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(54) INTEGRATED AUDIOTEXT-INTERNET PERSONAL AD SERVICES

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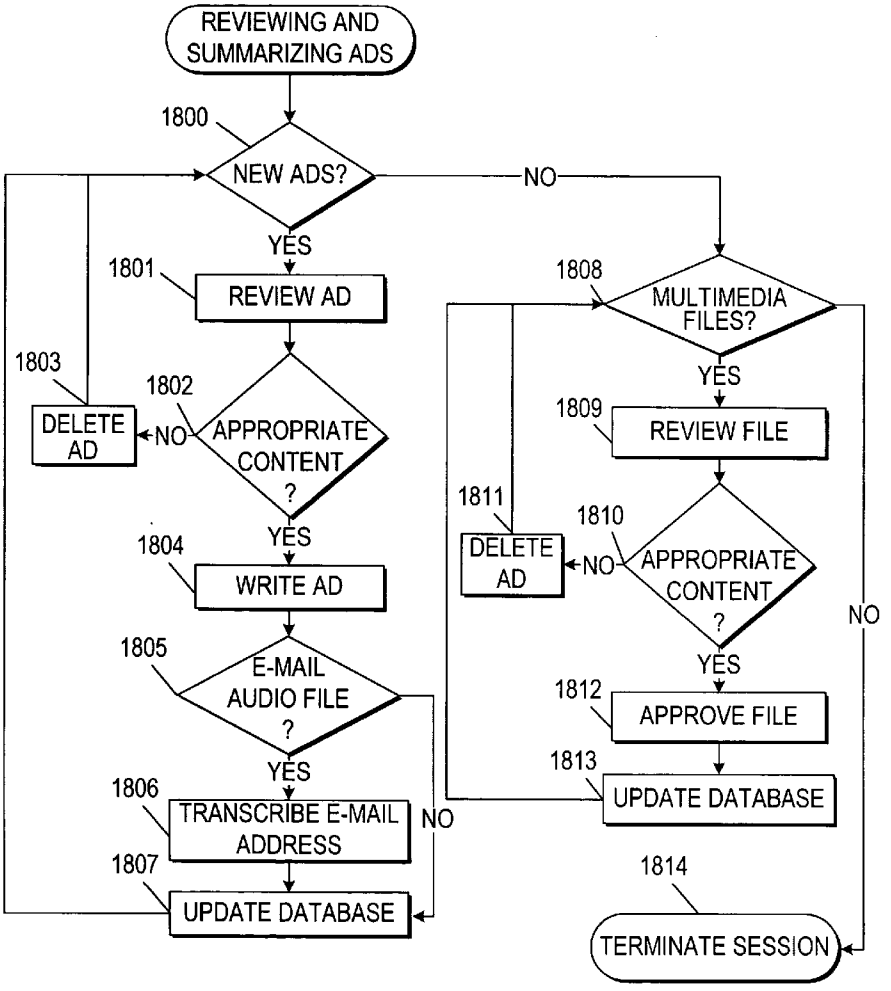
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(52) **U.S. Cl.** **709/219**

(57) **ABSTRACT**

The present invention relates to a method and apparatus for delivering personal ad services which substantially eliminate or reduce the disadvantages and problems associated with prior systems that deliver such personal ad services. In the use of such services, the need is recognized for improved capability regarding the features available to Internet users, and the integration of audiotex personal ad services and Internet personal ad services. With the present invention, a personal ad published in a newspaper includes graphical icons which denote if an ad has additional text or multimedia files (a photograph or a video clip) available on the Internet. With respect to personal ad services, the present invention provides the needed improved capability regarding the features available to Internet users, and the integration of audiotex personal ad services and Internet personal ad services.



