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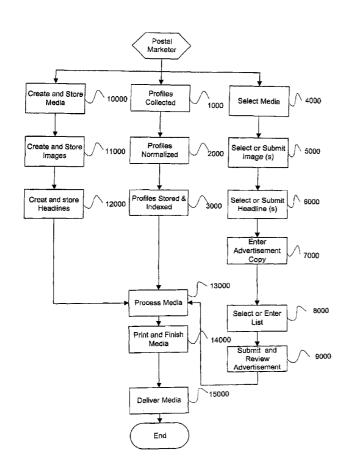
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(54) Title: TARGETED ADVERTISEMENT ASSEMBLY AND DELIVERY SYSTEM



(57) Abstract: A system for locating professional profiles on the Internet (1000), extracting from these profiles content and data (2000), compiling a database of desirable sales prospects (3000), and merging data with a template to create a personalized direct marketing advertisement (13000, 15000).

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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.

TARGETED ADVERTISEMENT ASSEMBLY AND DELIVERY SYSTEM

By Stephen M. REUNING and Nicole L. BAKOS

BACKROUND

This application claims priority from and incorporates by reference the disclosure of U.S. patent application serial numbers 09/911,024 and 60/304,891.

Direct marketing (e.g., direct mail and telemarketing) using a database of targeted sales prospects is well known. Using resumes is similarly well known for professional recruiting. Until now, however, resumes have not been used to make a database of direct marketing sales prospects.

We have discovered that resumes, because they contain detailed professional profiles, are useful in compiling a direct marketing data base. This database is useful for direct-mail campaigns for technical or professional products. Manually compiling such a database, however, can be prohibitively labor intense. Perhaps this is why no one has yet used resumes to make a direct marketing sales prospect database. We have found a way.

SUMMARY

Our invention entails a method of creating a database of targeted sales prospects. The advertiser uses a remote client or Internet browser to access the system and select images, text objects, and other digital objects to be assembled into a single advertisement.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the major procedural steps involved.

Figure 2 details step 1000 related to the collection of professional profiles.

Figure 3 details step 1200, related to harvesting professional profiles from the Internet.

Figure 3A details step 1200.

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25 Figure 3B details step 1400, collection of profiles via the Third Party Import method.

Figure 3C details step 1600, the collection of profiles via the Portal Collection Site method.

Figure 3D details step 1800, the collection of professional profiles via Traditional Advertising.

Figure 4 details step 2000 related to Normalizing the data in professional profiles.

Figure 5 details step 3000 related to storing normalized professional profiles.

Figure 6 details step 10000, creating and storing media and media templates.

Figure 6A details step 11000 related to creating and storing images.

Figure 6B details step 12000 related to creating and storing headlines.

Figure 7 details step 5000 related to selecting or submitting images.

Figure 8 details step 6000 related to selecting and submitting headlines.

Figure 9 details step 4000 related to selecting media and media templates.

Figure 10 details step 7000 related to entering advertisement copy.

Figure 11 details step 8000 related to selecting or entering a list of contacts.

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- Figure 12 details step 9000 related to submitting and reviewing an advertisement.
- Figure 13 is a diagram of a database record format for advertisement submission data.
- Figure 14 is a professional profile collecting, advertising creating, and media delivering system.
- Figure 15 details step 13000 related to processing media.
- Figure 16 details step 14000 related to printing and finishing media.
 - Figure 17 is a diagram of a database record format used for contact data.

DETAILED DESCRIPTION

Our system can for convenience be thought of as involving two general parts: (1) compiling a data base of candidate contact information, and (2) using this data as the variable inputs in a mail merge to create a customized advertisement delivered to the specific candidate. We discuss each aspect in turn.

Compiling the Data Base of Candidate Contact Data

Data comprising professional profiles (e.g., resume or curriculum vitae data) are collected [1000] and stored in a data structure (or "database"). Four professional profile collection strategies are described. One involves harvesting Personal Profiles from the Internet and is described in Steps 1200 through 1370. Another involves collecting contact data from third party sources such as data suppliers, resume collection website companies, etc., and is described in Steps 1400 through 1430. Another collection strategy involves collecting professional profiles via a collection program placed on websites such as community portals [800] and is described in Steps 1600 through 1640. Another collection strategy involves collecting professional profiles as a response to conventional help wanted advertising in such mediums as newspapers, trade journals, and Internet job posting websites and is described in Steps 1800 through 1850.

Harvesting the Internet

Professional profiles are harvested from websites on the Internet [1210-1370]. At Step 1210, our invention provides for the "harvesting" of website page content based on different searching algorithm strategies.

At Step 1215, operator determines URL Search Criteria or IP Address Sequence or URL Set. If the "search engine" type of collection strategy is to be used then search criteria must be entered into the criteria interface of our invention.

The operator then starts [1305] the search. The apparatus initiates contact [1310] with a search engine or specified URL. The apparatus reports status [1315]. The apparatus then reports the results [1320]. The apparatus downloads content [1325] and conducts comparisons. At Step 1330, the apparatus collects URL addresses contained in HTML statements commonly

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called "Hyperlinks" and generally referenced with the command suffix "HREF=" for only those visited website pages that match the link qualifying criteria entered during Step 1220.

At Step 1335, apparatus check for new URLs and then repeats steps starting with Step 1325 for the new URL. At Step 1340, if during Step 1290 "Email Addresses" was selected, then the apparatus collects and stores email addresses that are located in the text content of the downloaded page for only those visited website pages that match the page qualifying criteria entered during Step 1225. At Step 1345, if during Step 1290, "Pages as HTML" was selected, then the apparatus collects and stores the entire HTML code file of the downloaded page for only those visited website pages that match the page qualifying criteria entered during Step 1225.

At Step 1350, if during Step 1290, "Pages as Text" was selected, then the apparatus collects and stores the entire body text of the downloaded page for only those visited website pages that match the page qualifying criteria entered during Step 1225. At Step 1355, if "Pages as HTML or "Pages as Text" are selected in Step 1290, then each "matching" page is stored as a file onto a mass storage device, such as the hard drive, in a desirable format such as HTML or ASCII and contact information is "normalized." At step 1360, normalized documents are imported into a database. At Step 1365, the database is indexed. At Step 1370, the records are reported.

Harvesting A Third-Party Database

At Step 1400, information on prospective contacts is collected and normalized. At Step 1410, the operator defines, locates and acquires desirable collections of information on prospective contacts. At Step 1420, our invention normalizes data collected in Step 1410 to our invention's standards. At Step 1430, the system stores the information on prospective contacts that was normalized in Step 1420 into a computer storage device.

Website Collection Program Harvesting

At Step 1600, a professional profile collection device, in the form of a server software program, is placed on Internet community web portals such as demonstrated by element 800. Using the professional profile collection device, individual visitors to the Internet community web portals submit their resumes, curriculum vitae, professional profiles, job applications, biographies or other format in which a career biographies might exist using an interface so that they are ultimately stored in the Contact Database shown as Element 472.

At Step 1610, the system searches for websites that could serve as professional profile collection points and contacts the operators of desirable sites and reaches an agreement to install and maintain a professional profile collection device, in the form of a server software program [800]. At Step 1620, the system installs and maintains a professional profile

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collection device, in the form of a server software program [800]. At Step 1630, professional profiles are submitted to professional profile collection devices posted on websites

At Step 1640, the professional profiles arrive at collection point [472] where they are stored in the Contact Database element [472] in a computer storage device.

Advertising Harvesting

At Step 1800, advertisements are placed in traditional help wanted advertising media such as newspapers, magazines, job websites, and trade journals. Candidates respond to the advertisements or email their resumes, curriculum vitae, job applications, biographies or other format in which a career biographies might exist so that it they are ultimately stored in the Contact Database shown as Element 472.

At Step 1810, the system determines the types of prospects that shall be needed for future advertising and what employment positions those types of contacts might hold. At Step 1820, the system places advertisements in traditional help wanted advertising media such as newspapers, magazines, job websites, and trade journals.

At Step 1830, Prospective Contacts respond to the advertisements placed in Step 1820 by mailing, faxing, submitting via website or emailing their professional profiles, resumes, curriculum vitae, job applications, biographies or other format in which a career biographies might exist and they are stored at a collection point element 471 until later steps when they are normalized and stored in the Contact Database [472].

At Step 1840, the system normalizes data collected in Step 1830 to our invention's standards. At Step 1850, the system stores the information on prospective contacts that was normalized in Step 1840 into a computer storage device [472].

