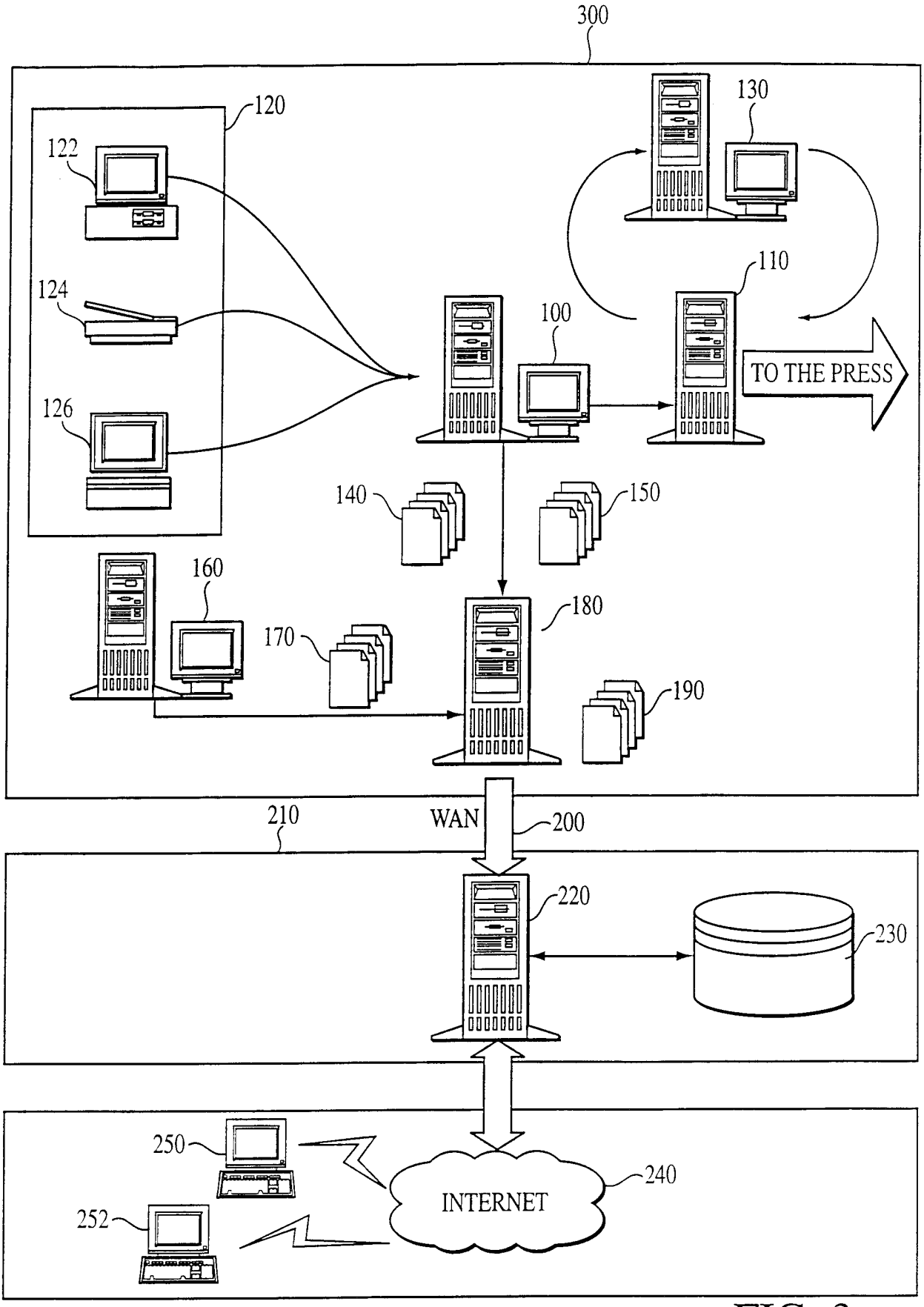
300
120
122
124
126
130
110
100
TO THE PRESS
140
150
160
170
180
190
210
WAN
200
220
230
250
252
INTERNET
240

FIG. 3

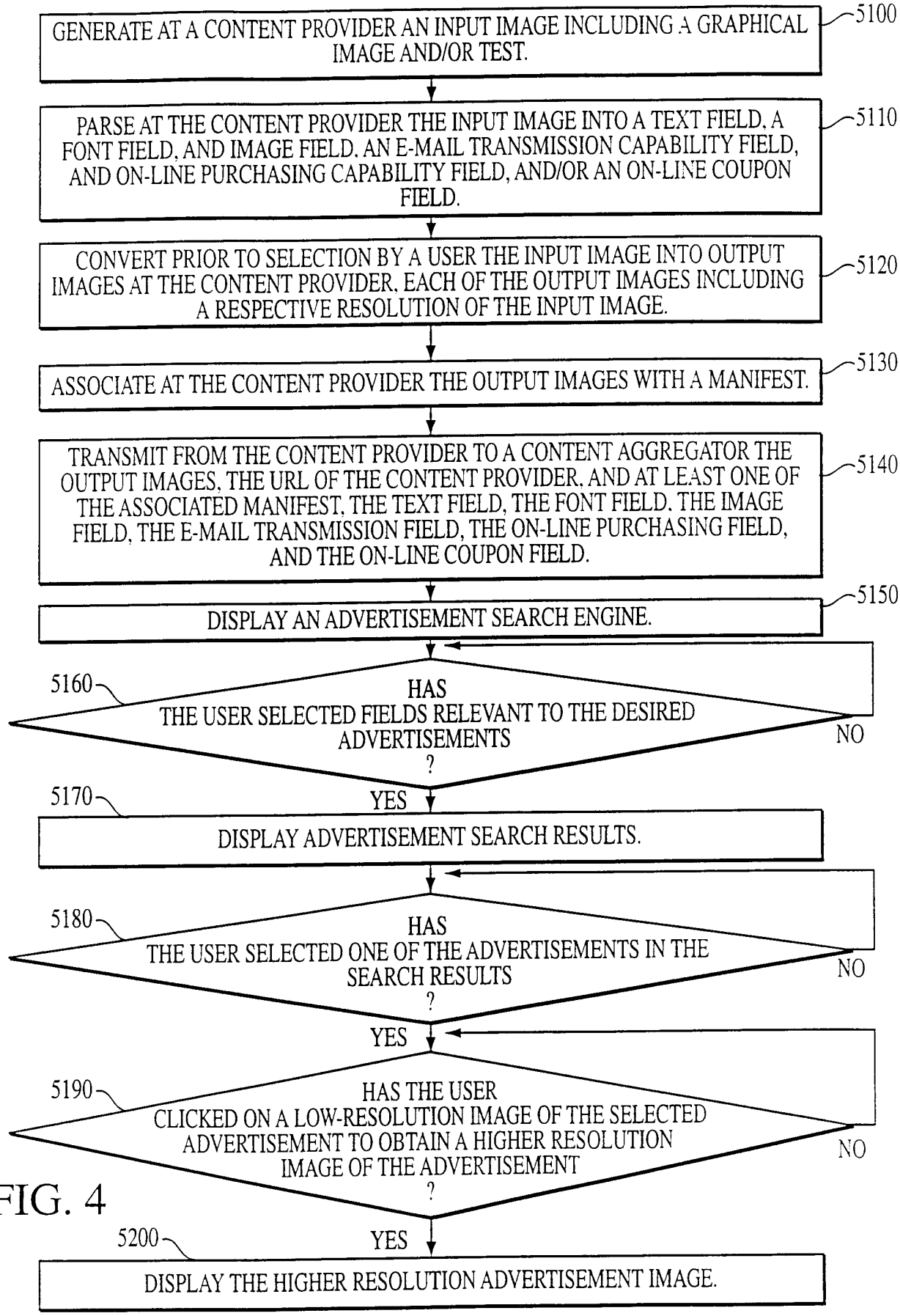
GENERATE AT A CONTENT PROVIDER AN INPUT IMAGE INCLUDING A GRAPHICAL IMAGE AND/OR TEST.
5100
PARSE AT THE CONTENT PROVIDER THE INPUT IMAGE INTO A TEXT FIELD, A FONT FIELD, AND IMAGE FIELD, AN E-MAIL TRANSMISSION CAPABILITY FIELD, AND ON-LINE PURCHASING CAPABILITY FIELD, AND/OR AN ON-LINE COUPON FIELD.
5110
CONVERT PRIOR TO SELECTION BY A USER THE INPUT IMAGE INTO OUTPUT IMAGES AT THE CONTENT PROVIDER, EACH OF THE OUTPUT IMAGES INCLUDING A RESPECTIVE RESOLUTION OF THE INPUT IMAGE.
5120
ASSOCIATE AT THE CONTENT PROVIDER THE OUTPUT IMAGES WITH A MANIFEST.
5130
TRANSMIT FROM THE CONTENT PROVIDER TO A CONTENT AGGREGATOR THE OUTPUT IMAGES, THE URL OF THE CONTENT PROVIDER, AND AT LEAST ONE OF THE ASSOCIATED MANIFEST, THE TEXT FIELD, THE FONT FIELD, THE IMAGE FIELD, THE E-MAIL TRANSMISSION FIELD, THE ON-LINE PURCHASING FIELD, AND THE ON-LINE COUPON FIELD.
5140
DISPLAY AN ADVERTISEMENT SEARCH ENGINE.
5150
5160
HAS THE USER SELECTED FIELDS RELEVANT TO THE DESIRED ADVERTISEMENTS ?
NO
YES
5170
DISPLAY ADVERTISEMENT SEARCH RESULTS.
5180
HAS THE USER SELECTED ONE OF THE ADVERTISEMENTS IN THE SEARCH RESULTS ?
NO
YES
5190
HAS THE USER CLICKED ON A LOW-RESOLUTION IMAGE OF THE SELECTED ADVERTISEMENT TO OBTAIN A HIGHER RESOLUTION IMAGE OF THE ADVERTISEMENT ?
NO
YES
5200
DISPLAY THE HIGHER RESOLUTION ADVERTISEMENT IMAGE.