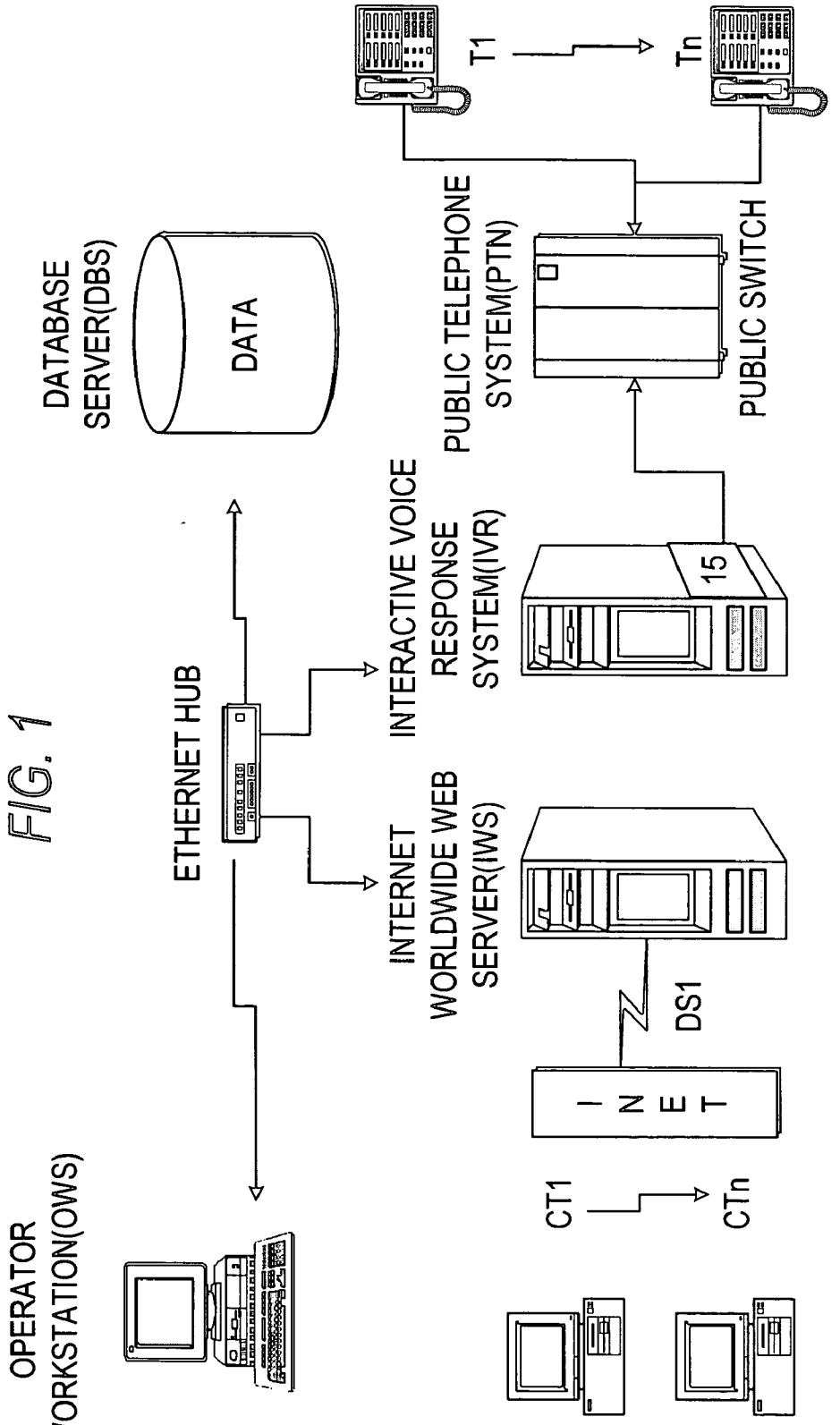

OPERATOR WORKSTATION(OWS)
ETHERNET HUB
DATABASE SERVER(DBS)
DATA
INTERACTIVE VOICE RESPONSE SYSTEM(IVR)
INTERNET WORLDWIDE WEB SERVER(IWS)
PUBLIC TELEPHONE SYSTEM(PTN)
PUBLIC SWITCH
15
DS1
I N E T
CT1
CTn
T1
Tn