Normalization

At Step 2000, the system "normalizes" the professional profiles data collected by our invention. Preferences and options are adjusted [2105]. At Step 2110 the system uses a computer workstation [471] to identify contact information by recognizing patterns and parsing character sets into data fields (we refer to this kind of software as a "Normalizer Program"). Step 2135 is preparing to store the file with the data saved in a table or array in memory [2115-2130] with the delimiter selected [812] between each data field such that the file would display in a computer text window as shown in 8 if the delimiter character were a Return character or as shown in 8A if the delimiter character was a Tab character.

Steps 3000 *et seq*. describes how our system merges the normalized contact information with a template letter.

AN EXAMPLE OF OUR SYSTEM

Step 1200 et seq.

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At step 1225, operator determines page-qualifying criteria. Once our invention begins its search on the Internet, it downloads from web site servers the text and Meta page content. The content is then analyzed for combinations of characters, words, or phrases, based on what the operator enters. When the content of a page matches one of the page qualifying criteria, then the email address and HTML text or body text of any "matching" page will be stored by the computer. In other words, the system is instructed to save specified content [1290] from only those web pages which contain words, phrase, or combinations that match the entry in the page qualifying criteria field.

The following are an example of page qualifying criteria used by we: "my resume", "vitae", "resume for", "resume of", "C.V.", "CV", "online resume", "personal resume", "work history", "work experience", "job history", "job experience", "my skills", "personal skills", "personal profile", "personal experience", "career experience", "professional profile", "career profile", "my profile", "career objective", "career history". An example of what might be used to search for Visual Basic Programmers' professional profiles is: "my resume", "computer programmer" AND "Visual Basic" AND "vitae".

At Step 1230, operator determines Search Engines if relevant embellishment (URL Search Criteria method) of method is implemented. The search/search engine interface provides a selection list of search engines, which is determined by the entries made in Step 1210. In other words, if three search engines were entered during Step 1210 then the list appearing on the search/search engine interface would consist of three search engines that can be selected. If during Step 1210 eight search engines were entered, then on the search/search engine interface ten search engines would be listed for possible selection. The preferred embodiment of our invention lists the search engines by their "friendly" name as listed in the search engine controls (. 32) interface dialog window column labeled "Name". At Step 1235, operator determines URLs to Ignore.

Normalizing Pattern Analysis Algorithms

Each file is analyzed at a time determined to be effective and convenient by the operator using an application program that resides on the computer that harvested the document or another computer as may be desired in our invention. An application software program compares the text of each stored page with known "patterns" that would indicate the likelihood of a set of characters, or a set of words or a set of phrases to be a specific piece of desired contact information such as Name, Street Address, City, State, Postal Code, Voice Phone, Facsimile Phone, and Email Address. For example, the application program developed by we

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and used by our preferred embodiment of our invention uses the following pattern comparisons to isolate likely phone numbers. Where "#" res any ASCII character that re the digits 0 through 9 then:

	Pattern Variables			
;	0=(###) ###-####	1=###.###.####	2=###-###-####	3=(###)###-####
	4=(###)### ####	5=(###)-###-####	6=(###) ### ####	7=(###).###.####
	8=### ### ####	9=### ###-####	10=###-### ####	11=### - ### - ####
	12=(###) ### - ####			

Upon locating a "phone number" pattern, our invention searches an operator specified number of characters before the located pattern and searches for a match to one of the following "modifiers" and assigns the "phone number" to one of three possible database record fields: Home, Office or Fax.

	[Modifier]				
15	Home=Home	Home=home	Fax=Fax	Fax=fax	Office=Office
	Office=office	Home=ho:	Home=Ho:	Home=H:	Home=Voice
	Home=voice	Office=work	Office=Work	Office=W:	Office=w:
	Fax=Fx	Fax=fx	Fax=F:	Fax=f:	Fax=Facsimile
	Fax=facsimile	Office=wrk	Office=WRK	Fax=FAX	Home=HOME
20	Home=HM	Office=OFF	Office=Off	Office=O:	Office=WORK
	Home=phone	Home=VOICE	Home= HOME	PHONE	Office=Work Phone
	Home=Call	Home=call	Home=Phone	Home=Ph	Office=(o)
	Fax=(f)				

At step 1360, normalized documents are imported into a database. At Step 1370, records reported.

Another example could report the home telephone numbers of the selected records to an electronic file that could later be displayed on the computer monitor of a telemarketing prospector. Another example could be a report of the email addresses, which could be exported to an emailing program so that a help-wanted advertisement could be sent via email to those individuals that have relevant background reed on their resume.

Steps 1600 et seq.

At Step 1600, a professional profile collection device, in the form of a server software program, is placed on Internet community web portals such as demonstrated by element 800 in 0. Using the professional profile collection device, individual visitors to the Internet community web portals submit their resumes, professional profiles, job applications, biographies or other format so that they are ultimately stored in the Contact Database [472].

At Step 1610, the system searches for websites that could serve as professional profile collection points and contacts the operators of desirable sites and reaches an agreement to install and maintain a professional profile collection device, in the form of a server software

program, element 800. A reward provided to third party website owners by the invention for profiles submitted from websites supporting our invention's professional profile collection points provides an incentive for operators and owners of websites to install the professional profile collection point software on their website. professional profiles are tagged by our invention's professional profile collection point software with an identification code reing the website via which it was submitted. That code is stored in a field in the Contact Database allowing for easy tabulation of submissions.

At Step 1620, the system installs and maintains a professional profile collection device, in the form of a server software program, as demonstrated by element 800. Then, at Step 1630, professional profiles are submitted to professional profile collection devices posted on websites when visitors click on a button or hyperlink object such as that demonstrated by element 800 are then invited to fill a computer interface displayed form. Then, at Step 1640, professional profiles arrive at a collection point element 472 where they are stored in the Contact Database element 472 in a computer storage device. Their need not be a normalizing step in the sequence from Step 1600 through 1640 since the form may be designed to force input of data into fields as standardized by the system administrator of the system. For example, the professional profile collection device server software can be programmed to parse the name field element 863 into first name and last name using code that is known in the Art or, the professional profile collection device server software can be programmed to conure the form to input first name and last name as separate entry fields instead of one name field. The form components should be conured such that the input fields match the contact information fields in the Contact Database at element 472 which are dependent on the fields that shall be used in the different layouts as described in Steps 10000 through 10035 and their possible variations.

Steps 1800 et seq.

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At Step 1800, advertisements are placed in help wanted advertising media. Prospective Contacts respond to the advertisements so that they are ultimately stored in the Contact Database shown as Element 472. At Step 1810, the system determines the types of prospects that shall be needed for future advertising and what employment positions those types of contacts might hold. Then, at Step 1820, the system places advertisements in help wanted advertising media. At Step 1830, Prospective Contacts respond to the advertisements and they are stored at a collection point.

At Step 1840, the system normalizes data collected in Step 1830 to our invention's standards using the systems described later in Steps 2000 through 2140. Then, at Step 1850, the system stores the information on prospective contacts that was normalized in Step 1840 into a

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computer storage device demonstrated as the element 472 using the systems described later in Steps 3000 through 3060.

At Step 2000 professional profiles are "Normalized". As used in this patent application for describing our invention, "Normalizing" means converting data into a uniform format for a database. Our invention normalizes *contact information* such as Name, Street Address, City, State, Postal Code, Telephone Numbers and Email Address and normalizes *content information* such as a prospect's practical, academic, and corporate experience; cover letters, forms or other communication indicating the prospects preferences, objectives or goals; publications, documents; and testimonial or reference documentation.

The *content information* most valuable to our invention's professional profile database is that which specifically refers to a candidate's practical, academic, and corporate experience; cover letters, forms or other communication indicating the candidates preferences, objectives or goals; publications, and testimonial or reference documentation. One of the objectives of normalization can be to remove non-relevant *content information* such as advertisement headers and third party information and *objects* such as pictures and tables. The advantage to this is to save data storage space from being used to hold data that is not used by our invention.

Our invention receives resumes, curriculum vitas, professional profiles and other forms of contact records from many different sources, using many different formats and uniquely readable by different application programs. Sources of professional profiles can include, but not be limited to: our invention's harvesting method [1200]; professional profiles harvested by publicly available professional profile harvesting web spidering systems and implemented by the operator of our invention, professional profiles received by postal mail, electronic mail, hand delivery, facsimile machine or other method as may exist as a consequence implementation of step 1400, 1600, 1800, or other method as may exist and be implemented by the operator of our invention; by individual candidates, resumes e-mailed by search agents services, downloads from subscriber databases, responses to other forms of prospecting that may exist or come to exist.