FIG. 4

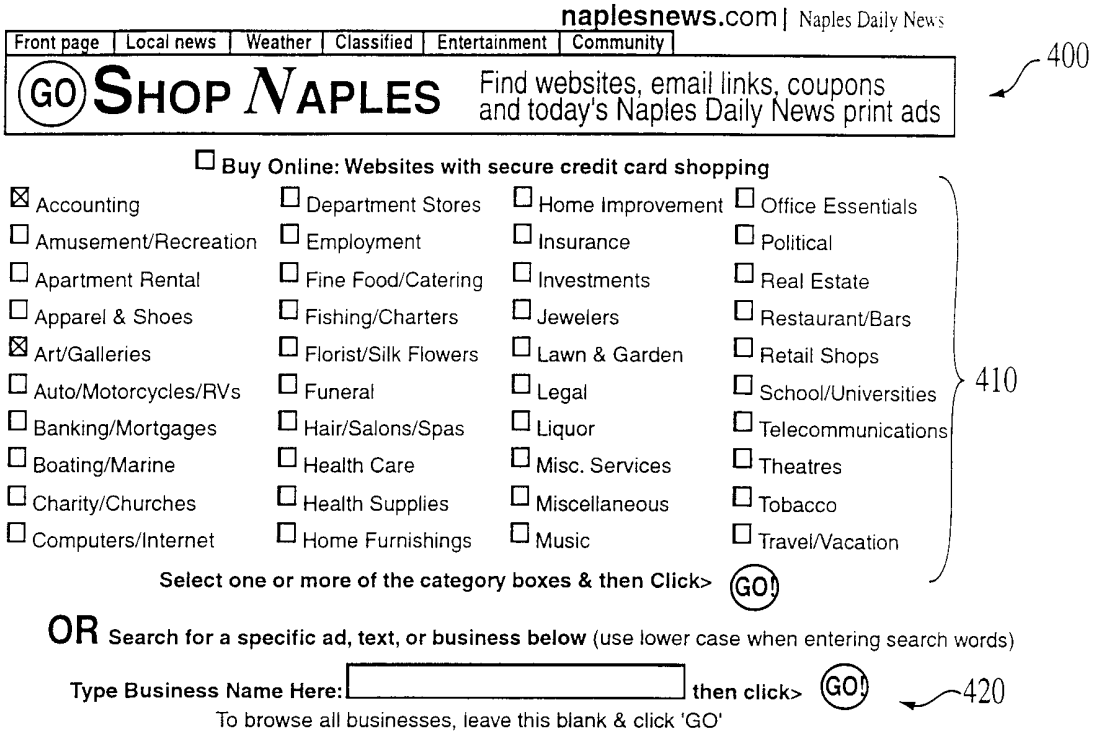
naplesnews.com | Naples Daily News
Front page | Local news | Weather | Classified | Entertainment | Community
GO SHOP NAPLES
Find websites, email links, coupons and today's Naples Daily News print ads
400
Buy Online: Websites with secure credit card shopping
Accounting
Amusement/Recreation
Apartment Rental
Apparel & Shoes
Art/Galleries
Auto/Motorcycles/RVs
Banking/Mortgages
Boating/Marine
Charity/Churches
Computers/Internet
Department Stores
Employment
Fine Food/Catering
Fishing/Charters
Florist/Silk Flowers
Funeral
Hair/Salons/Spas
Health Care
Health Supplies
Home Furnishings
Home Improvement
Insurance
Investments
Jewelers
Lawn & Garden
Legal
Liquor
Misc. Services
Miscellaneous
Music
Office Essentials
Political
Real Estate
Restaurant/Bars
Retail Shops
School/Universities
Telecommunications
Theatres
Tobacco
Travel/Vacation
410
Select one or more of the category boxes & then Click> GO!
OR Search for a specific ad, text, or business below (use lower case when entering search words)
Type Business Name Here: then click> GO!
420
To browse all businesses, leave this blank & click 'GO'