FIG. 1

FIG. 2

AD PERSONAL TABLE

FIELD NAME	REF. #	DESCRIPTION
AD_MAILBOX_NUMBER	201	THE FIVE DIGIT MAILBOX NUMBER ASSIGNED TO THE AD. THE MAILBOX NUMBER IS USED FOR VOICE MAILBOX E-MAIL ADDRESSES.
AD_PASSWORD	202	THE ADVERTISERS 5 DIGIT PASSWORD
AD_PHONE	203	THE ADVERTISERS PHONE NUMBER
AD_EMAIL_ADDRESS	204	THE OPTIONAL E-MAIL ADDRESS OF THE ADVERTISER. THE AD E-MAIL ADDRESS WILL ONLY BE USED TO NOTIFY THE ADVERTISER THAT A RESPONSE HAS OCCURRED.
AD_EMAIL_FILENAME	205	THE FILENAME OF THE E-MAIL AUDIO FILE RECEIVED FROM THE CLIENT
AD_DATE	206	THE DATE THE AD IS PLACED
AD_GENDER	207	THE GENDER OF AN ADVERTISER
AD_MARITAL_STATUS	208	THE MARITAL STATUS OF AN ADVERTISER
AD_AGE	209	THE AGE OF AN ADVERTISER
AD_REVIEW_FLAG	210	SET TO FALSE TO INDICATE THAT THE AD NEEDS TO BE REVIEWED.
AD_ORIGIN	211	WHERE DID THE AD ORIGINATE? IVR OR IWS

FIG. 3

AD GREETINGS TABLE

FIELD NAME	REF. #	DESCRIPTION
GR_MAILBOX_NUMBER	301	THE FIVE DIGIT MAILBOX NUMBER ASSIGNED TO THE AD. THE AD NUMBER IS ALSO USED AS THE VOICE MAILBOX ADDRESS AND FOR THE E-MAIL ADDRESS.
GR_TYPE	302	THE TYPE OF GREETING STORED (TEXT, VOX, WAV, REALAUDIO, PHOTO, ETC..).
GR_REVIEW_FLAG	303	THE FLAG THAT DENOTES THE FILE HAS BEEN REVIEWED (INITIALLY SET TO FALSE).
GR_FILENAME	304	THE FILENAME OF A GREETING (GREETING1, GREETING2, ETC..).
GR_DATE_TIME	305	DATE AND TIME THE GREETING WAS POSTED TO THE DATABASE.
GR_CONVERSION_FLAG	306	SET TO FALSE IF THE FILE IS TO BE CONVERTED TO ANOTHER FORMAT.

FIG. 4

AD RESPONSE TABLE

FIELD NAME	REF. #	DESCRIPTION
RSP_MAILBOX_NUMBER	501	THE FIVE DIGIT MAILBOX NUMBER ASSIGNED TO THE AD. THE MAILBOX NUMBER IS ALSO USED FOR THE VOICE MAILBOX ADDRESS AND FOR THE E-MAIL ADDRESS.
RSP_DATE_TIME	503	THE DATE THE RESPONDENT ENTERED THE FILE INTO THE DATABASE.
RSP_TYPE	504	THE TYPE OF RESPONSE FILE (TEXT, VOX, WAV, REALAUDIO, ETC..).
RSP_FILENAME	505	THE FILENAME OF A RESPONSE, INCLUDING TEXT FILES (GREETING1, GREETING2, ETC..).
RSP_CONVERSION_FLAG	506	SET TO FALSE IF THE FILE IS TO BE CONVERTED TO ANOTHER FORMAT.