For proper importation of field specific data, the Resume Import software installed at element 472 and the workstation(s) at element 471, which interface is demonstrated in 9, requires that *contact information* be positioned at the upper left on the first page of import documents in a specific order. The professional profiles in all their forms and associated documents received from different sources do not always display contact information in the upper left position, nor necessarily together in the document, nor within a single source document nor in the appropriate order. Often, a prospective contact's name is located in one place, his address in another and her telephone numbers in yet another place. In some cases, the

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contact information is spread through several different documents, which are normalized into one by the system. Operators of the system *normalize* the resumes by locating all contact information within the text of received documents and copying and pasting that information into the upper left position of a single normalized document in the appropriate order.

Some sources provide resumes containing undesirable graphics, headers, or other non-professional experience related text. The system may further *normalize* the resumes by removing such content.

Professional profiles, in all their forms, are created and stored in many different software application formats. These formats are designated by file extensions, which are generally the last three letters of a filename following a dot. For example, "johns_resume.txt.", in which case ".txt" is the file extension indicating that the file a stored as an ASCII document which may be opened by almost any type of computer application software such as Microsoft Word or Microsoft notepad.

As those skilled in the Art know, importing is a technique used to enter data into a computer database. One method of entering data into a database comprises typing the data directly into a computer interface. This method could be used to enter resumes into the Contact database. However, the professional profile in all their forms in most cases have already been typed once by their producer and it does not make sense to do that work over again. Instead, the system use a technique known by those skilled in the Art as "importing".

20 Normalization - Automatic

At Step 2105 the system adjusts preferences and options in the Normalizer Program s. 41 through 46. The following are examples of "non-tagged" and "tagged" contact information.

Non-tagged: Tagged:

Stephen Reuning
1 State St.
Anytown, NJ
Street: 1 State St.
City: Anytown

City: Anytown State: NJ

At Step 2105 the system adjusts preferences and options in the Normalizer Program by entering the Normalizer Program Wildcard Maintenance computer software interface where the operator sets parameters for wild card symbols that shall be used later when entering patterns in the Normalizer Program Pattern Maintenance computer software interface and ultimately by the Normalizer Program to compare character sets in text files with patterns stored in its Pattern Table.

At Step 2105 the system stores and imports Tag and Pattern profiles such that different tag and pattern collections can be applied to document from different sources.

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At Step 2105 the system store into a table a list of known States and Provinces and their abbreviations.

In our invention, the object of Steps 2110 through 2130 is to locate and identify strings of characters representing contact information such as name, street address, city, state, zip code, etc. in documents of different varieties following different formats. In some cases, contact information will be tagged within documents with identifiers like "Home Address" and in other cases contact information will have no obvious identifiers. Since the process to identify contact information in documents with tagged contact information is simpler, the Normalizer Program searches for tagged information first then follows with more complex logical decision making (described in the following paragraphs) in order to intelligently guess what might be contact information and then catalog it into fields.

At Step 2110 the system uses a computer workstation [471] equipped with application software programmed to identify contact information by recognizing patterns and parsing character sets into data fields (Normalizer Program) and using an interface selects a directory on a computer storage device from which to import and normalize files.

At Step 2115 the Normalizer Program opens the first file of the directory submitted by the operator in Step 2110 and searches for postal code patterns which were declared in Step 2105 using an interface and, for each matching set of characters, stores them in a table or array in memory in the column reserved for postal code.

Step 2120 et seq.

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At Step 2120 the Normalizer Program continues with the file opened in Step 2115 searching for a string of characters bordered by space characters just before the location of the postal codes located in Step 2115 and compares that string of characters to a set of known States or Provinces and, searches for a Tag and accompanying string of characters matching those designated in the Normalizer Program Tag Maintenance interface as a State Pattern Type and, in the case of locating a match sets the status column to the value "true" or in the case of failing to find a match sets the status column to the value "false" and stores the string in a table or array in memory in the column reserved for State in the row that corresponds to the Postal Code following directly and located and stored in Steps 2115.

At Step 2122 the Normalizer Program continues with the file opened in Step 2115 searching for a string of characters bordered by space characters just before the location of the state string located in Step 2120 and compares that string of characters to a set of known Cities and, searches for a Tag and accompanying string of characters matching those designated in the Normalizer Program Tag Maintenance interface as a City Pattern Type and, in the case of locating a match sets the status column to the value "true", unless the status has already been

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set to false in an earlier step, or in the case of failing to find a match sets the status column to the value "false" and stores the string in a table or array in memory in the column reserved for City in the row that corresponds to the State or Province and Postal Code following directly and located and stored in Steps 2115 and 2120.

At Step 2125 the Normalizer Program continues with the file opened in Step 2115 searching for a string of characters ending with a space character and starting with an Integer where the string does not exceed sixty characters (this number can be adjusted) just before the location of the City string located in Step 2122 and, searches for a Tag and accompanying string of characters matching those designated in the Normalizer Program Tag Maintenance interface as a Street Pattern Type and, in the case of a successful find, stores the string in a table or array in memory in the column reserved for Street in the row that corresponds to the City and State or Province and Postal Code following directly and located and stored in Steps 2115, 2120 and 2122.

At Step 2130 the Normalizer Program continues with the file opened in Step 2115 searching for a string of characters bordered by space characters just before the location of the street string located in Step 2125 and compares that string of characters to a set of known Last Names and, searches for a Tag and accompanying string of characters matching those designated in the Normalizer Program Tag Maintenance interface as a Name Pattern Type and, in the case of locating a match sets the status column to the value "true", unless the status has already been set to false in an earlier step, or in the case of failing to find a match sets the status column to the value "false" and stores the string in a table or array in memory in the column reserved for Last Name in the row that corresponds to the Street Address, City and State or Province and Postal Code following directly and located and stored in Steps 2115, 2120, 2122 and 2125.

Then, the Normalizer Program continues with the file opened in Step 2115 searching for a string of characters bordered by space characters just before the location of the Last Name string located in the first part of Step 2130 and compares that string of characters to a set of known First Names and, searches for a Tag and accompanying string of characters matching those designated in the Normalizer Program Tag Maintenance interface as a Name Pattern Type and, in the case of locating a match sets the status column to the value "true", unless the status has already been set to false in this step or an earlier step, or in the case of failing to find a match sets the status column to the value "false" and stores the string in a table or array in memory in the column reserved for First Name in the row that corresponds to the Street Address, City and State or Province and Postal Code following directly and located and stored in Steps 2115, 2120, 2122 and 2125.

At Step 2135 the Normalizer Program continues with the file opened in Step 2115 by preparing to store it as a text document with the data saved in a table or array in memory during Steps 2115 through 2130 with the delimiter selected using the element 812 between each data field such that the file would display in a computer text window as shown in 8 if the delimiter character were a Return character or as shown in 8A if the delimiter character was a Tab character.

At Step 2140 the Normalizer Program continues with the file opened in Step 2115 by storing it on a computer storage device as a text document with the data saved in a table or array in memory during Steps 2115 through 2130 with the delimiter selected using the element 812 41 between each data field such that the file would display in a computer text window 8 if the delimiter character were a Return character or as shown in 8A if the delimiter character was a Tab character.

Update Data and Screen Redundancies

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At Step 3000, the system imports the files saved in Step 2140 into the Contact Database [472]. At Step 3010, the system selects documents saved in Step 2140 using a resume import program which computer software interface is demonstrated in 9. The path to the storage directory where the selected documents are stored is entered [678]. At Step 3020, the system opens the files selected and parses the data fields. The parsed fields are stored in an array in memory and displayed. Row 2 of the table [680, 681, 682, 683, 684, and 685] shows how the delimited elements [704] are displayed in the Resume Import Interface.

At Step 3030, the system compares contact information from the files opened with contact information of records already stored in the Contact Database [472] and decides if it duplicates an already stored prospective contact record. If the record is a duplicate then our invention proceeds to Step 3040. If the record is not a duplicate, then our invention proceeds to Step 3050. At Step 3040, the system joins information from a file selected during Step 3010 with a record stored in the Contact Database [472].