FIG. 5

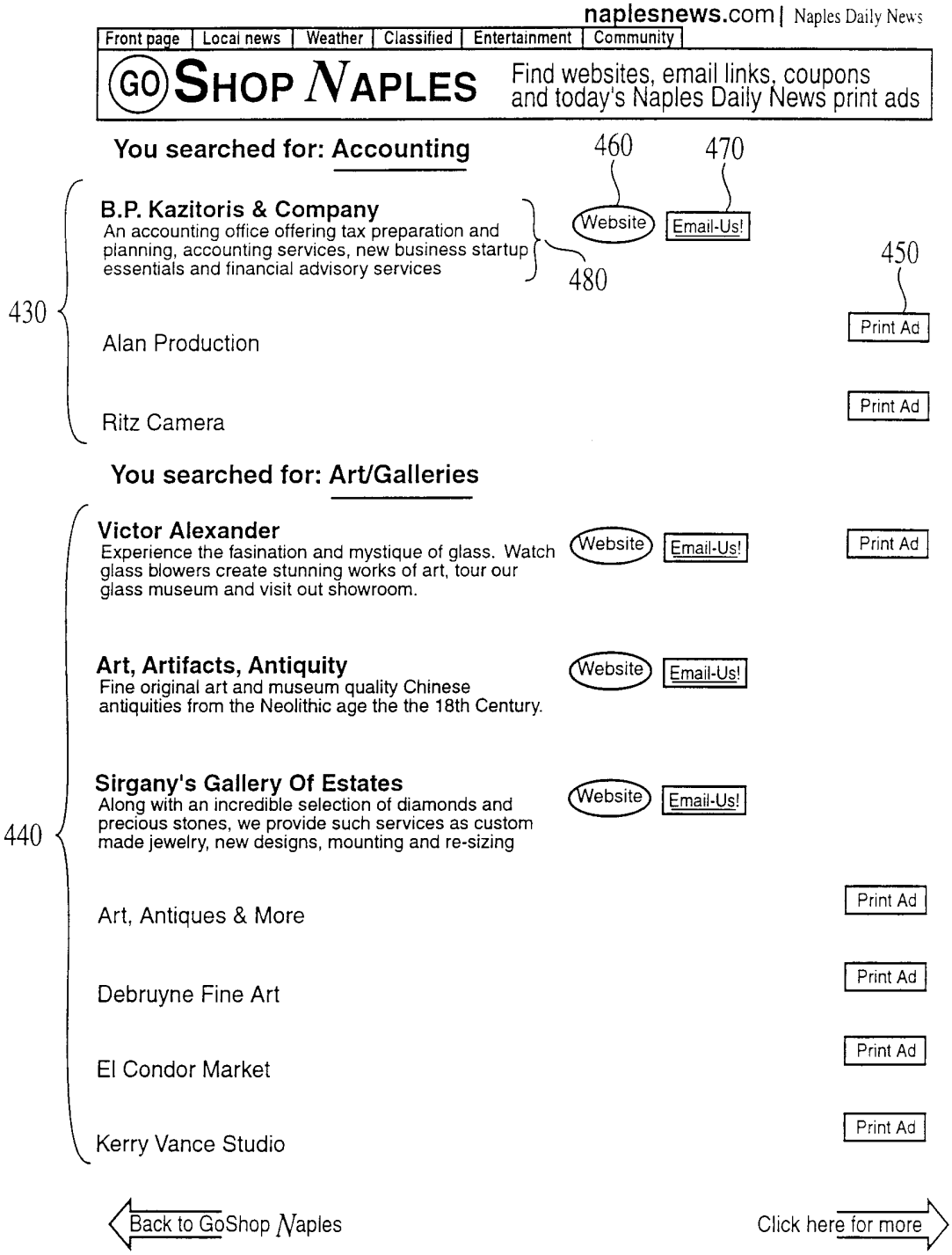
naplesnews.com | Naples Daily News
Front page
Local news
Weather
Classified
Entertainment
Community
GO SHOP NAPLES
Find websites, email links, coupons and today's Naples Daily News print ads
You searched for: Accounting
460
470
B.P. Kazitoris & Company
An accounting office offering tax preparation and planning, accounting services, new business startup essentials and financial advisory services
Website
Email-Us!
480
450
430
Print Ad
Alan Production
Print Ad
Ritz Camera
You searched for: Art/Galleries
Victor Alexander
Experience the fasination and mystique of glass. Watch glass blowers create stunning works of art, tour our glass museum and visit out showroom.
Website
Email-Us!
Print Ad
Art, Artifacts, Antiquity
Fine original art and museum quality Chinese antiquities from the Neolithic age the the 18th Century.
Website
Email-Us!
Sirgany's Gallery Of Estates
Along with an incredible selection of diamonds and precious stones, we provide such services as custom made jewelry, new designs, mounting and re-sizing
Website
Email-Us!
440
Art, Antiques & More
Print Ad
Debruyne Fine Art
Print Ad
El Condor Market
Print Ad
Kerry Vance Studio
Print Ad
Back to GoShop Naples
Click here for more

FIG. 6

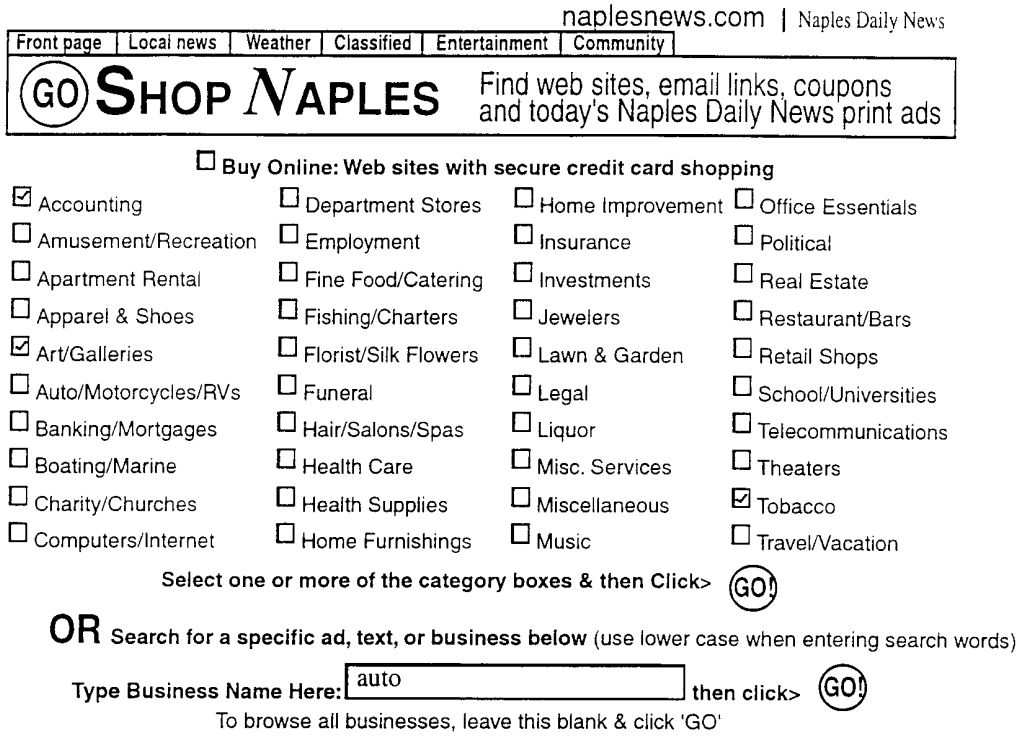
naplesnews.com | Naples Daily News
Front page
Local news
Weather
Classified
Entertainment
Community
GO SHOP NAPLES
Find web sites, email links, coupons and today's Naples Daily News print ads
Buy Online: Web sites with secure credit card shopping
Accounting
Amusement/Recreation
Apartment Rental
Apparel & Shoes
Art/Galleries
Auto/Motorcycles/RVs
Banking/Mortgages
Boating/Marine
Charity/Churches
Computers/Internet
Department Stores
Employment
Fine Food/Catering
Fishing/Charters
Florist/Silk Flowers
Funeral
Hair/Salons/Spas
Health Care
Health Supplies
Home Furnishings
Home Improvement
Insurance
Investments
Jewelers
Lawn & Garden
Legal
Liquor
Misc. Services
Miscellaneous
Music
Office Essentials
Political
Real Estate
Restaurant/Bars
Retail Shops
School/Universities
Telecommunications
Theaters
Tobacco
Travel/Vacation
Select one or more of the category boxes & then Click>
GO!
OR Search for a specific ad, text, or business below (use lower case when entering search words)
Type Business Name Here:
auto
then click>
GO!
To browse all businesses, leave this blank & click 'GO'

FIG. 7

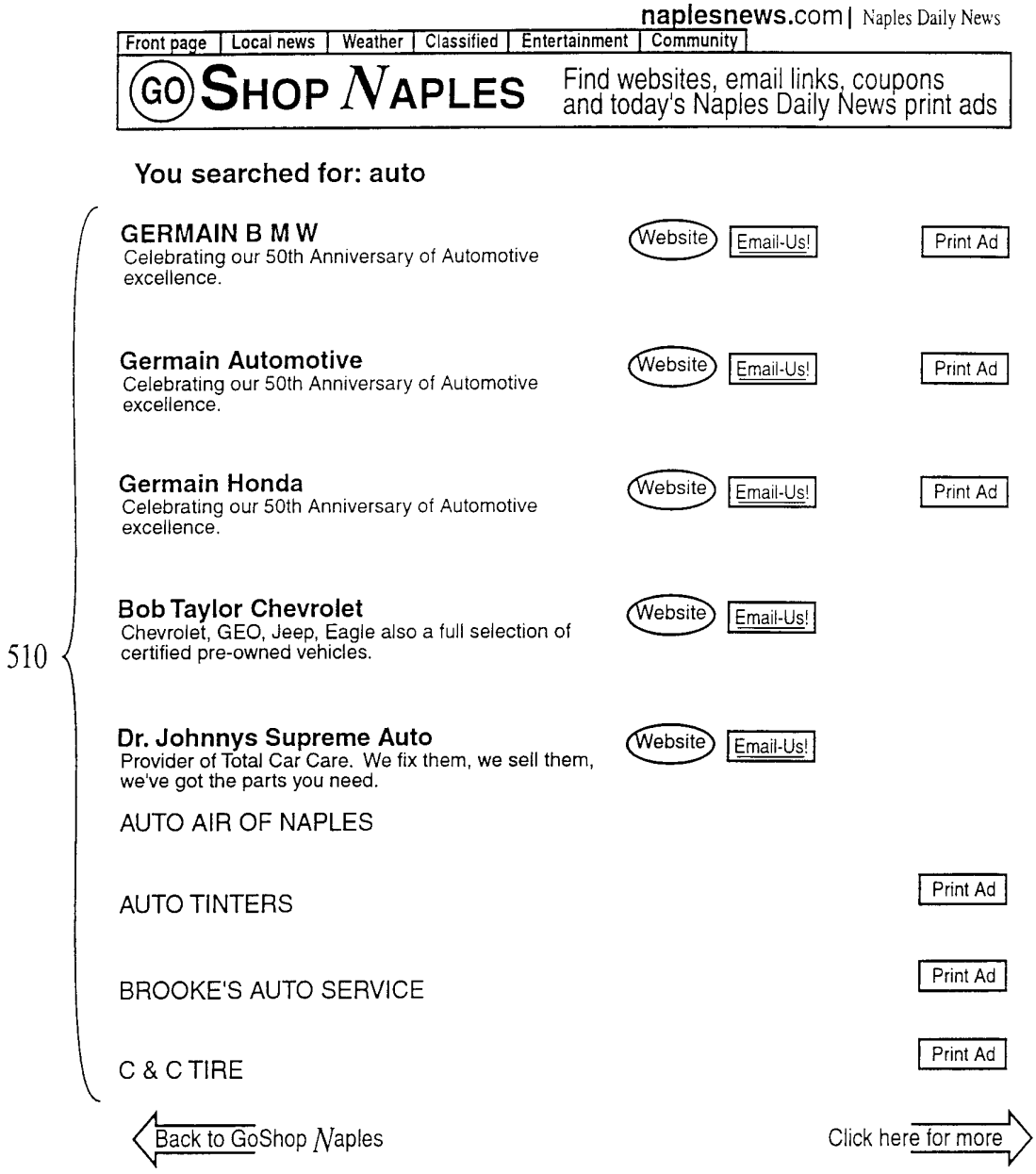
naplesnews.com | Naples Daily News
Front page
Local news
Weather
Classified
Entertainment
Community
GO SHOP NAPLES
Find websites, email links, coupons and today's Naples Daily News print ads
You searched for: auto
GERMAIN B M W
Celebrating our 50th Anniversary of Automotive excellence.
Website
Email-Us!
Print Ad
Germain Automotive
Celebrating our 50th Anniversary of Automotive excellence.
Website
Email-Us!
Print Ad
Germain Honda
Celebrating our 50th Anniversary of Automotive excellence.
Website
Email-Us!
Print Ad
Bob Taylor Chevrolet
Chevrolet, GEO, Jeep, Eagle also a full selection of certified pre-owned vehicles.
Website
Email-Us!
510
Dr. Johnnys Supreme Auto
Provider of Total Car Care. We fix them, we sell them, we've got the parts you need.
Website
Email-Us!
AUTO AIR OF NAPLES
AUTO TINTERS
Print Ad
BROOKE'S AUTO SERVICE
Print Ad
C & C TIRE
Print Ad
Back to GoShop Naples
Click here for more