Selecting "Join" [691] leaves the contact field information indicated in the O row unchanged in the Contact Database and joins the content information [e.g., 686] to the content information field already stored as part of this individual prospective contact's record in the Contact Database. Selecting "New" [691] instructs our invention system to create a new record in the Contact Database using the information from the file selected [3010]. If no selection is made from element 691, 692 or 693, then the document reed by the N row is stored in a "Hold" directory on a computer storage device as directed by the path entered [701]. A selection is entered by clicking in the selected column, displaying a check mark in the box and then clicking on the Submit button [864].

At Step 3050, the system, when no duplicate record is matched during Step 3030, creates a new prospective contact record for the file selected [3010] in the Contact Database element [472] and imports the information from a file selected [3010]. At Step 3060, the system checks for files not yet processed that were selected [3100], and executes Steps 3020 through 3050 for each not yet processed file.

Advertisement Submission

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An Advertisement Submission Program implements the entry, update, storage, reading, sorting, importing, exporting, reporting and other manipulation of image records in the form of image records which are stored in a database structure such as that demonstrated by Table 3 [152]. An Advertisement Submission Program implements the entry, update, storage, reading, sorting, importing, exporting, reporting and other manipulation of Headlines submissions in the form of Headline records which are stored in a database structure such as that demonstrated by Table [153]. An Advertisement Submission Program implements the entry, update, storage, reading, sorting, importing, exporting, reporting and other manipulation of media selections in the form of media records which are stored in a database structure such as that demonstrated by Table 5 [188].

An Advertisement Submission Program implements the entry, update, storage, reading, sorting, importing, exporting, reporting and other manipulation of contact list submissions in the form of list records which are stored in a database structure such as that demonstrated by Table 6 [350]. An Advertisement Submission Program implements the entry, update, storage, reading, sorting, importing, exporting, reporting and other manipulation of Letterhead submissions in the form of Letterhead records which are stored in a database structure such as that demonstrated by Table 7 [151]. The Advertisement Submission Database Program shall be called upon in later steps, to retrieve and report images and objects.

25 Steps 5000 et seq.

At Step 5000, the system provides image selections based on the media type selected in Step 4030. An advertiser inputs a selection [222, 553, 552] from an Advertisement Submission Program Interface Submit New Advertisement Page [575] and demonstrated by. By clicking a selection, the operator causes an Advertisement Submission Program to display a selection available to the selected media type [222, 553, 552] from an Advertisement Submission Program Interface Submit New Advertisement based on what is available for the media type selected [4030]. For example, if the operator had selected "Post Card 5X8" [221] in Step 4030 and then selected Food/ restaurant element 365, then an Advertisement Submission Program displays an interface where the operator can review and select from image thumbnails that are specific to the Post Card media type. Other categories of image thumbnails may be reviewed

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by scrolling the images list [365] that is displayed at element 357. If the operator had selected "Post Card 5X8" at element 221 in Step 4030, then no selections would appear at elements 553 and 552 because such selections do not apply to the Post Card media type. If the operator had selected "ZFold Letter2" at element 221 in Step 4030 then selections would appear at elements 553 and 552 because such selections apply to the "Zfold Letter2" media type. If the operator had selected "ZFold Letter2" at element 221 in Step 4030 then an item [553] is selected to display an interface where the operator can review and select from Letter Head image thumbnails that are specific to the "ZFold Letter2" and the operator selects an item at element 552 to cause an Advertisement Submission Program to display an interface where the operator can review and select from Left Border image thumbnails that are specific to the Zfold Letter2".

At Step 5005, the system Advertisement Submission Program determines, based on the media type selection made by the advertiser in Step 403, which set of steps to follow. At Step 5010, the system Advertisement Submission Program, based on the media type selection made by the advertiser in Step 4030 and the advertiser's user ID, displays a selection of image titles in an Advertisement Submission Program Submit New Advertisement interface at element 222 Select Post Card Image. At Step 5020, the advertiser of the system Advertisement Submission Program decides to use images already stored in an Advertisement Submission Program database or to submit a new image and indicates selection by selecting element 222 or element 576 of. At Step 5030, the advertiser of the system Advertisement Submission Program proceed to Step 11000 if advertiser chose "Submit New Post Card Image" element 576 during Step 5020. At Step 5040, the advertiser of the system Advertisement Submission Program selects an image from an Advertisement Submission Program database.

At Step 5050, the system Advertisement Submission Program, based on the media type selection made by the advertiser in Step 4030 and the advertiser's user ID, displays a selection of image titles in an Advertisement Submission Program Submit New Advertisement interface at element 553 Select Letter Head. At Step 5060, the advertiser of the system Advertisement Submission Program decides to use images already stored in an Advertisement Submission Program database or to submit a new image and indicates selection by selecting element 553 or element 577. At Step 5070, the advertiser of the system Advertisement Submission Program proceed to Step 11000 if advertiser chose "Submit New Letter Head" element 577 during Step 5060. At Step 5080, the advertiser of the system Advertisement Submission Program selects an image from an Advertisement Submission Program database.

At Step 5090, the system Advertisement Submission Program, based on the media type selection made by the advertiser in Step 4030 and the advertiser's user ID, displays a selection

of image titles in an Advertisement Submission Program Submit New Advertisement interface at element 553 Select Letter Head and/or element 552 Select Left Border if Desired. At Step 5100, the advertiser of the system Advertisement Submission Program decides to use images already stored in an Advertisement Submission Program database or to submit a new image and indicates selection by selecting element 553 or element 577 of and element 552 or element 578 of. At Step 5110, the advertiser of the system Advertisement Submission Program proceed to Step 11000 and, if advertiser chose "Submit New Letter Head" element 577 during Step 5100 or "Submit New Border" element 578 during Step 5100. At Step 5120, the advertiser of the system Advertisement Submission Program selects an image from an Advertisement Submission Program database.

The advertiser is not limited to choosing an image or object already stored [364, 365, 366, 367, 569] and can indicate the intention of adding a new image or object to an Advertisement Submission Program database [576, 577, 578], which causes an Advertisement Submission Program to display an interface. An Advertisement Submission Program interfaces achieve similar results and illustrate two differing strategies for presenting selections.

Step 6000 et seq.

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At Step 6000 the system provides headline selections based on the media type selected in Step 4030 for which an advertiser inputs a selection using element 223 from an Advertisement Submission Program Interface Submit New Advertisement page located at element 575 and the choice to enter a new headline by selecting element 226. At Step 6010 the advertiser of the system Advertisement Submission Program decides to use headlines already stored in an Advertisement Submission Program database or to submit a new headline and indicates selection by selecting element 223 or element 226. At Step 6020 the advertiser of the system uses an Advertisement Submission Program Submit New Headline interface to enter a new headline element 234. At Step 6030 the advertiser of the system stores the headline entered in Step 6020 in the Advertisement Submission Database by clicking the Submit button on an Advertisement Submission Program Submit New Headline interface. When the operator clicks on element 226 an Advertisement Submission Program responds by activating an Advertisement Submission Program Submit New Headline interface. The operator types into element 234 then clicks on the Submit button to save the entry causing a new record to be created in Table element 153.

At Step 6040, the advertiser of the system reviews the list of headlines available by scrolling the list at element 223 of an Advertisement Submission Program Submit New Advertisement page. At Step 6050, the advertiser of the system selects a headline from the list of headlines available by scrolling the list at element 223 of an Advertisement Submission

Program Submit New Advertisement interface by clicking on it so that it is highlighted. At Step 6060, or at any step when the operator wishes to store the selections made at an Advertisement Submission Program Submit New Advertisement interface, the advertiser submits the selections made at an Advertisement Submission Program Submit New Advertisement page by clicking on the Submit button element 237 and then our invention stores them in the Advertisement Submission Database and an Advertisement Submission Program activates the View and Update Submitted Advertisements interface which displays the layout of an assembled advertisement based on the advertisers selections made during Steps 4000 through 7050. An operator of the system clicks on the Active List Selection button element 870 and the program activates an Advertisement Submission Program List Selection interface from which the operator begins the execution of Steps 8020 through 8120.

Step 7000 et seq.

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At Step 7000 the advertiser of the system enters advertising copy into an Advertisement Submission Program Submit New Advertisement page by typing it in directly or copying and pasting it from an already created document. At Step 7010 the advertiser of the system decides whether to copy and paste advertisement copy from an already created document or type the advertisement copy directly into the interface and based on that choice proceeds to Step 7060 or Step 7020 accordingly. At Step 7020, if the advertiser of the system chose to copy and paste advertisement copy from an already created document in Step 7010 then open the document file in which the advertisement copy is stored.