FIG. 8

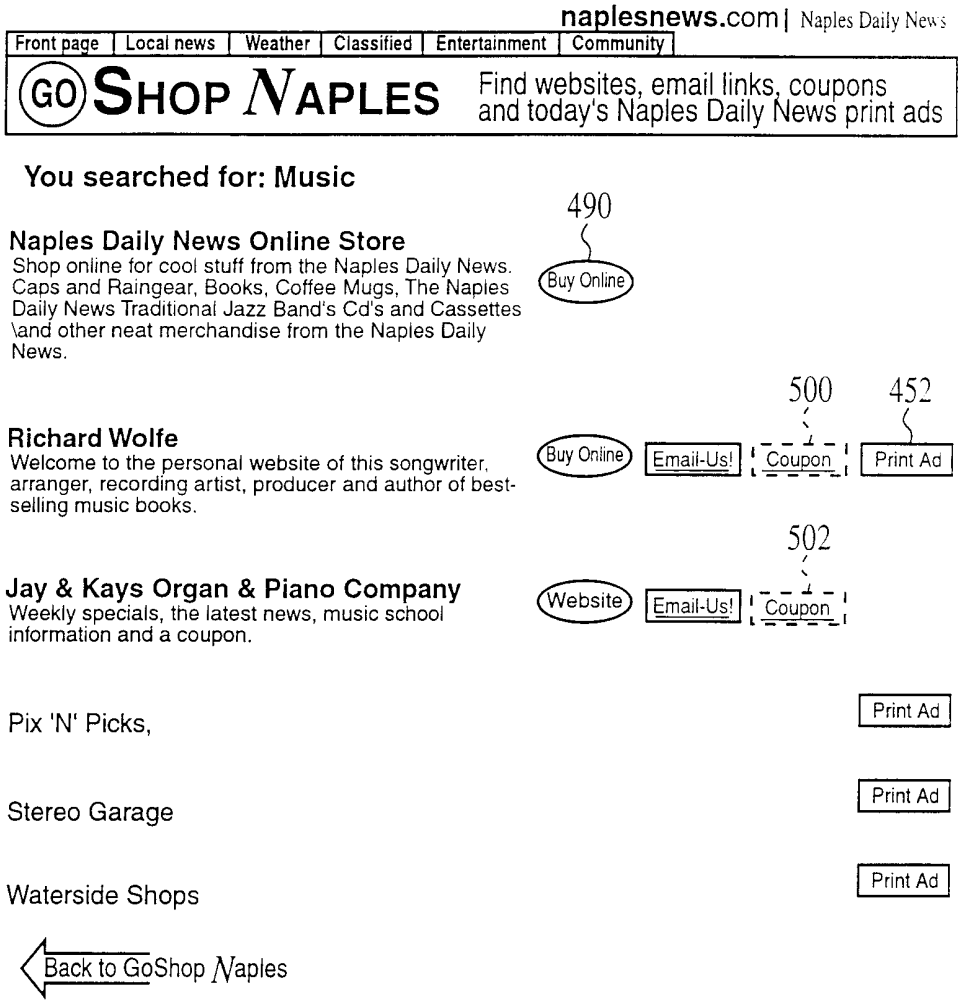
naplesnews.com | Naples Daily News
Front page | Local news | Weather | Classified | Entertainment | Community
GO SHOP NAPLES
Find websites, email links, coupons and today's Naples Daily News print ads
You searched for: Music
490
Naples Daily News Online Store
Shop online for cool stuff from the Naples Daily News. Caps and Raingear, Books, Coffee Mugs, The Naples Daily News Traditional Jazz Band's Cd's and Cassettes \and other neat merchandise from the Naples Daily News.
Buy Online
500
452
Richard Wolfe
Welcome to the personal website of this songwriter, arranger, recording artist, producer and author of best-selling music books.
Buy Online
Email-Us!
Coupon
Print Ad
502
Jay & Kays Organ & Piano Company
Weekly specials, the latest news, music school information and a coupon.
Website
Email-Us!
Coupon
Pix 'N' Picks,
Print Ad
Stereo Garage
Print Ad
Waterside Shops
Print Ad
Back to GoShop Naples

FIG. 9

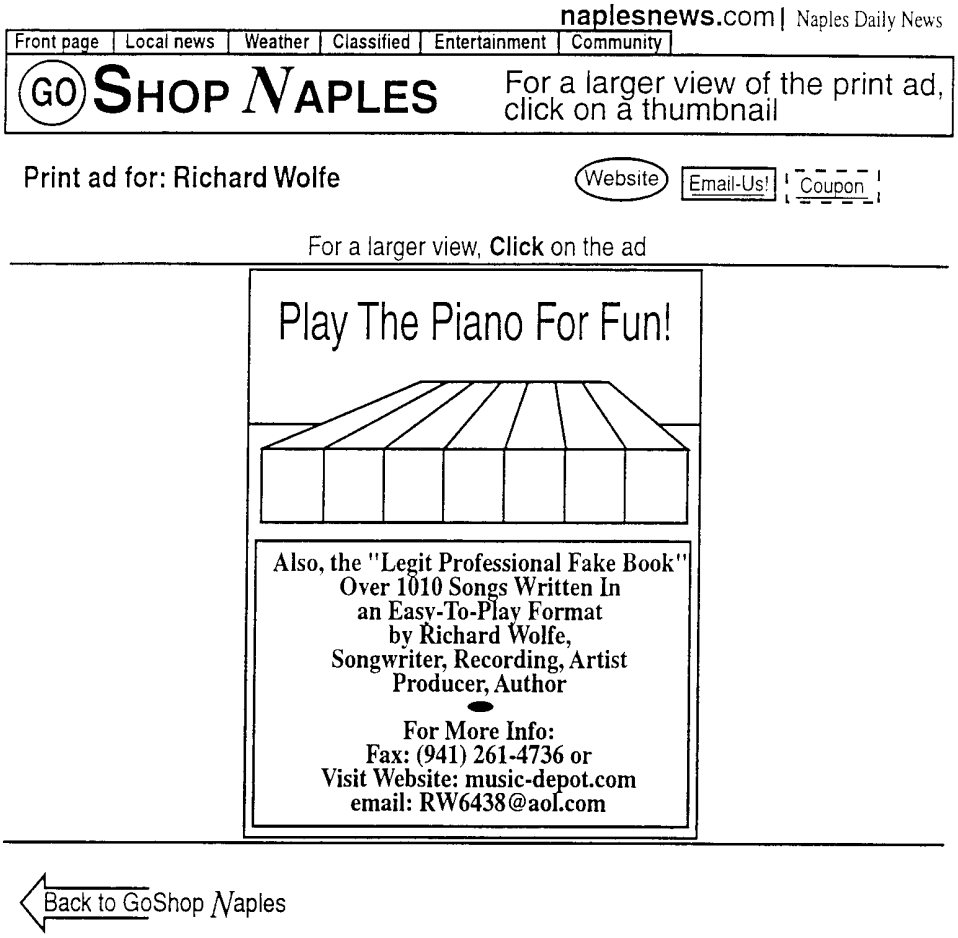
naplesnews.com | Naples Daily News
Front page
Local news
Weather
Classified
Entertainment
Community
GO SHOP NAPLES
For a larger view of the print ad, click on a thumbnail
Print ad for: Richard Wolfe
Website
Email-Us!
Coupon
For a larger view, Click on the ad
Play The Piano For Fun!
Also, the "Legit Professional Fake Book"
Over 1010 Songs Written In
an Easy-To-Play Format
by Richard Wolfe,
Songwriter, Recording, Artist
Producer, Author
For More Info:
Fax: (941) 261-4736 or
Visit Website: music-depot.com
email: RW6438@aol.com
Back to GoShop Naples

FIG. 10

▼Go to Weekly Coupon ▼Go to Weekly Specials

Weekly COUPON

JAY & KAY'S ORGAN AND PIANO COMPANY
2125 Colonial Blvd.
Ft. Myers, FL 33907
(941) 939-4549

WEBSITECOUPON
PIANO Disc Player
PIANO DISKS

Web Site Coupon One per purchase Expires 5/7/99
Must present coupon at time of purchase.
Click Anywhere on this page and then Print from "File" menu to print out coupon.

Weekly SPECIALS

These specials are good without a coupon.

JAY & KAY'S ORGAN AND PIANO COMPANY
2125 Colonial Blvd.
Ft. Myers, FL 33907
(941) 939-4549

THIS WEEK'S SPECIAL IS:

Wurlitzer Grand Piano
$5,995

Please tell us you saw this special on the web!.

FIG. 11

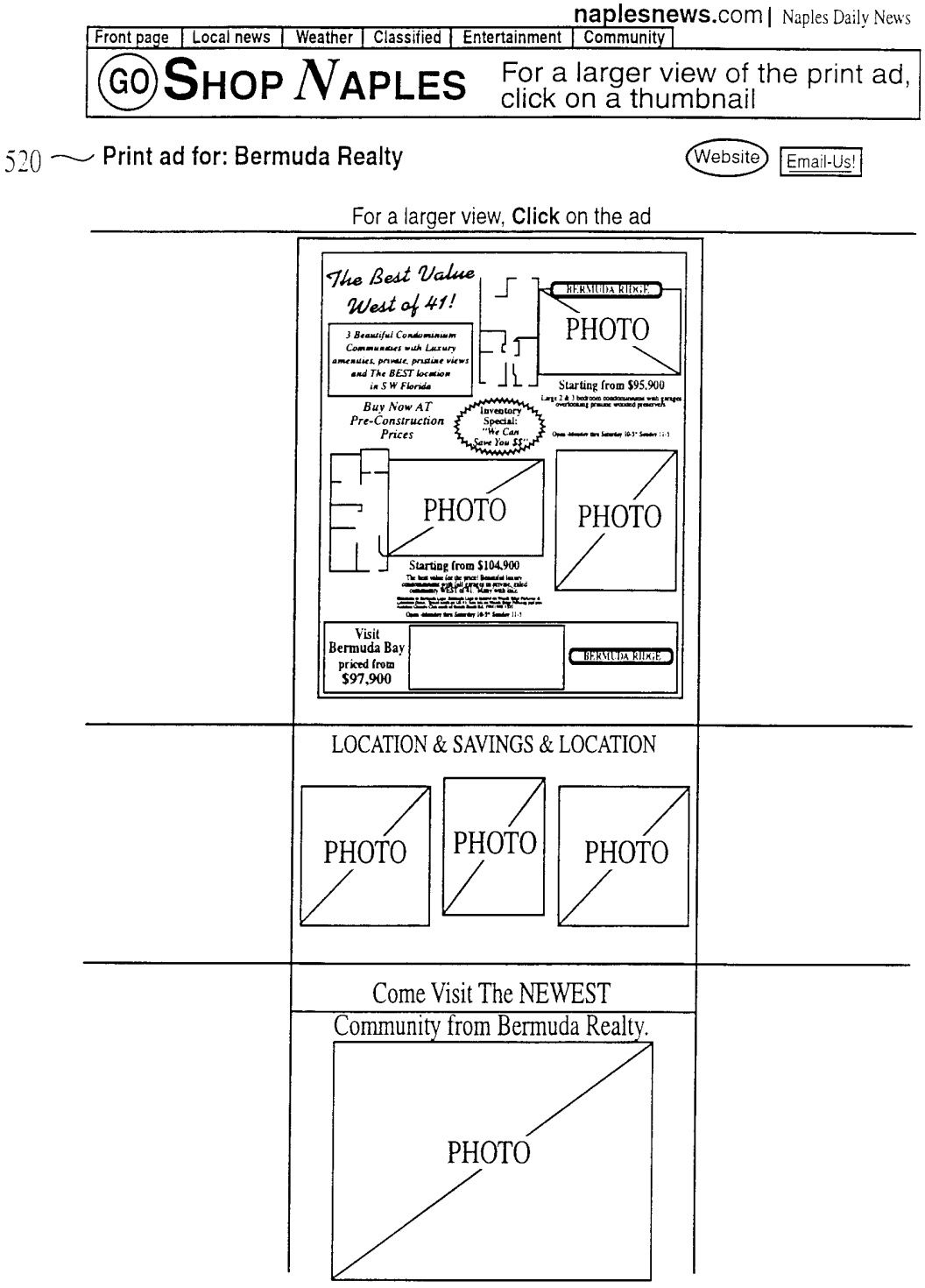
naplesnews.com | Naples Daily News
Front page
Local news
Weather
Classified
Entertainment
Community
GO SHOP NAPLES
For a larger view of the print ad, click on a thumbnail
520
Print ad for: Bermuda Realty
Website
Email-Us!
For a larger view, Click on the ad
The Best Value West of 41!
3 Beautiful Condominium Communities with Luxury amenities, private, pristine views and The BEST location in S W Florida
BERMUDA RIDGE
PHOTO
Starting from $95,900
Buy Now AT Pre-Construction Prices
Inventory Special: "We Can Save You $$"
PHOTO
PHOTO
Starting from $104,900
Visit Bermuda Bay priced from $97,900
BERMUDA RIDGE
LOCATION & SAVINGS & LOCATION
PHOTO
PHOTO
PHOTO
Come Visit The NEWEST
Community from Bermuda Realty.
PHOTO