At Step 7060, the advertiser of the system opens an Advertisement Submission Program Submit New Advertisement interface page then, at Step 7070, the advertiser of the system types advertisement copy into element 225 of an Advertisement Submission Program Submit New Advertisement interface page.

Step 8000

At Step 8000, operating an Advertisement Submission Program List Selection interface, the advertiser of the system submits a list of prospects from a source other than our invention's Contact Database and submits that list to be merged with the advertisement copy and selected images into the selected media type OR requests the help of an experienced Query Artist who will later search for a list of prospects from the Contact Database element 472 submits that list to be merged with the advertisement copy and selected images into the selected media type OR searches for a list of prospects from the Contact Database element 472 and submits that list to be merged with the advertisement copy and selected images into the selected media type. For the purpose of illustration, a specialized system administrator called a "Query Artist" is referenced herein..

At Step 8010, the advertiser of the system opens an Advertisement Submission Program Start Page interface, selects option "View and update submitted advertisements" element 203, the Program opens an Advertisement Submission Program View and Update Submitted Advertisements interface.

At Step 8020, the advertiser of the system proceeds to Step 8050 if the advertiser decided to enter a list of prospects from a source other than our invention's Contact Database or proceeds to Step 8030.

At Step 8050, the advertiser of the system highlights the radio button [375] and clicks the Submit button [377] which action opens an Advertisement Submission Program List Transfer interface. At Step 8060, the advertiser of the system enters the network path to the storage location of the file containing a pre-prepared contact list into an Advertisement Submission Program List Transfer interface input field element 380. At Step 8070, the advertiser of the system submits the list which path was entered in Step 8060 into the Advertisement Submission Database by clicking the Submit button [382].

At Step 8080, the advertiser of the system highlights the radio button [376] and clicks the Submit button element. The words or phrases entered into the input field elements at 385 are used in what any person with ordinary skill in the art would understand. At Step 8090, the advertiser of the system enters search criteria into the fields. At Step 8120, the system submits the list to Advertisement Submission Database.

20 Step 9000 et seq.

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Step 9000 et seq. illustrate the steps of merging data to create an advertising piece.

At Step 13000, the system selects an advertisement submission for processing then, using the graphic processing software applications located at element 486, prepares the layout for printing and merging into the list selected or submitted by an advertiser or Query Artist during Steps 8000 through 8120, imports the list, previews the job using a computer software interface at element 486and then inputs the command to print or export the advertisements.

At Step 13010, the system opens an Advertisement Submission Program Start Page then at Step 13020, the system clicks on the element 204 of an Advertisement Submission Program Start Page to activate an Advertisement Submission Program Process Advertisements interface. At Step 13030, the system selects an option from an Advertisement Submission Program Process Advertisements interface and in response our invention reports a list of advertisement submissions in the table element 399 The system administrator could search for advertisements submitted on a specific date by entering a date into input field element 393 which, upon clicking the submit button element 394, searches the Date field element 371 and reports matching advertisement submission records stored in Table 2 element 151.

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At Step 13060, the system imports variable field data from a file created or stored during Steps 8000 through 8120. Activating the graphics program such as Darwin Pilot, the system selects the Data Import command from the Navigator palette and the program displays the Import window.

5 Step 14000 et seq.

At Step 14000, the system opens the print processor, selects a printer to process the print job, loads materials into the printer, executes the print command which activates the print server [488], removes the printed materials and cuts, folds, inserts bundles, stamps and otherwise prepare for delivery.

At Step 14010, the system opens the print processor located at Darwin Workstation element 486. The operator enters a print run name and selects the all button indicating that advertisements should be printed for all the records imported from the contact list imported during Step 13060 and then saves the print run. At Step 14020, the system selects the printer or computer storage device to receive the print job.

15 Step 1000 et seq.

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At Step 1000 professional profiles are collected. The professional profiles collected by the system are stored. At Step 2000, contact information are searched for and located within the professional profile documents and recreated at the top of the professional profile. At Step 3000, professional profiles are imported into a Contact Database. At Step 4000 an advertiser selects a media type. Reacting to the selection, the system provides image and object selections relevant to the selected media type. At Step 5000 and 6000 an advertiser selects images and objects. During Step 5000 and 6000, the advertiser may choose to submit images and objects other than those made available by the system. At Step 7000, an advertiser inputs text copy that shall appear in the advertising media assembled, and delivered during Steps 13000 through 15000. At Step 7000, an advertiser inputs voice or sound recording(s) that shall be included in the advertising media assembled, and delivered during Steps 13000 through 15000. At Step 7000, an advertiser inputs video recording(s) that shall be included in the advertising media assembled, and delivered during Steps 13000. At Step 7000, an advertiser inputs an HTML object that shall be included in the advertising media assembled, and delivered during Steps 13000 through 15000.

At Step 8000, an operator inputs search criteria. Once a satisfactory set of professional profiles is selected, the system exports the contact information to a file or database record in a delimited format. At Step 8000, an operator inputs a delimited field list of contact information from a source other than the system into the data structure where it is stored for later use in Steps 13000 through 15000. At Step 9000, an operator stores the data entered and the

selections made during Steps 4000 through 8120. At Step 10000, an operator creates and stores media types into the Advertisement Submission Database.

Step 11000 et seq.

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At Step 11000 and 12000, an operator stores text, images and objects, in an Advertisement Submission Database. At Step 13000, an system administrator processes advertisement submissions made by advertisers [4000-9060] by assembling the components selected [5000-6060] and the Components or advertising copy entered [7000-7070] into a deliverable unit.

At Step 14000, the variable information (such as name, street address, City, State, Zip Code, email address) is merged from the contact record information stored as a delimited field file [8000] into a print layout [13000] and the merged advertisements are printed. At Step 15000, an operator applies postage, bundles and delivers advertisements to the Post Office.

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CLAIMS

1. A method comprising:

Searching the Internet for professional profile data,

Identifying a web page containing professional profile content data and contact data,

5 Normalizing said professional profile content data,

Storing said normalized professional profile data,

Normalizing said professional profile contact data, and

Storing said contact information data.

2. The method of claim 1, further comprising:

Merging said normalized contact data into a deliverable medium.

3. The method of claim 1, further comprising:

Sorting said professional profile data against a pre-determined criteria, and

If said professional profile data meets said pre-determined criteria, merging said contact data into a deliverable medium.

4. A method comprising:

Reading a document

Identifying in said document professional profile content data,

Normalizing said professional profile content data,

Storing said normalized professional profile content data,

Identifying in said document professional profile content data,

Normalizing said professional profile content data,

Storing said normalized professional profile content data,

5. The method of claim 4, further comprising:

Merging said contact data into a deliverable medium.

25 6. The method of claim 4, further comprising:

Sorting said professional profile data against a pre-determined criteria, and

If said professional profile data meets said pre-determined criteria, merging said contact data into a deliverable medium.

- 7. The method of claim 4, wherein said document is a web page.
- 30 8. The method of claim 7, further comprising:

Merging said contact data into a deliverable medium.

9. A system comprising:

An internet search engine,

A professional profile content data normalizer,

A professional profile content data data structure.

A professional profile contact data normalizer, and

A contact data data structure.

10. The system of claim 9, further comprising:

Means for merging normalized contact data into a media.

5 11. The method of claim 9, further comprising:

A professional profile data sorting filter, and

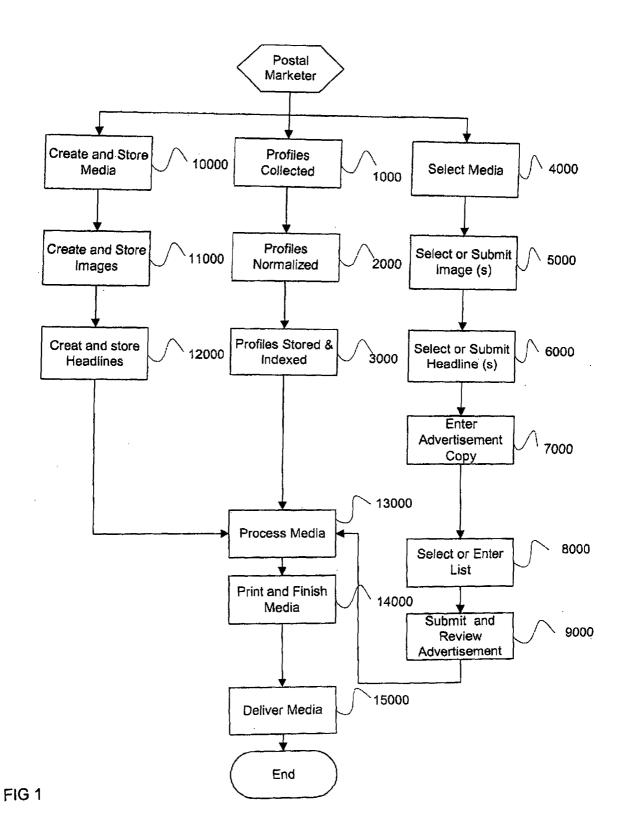
Means for merging normalized contact data into a media.

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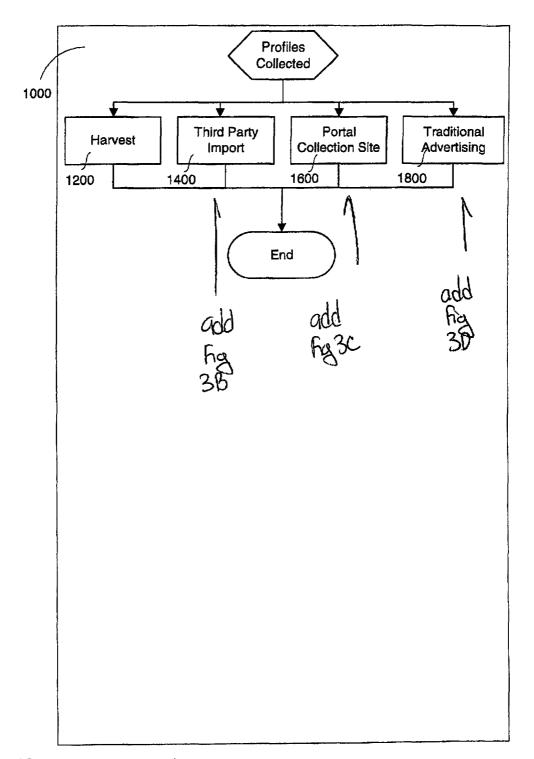
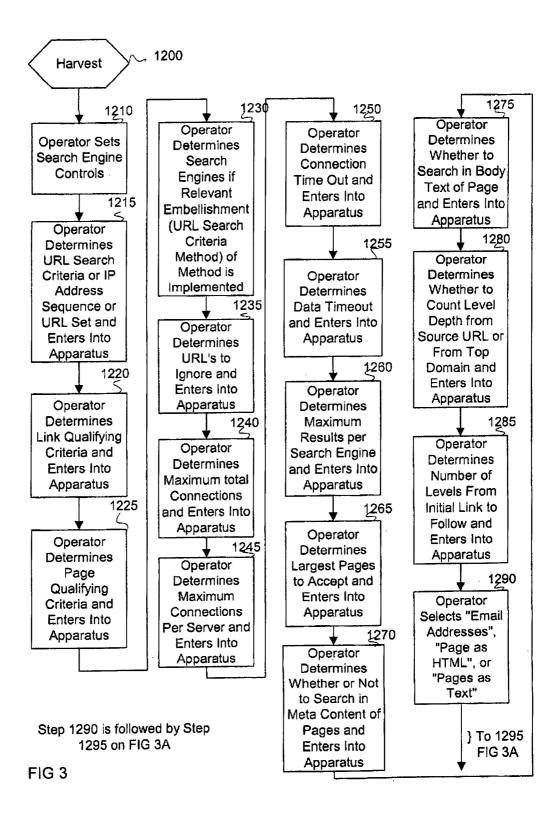
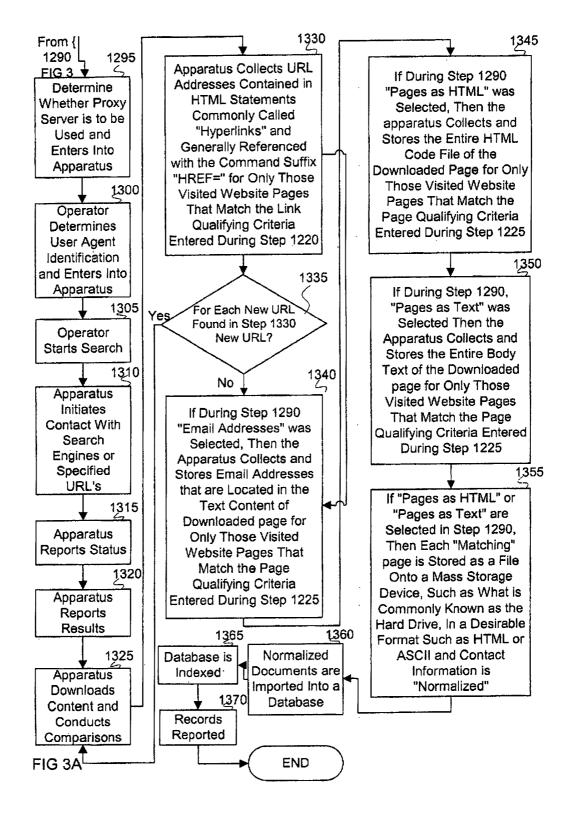
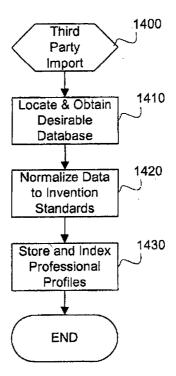
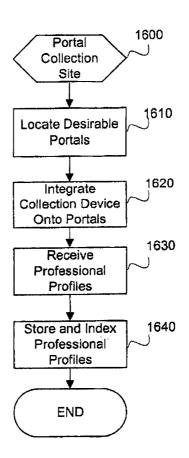


FIG 2

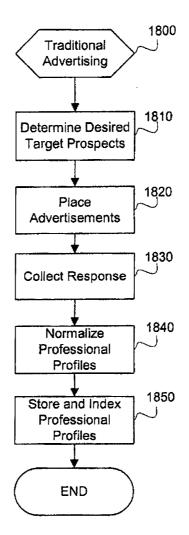


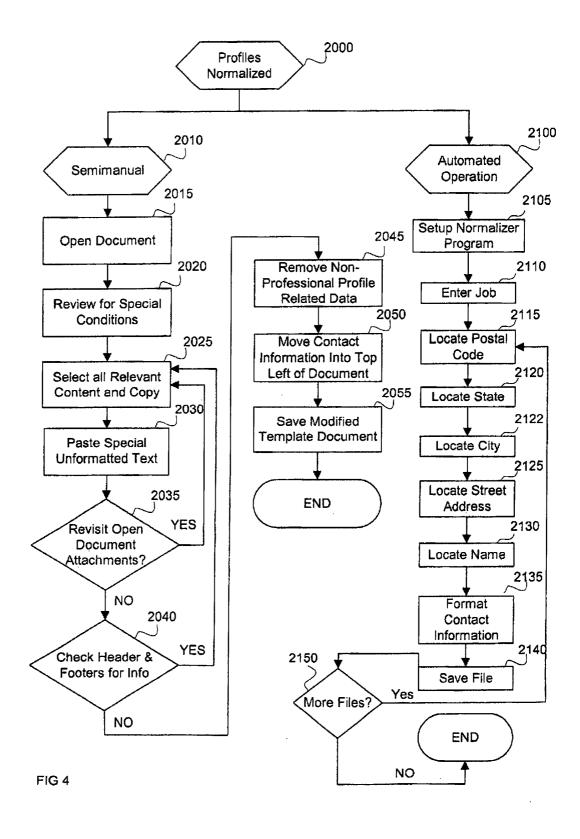






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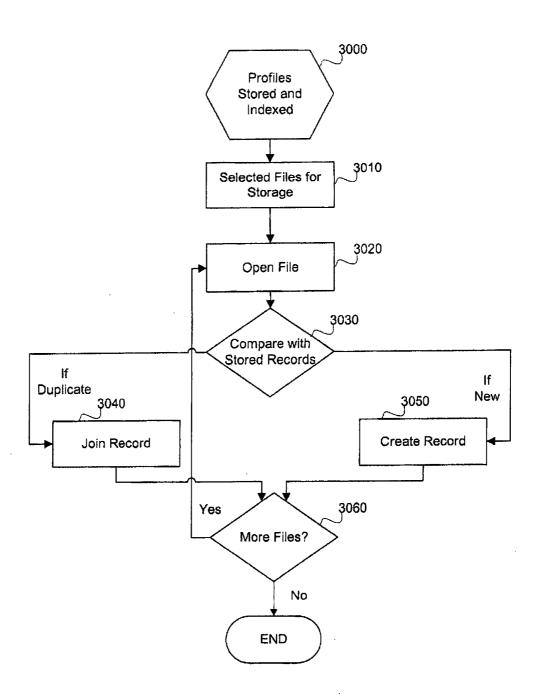