FIG. 12

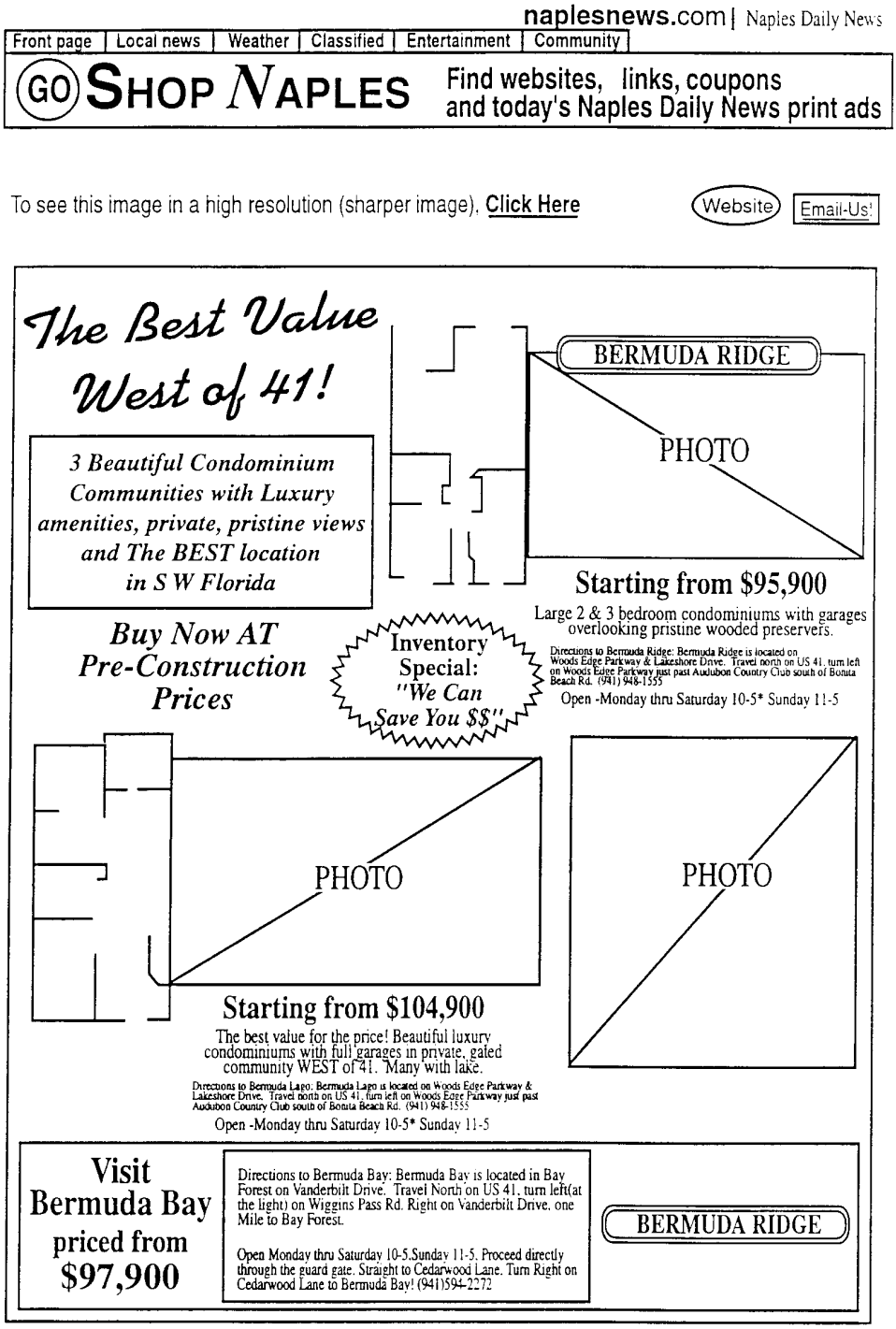
naplesnews.com | Naples Daily News
Front page | Local news | Weather | Classified | Entertainment | Community
GO SHOP NAPLES
Find websites, links, coupons and today's Naples Daily News print ads
To see this image in a high resolution (sharper image), Click Here
Website
Email-Us!
The Best Value West of 41!
3 Beautiful Condominium Communities with Luxury amenities, private, pristine views and The BEST location in S W Florida
BERMUDA RIDGE
PHOTO
Starting from $95,900
Large 2 & 3 bedroom condominiums with garages overlooking pristine wooded preserves.
Directions to Bermuda Ridge: Bermuda Ridge is located on Woods Edge Parkway & Lakeshore Drive. Travel north on US 41, turn left on Woods Edge Parkway just past Audubon Country Club south of Bonita Beach Rd. (941) 948-1555
Open -Monday thru Saturday 10-5* Sunday 11-5
Buy Now AT Pre-Construction Prices
Inventory Special: "We Can Save You $$"
PHOTO
PHOTO
Starting from $104,900
The best value for the price! Beautiful luxury condominiums with full garages in private, gated community WEST of 41. Many with lake.
Directions to Bermuda Lago: Bermuda Lago is located on Woods Edge Parkway & Lakeshore Drive. Travel north on US 41, turn left on Woods Edge Parkway just past Audubon Country Club south of Bonita Beach Rd. (941) 948-1555
Open -Monday thru Saturday 10-5* Sunday 11-5
Visit Bermuda Bay priced from $97,900
Directions to Bermuda Bay: Bermuda Bay is located in Bay Forest on Vanderbilt Drive. Travel North on US 41, turn left(at the light) on Wiggins Pass Rd. Right on Vanderbilt Drive, one Mile to Bay Forest.
Open Monday thru Saturday 10-5,Sunday 11-5. Proceed directly through the guard gate. Straight to Cedarwood Lane. Turn Right on Cedarwood Lane to Bermuda Bay! (941)594-2272
BERMUDA RIDGE

FIG. 13


naplesnews.com | Naples Daily News
Front page | Local news | Weather | Classified | Entertainment | Community
GO SHOP NAPLES
Find websites, email links, coupons and today's Naples Daily News print ads
Website
Email-Us!
The Best Value West of 41!
3 Beautiful Condominium Communities with Luxury amenities, prive, prustine views and The BEST location in S W Florida
Buy Now AT Pre-Construction Prices
Inventory Special: "We Can Save You $$"
Large 2
Directions
Woods Ed
on Woods
Beach Rd.
Open

FIG. 14

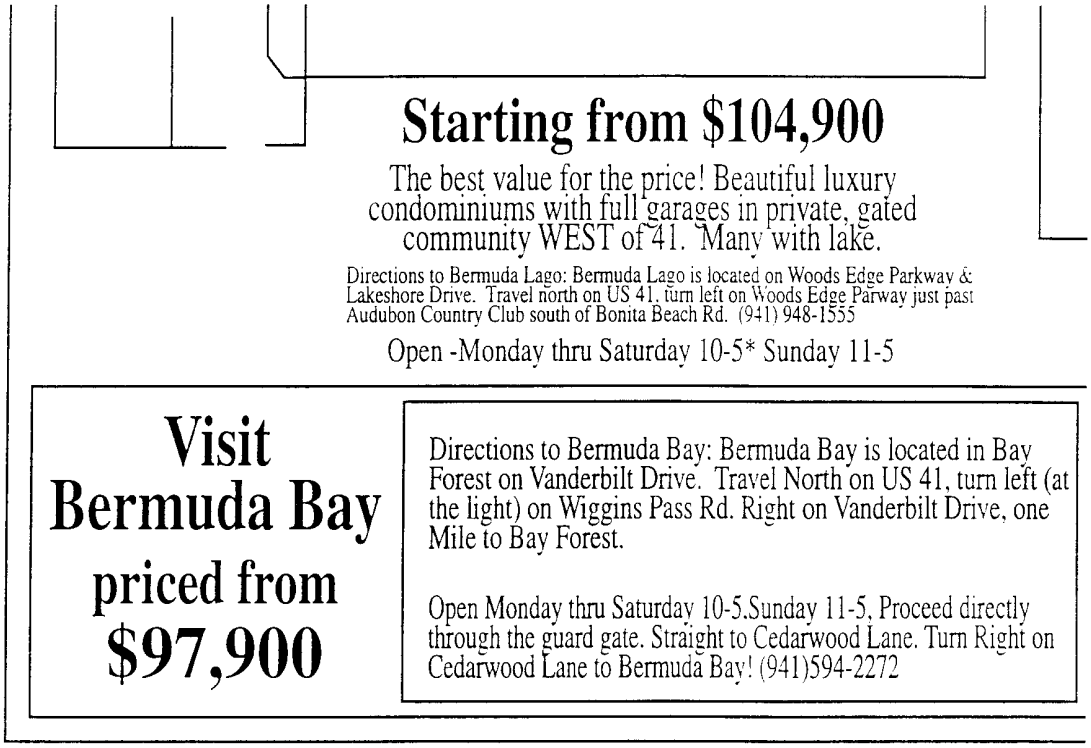
Starting from $104,900
The best value for the price! Beautiful luxury condominiums with full garages in private, gated community WEST of 41. Many with lake.
Directions to Bermuda Lago: Bermuda Lago is located on Woods Edge Parkway & Lakeshore Drive. Travel north on US 41, turn left on Woods Edge Parway just past Audubon Country Club south of Bonita Beach Rd. (941) 948-1555
Open -Monday thru Saturday 10-5* Sunday 11-5
Visit Bermuda Bay priced from $97,900
Directions to Bermuda Bay: Bermuda Bay is located in Bay Forest on Vanderbilt Drive. Travel North on US 41, turn left (at the light) on Wiggins Pass Rd. Right on Vanderbilt Drive, one Mile to Bay Forest.
Open Monday thru Saturday 10-5.Sunday 11-5, Proceed directly through the guard gate. Straight to Cedarwood Lane. Turn Right on Cedarwood Lane to Bermuda Bay! (941)594-2272