FIG 5

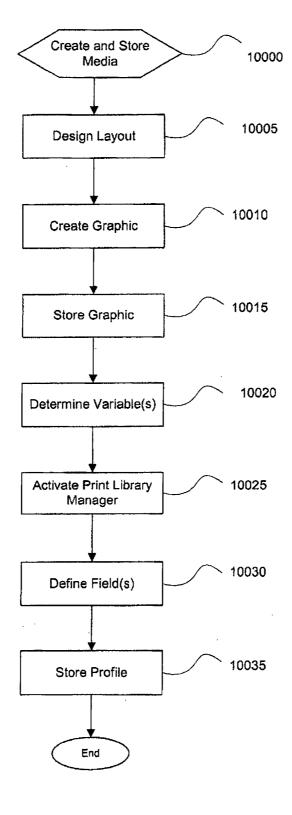
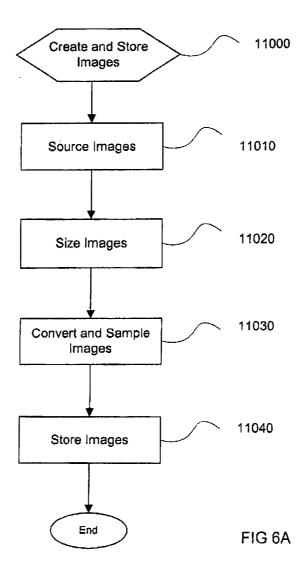
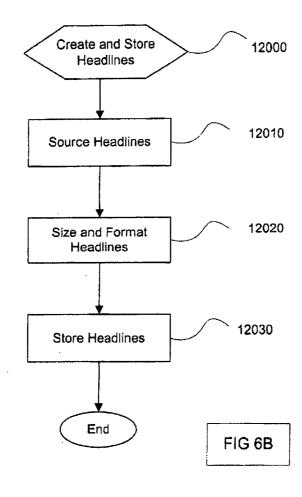
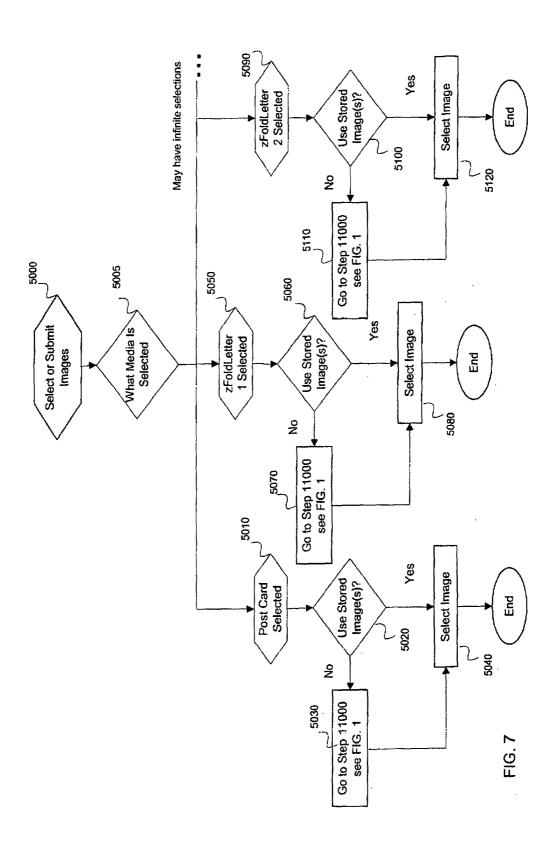


FIG 6







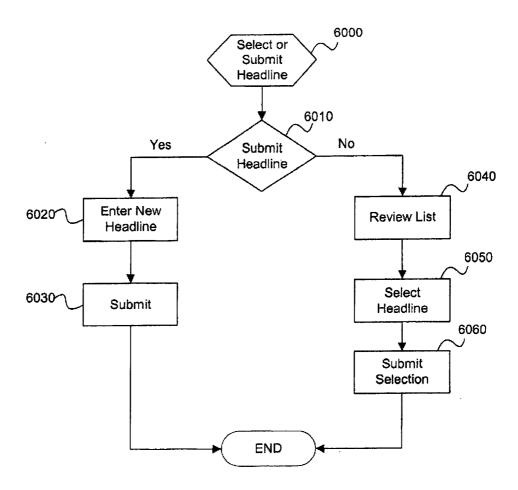
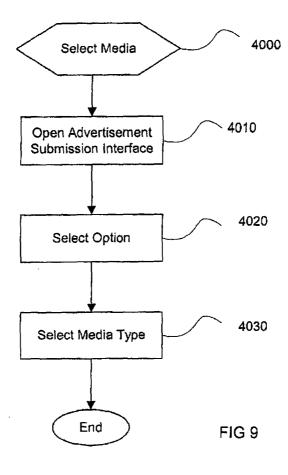


FIG 8



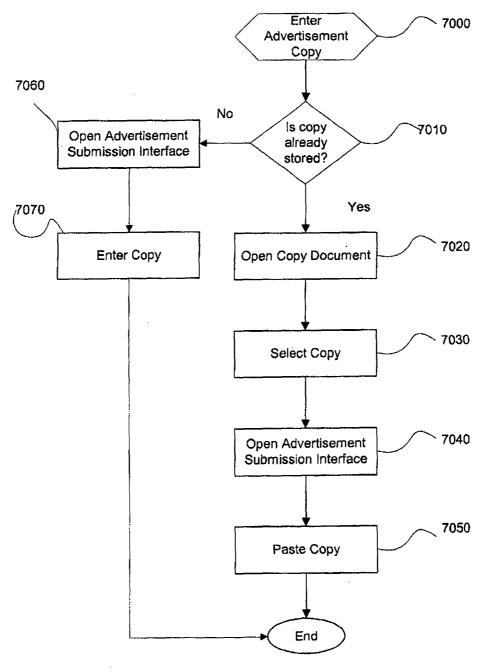
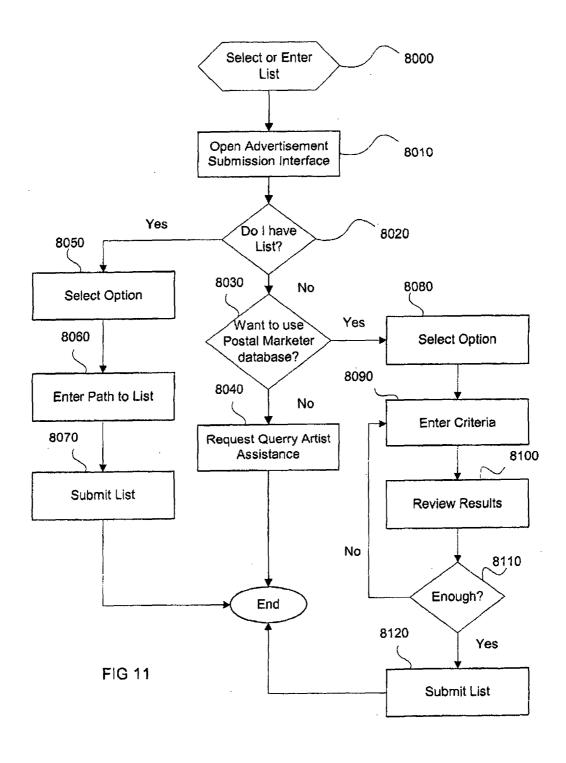