FIG. 15

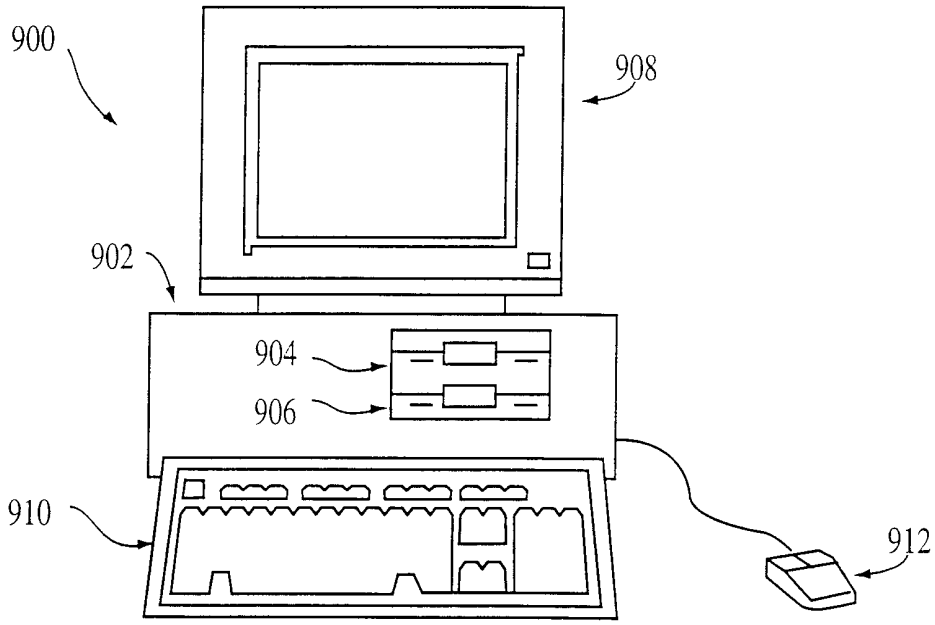
900
908
902
904
906
910
912

FIG. 16

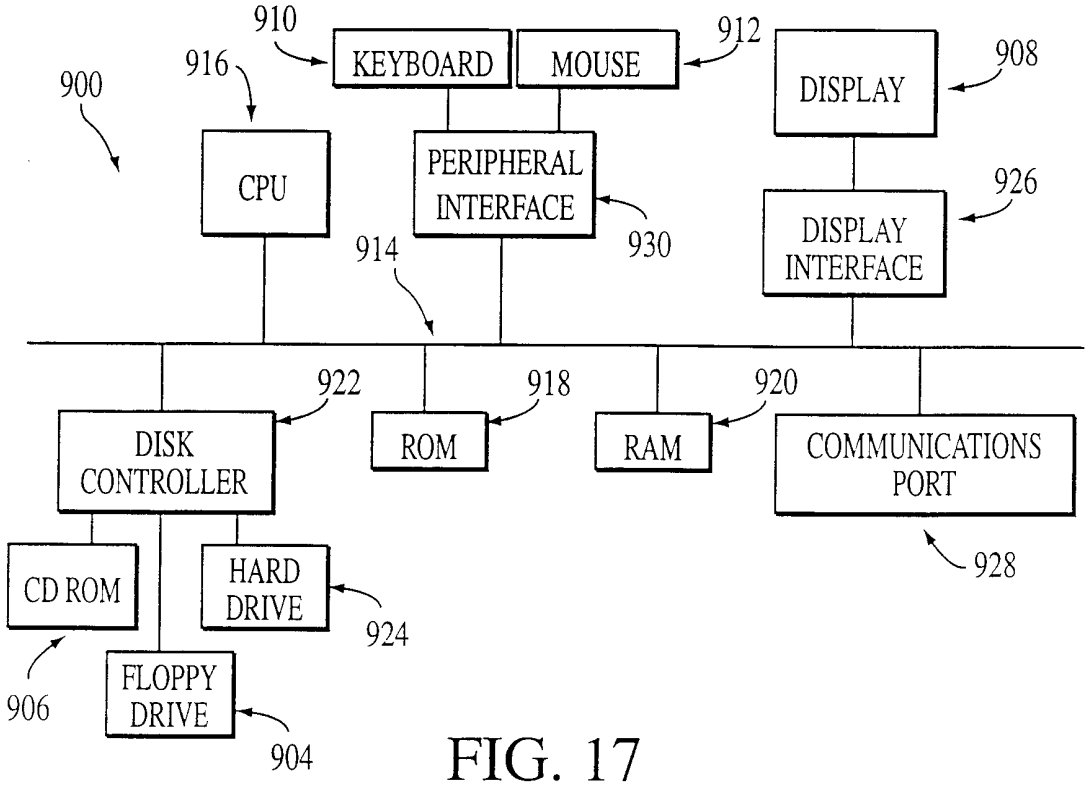
910
KEYBOARD
MOUSE
912
916
900
DISPLAY
908
CPU
PERIPHERAL INTERFACE
930
926
DISPLAY INTERFACE
914
922
918
920
DISK CONTROLLER
ROM
RAM
COMMUNICATIONS PORT
928
CD ROM
HARD DRIVE
924
906
FLOPPY DRIVE
904

FIG. 17

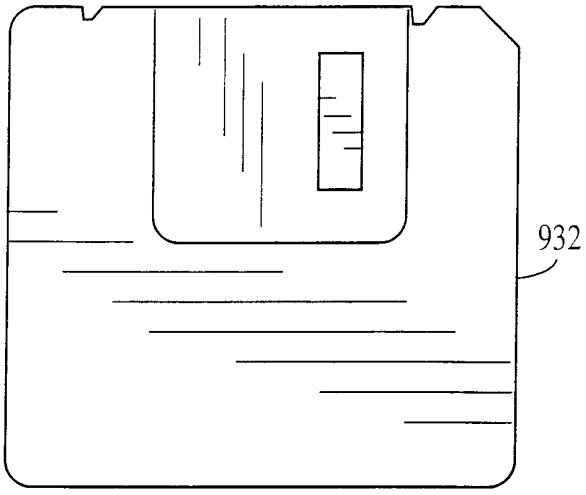

FIG. 18