FIG 10



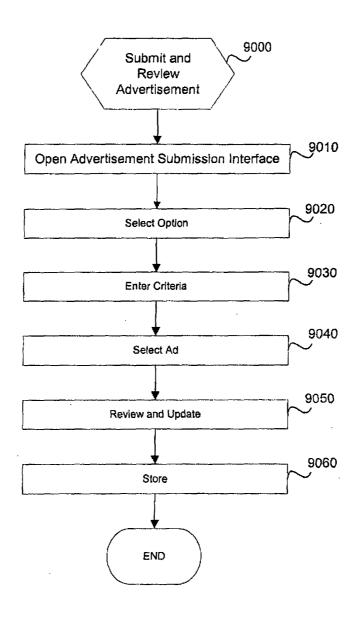
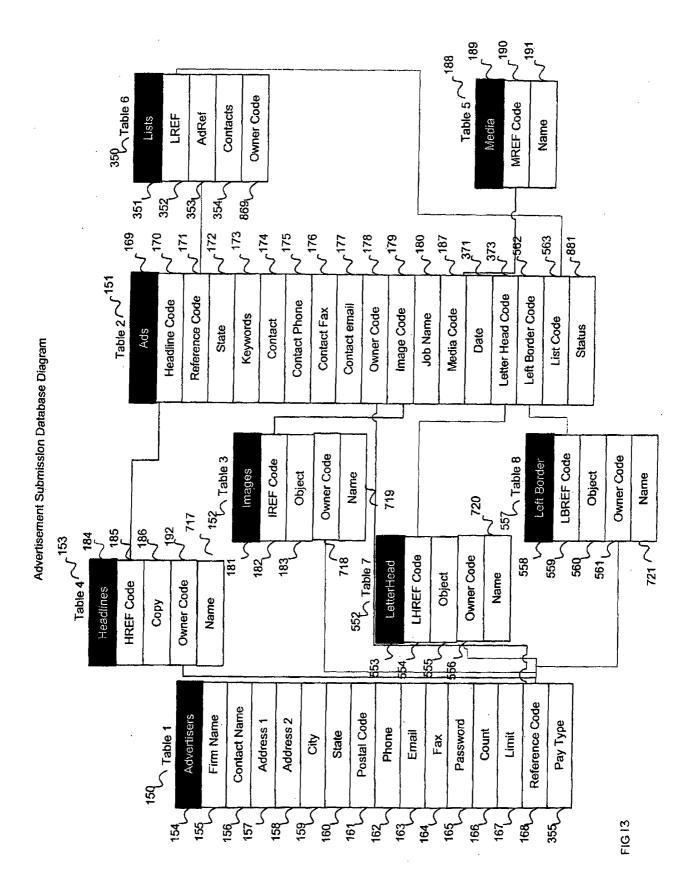


FIG 12



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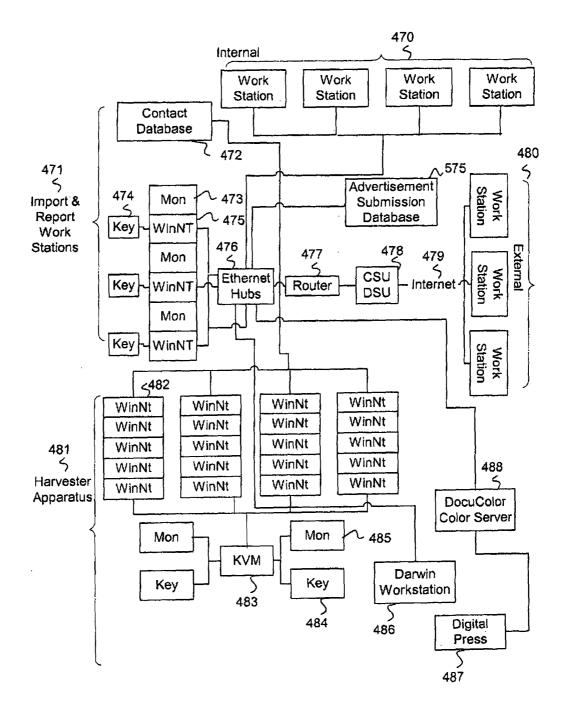


FIG 14

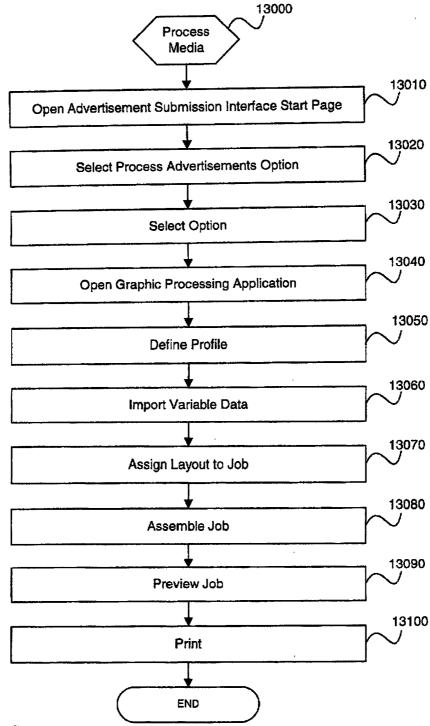


FIG 15

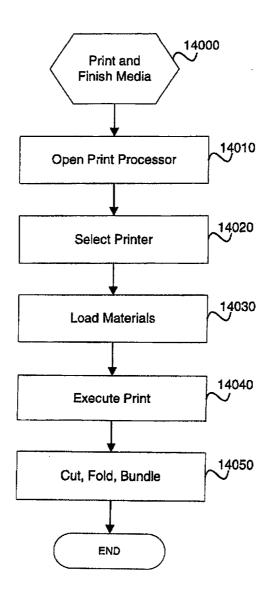


FIG 16

Contact Database Diagram

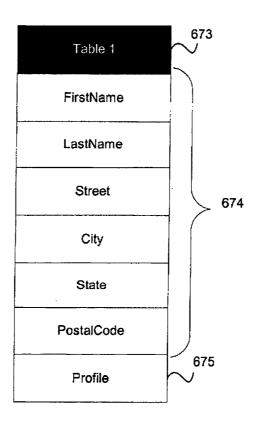


FIG 17

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/04463

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G06F 17/60 US CL : 705/14				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIEL	DS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 705/14				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where a		Relevant to claim No.	
X,E	US 2002/0116263 A1 (GOUGE) 22 August 2002 (22.08.2002), see abstract; paragraphs [0006] to [0011]; paragraphs [0023], [0109], [0115]; paragraphs [0159] to [0163]; paragraphs [0249] to [0253].		1-11	
X,E	US 6,045,214 B1 (MEADE, II) 11 June 2002 (11.06.2002), see entire document.		1-11	
х	'SpaceWorks: Spaceworks launches web businessmanager 5.0; Next generation B@B solution addresses move from pure B@B exchanges towards private Web-based sales channels.' M2 Presswire, October 18, 2000 (abstract) PROQUEST [online]. [retrieved on 2002-09-04].		1-11	
х	'Excite@Home's MatchLogic Advances Retaltionship Marketing Through eVista 3.0 Solution.' Business Wire, March 7, 2001 (abstract) PROQUEST [online]. [retrieved on 2002-09-04].		1-11	
х	DEANS, R. 'Web site operator's cookies refuse to crumble.' South China Morning Post, April 17, 2001 (abstract) PROQUEST [online]. [retrieved on 2002-09-04].		1-11	
Further documents are listed in the continuation of Box C.		See patent family annex.		
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance 		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
"E" earlier application or patent published on or after the international filing date		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination		
"O" document referring to an oral disclosure, use, exhibition or other means " "P" document published prior to the international filing date but later than the		being obvious to a person skilled in the art "&" document member of the same patent family		
priority date claimed Date of the actual completion of the international coards. Date of mailing of the international coards.			.1	
Date of the actual completion of the international search 04 September 2002 (04.09.2002)		Date of mailing of the international search 0 3 OCT 2	2002 Wells	
Name and ma	ailing address of the ISA/US	Authorized officer	1 / 1	
Commissioner of Patents and Trademarks Box PCT		Emanuel T. Voeltz	Volle	
Washington, D.C. 20231 Facsimile No. (703)305-3230		Telephone No. 703-305-3900	· ·	

Form PCT/ISA/210 (second sheet) (July 1998)

	PCT/US02/04463	
INTERNATIONAL SEARCH REPORT		
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Continue of D. ETEL DC CE A D.CHED 14		
Continuation of B. FIELDS SEARCHED Item 3:	and the constant of the second section is	
search terms: database, profiles, data, compile, collect, extract, information, adversition internet.	ertising, marketing, target, direct, store, selective,	
interliet.		