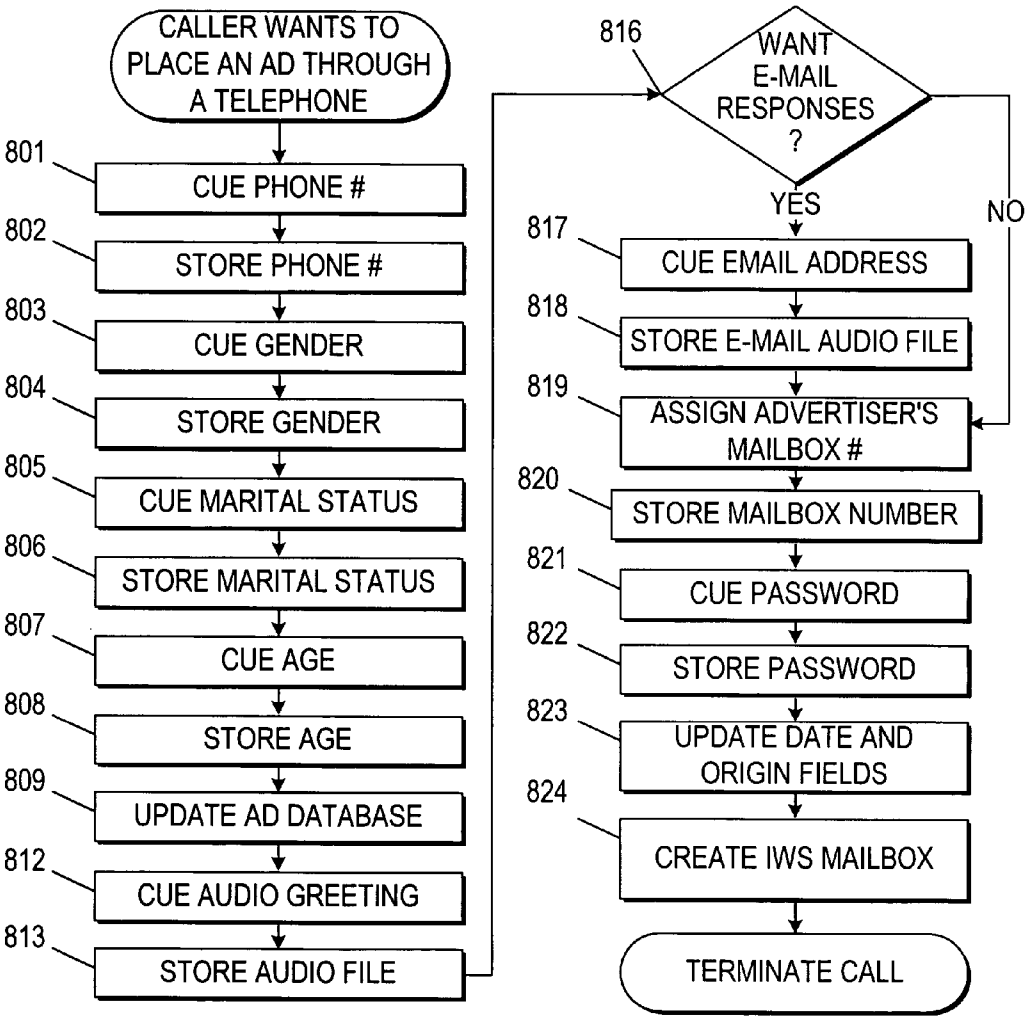

CALLER WANTS TO PLACE AN AD THROUGH A TELEPHONE
801
CUE PHONE #
802
STORE PHONE #
803
CUE GENDER
804
STORE GENDER
805
CUE MARITAL STATUS
806
STORE MARITAL STATUS
807
CUE AGE
808
STORE AGE
809
UPDATE AD DATABASE
812
CUE AUDIO GREETING
813
STORE AUDIO FILE
816
WANT E-MAIL RESPONSES ?
YES
NO
817
CUE EMAIL ADDRESS
818
STORE E-MAIL AUDIO FILE
819
ASSIGN ADVERTISER'S MAILBOX #
820
STORE MAILBOX NUMBER
821
CUE PASSWORD
822
STORE PASSWORD
823
UPDATE DATE AND ORIGIN FIELDS
824
CREATE IWS MAILBOX
TERMINATE CALL

FIG. 5

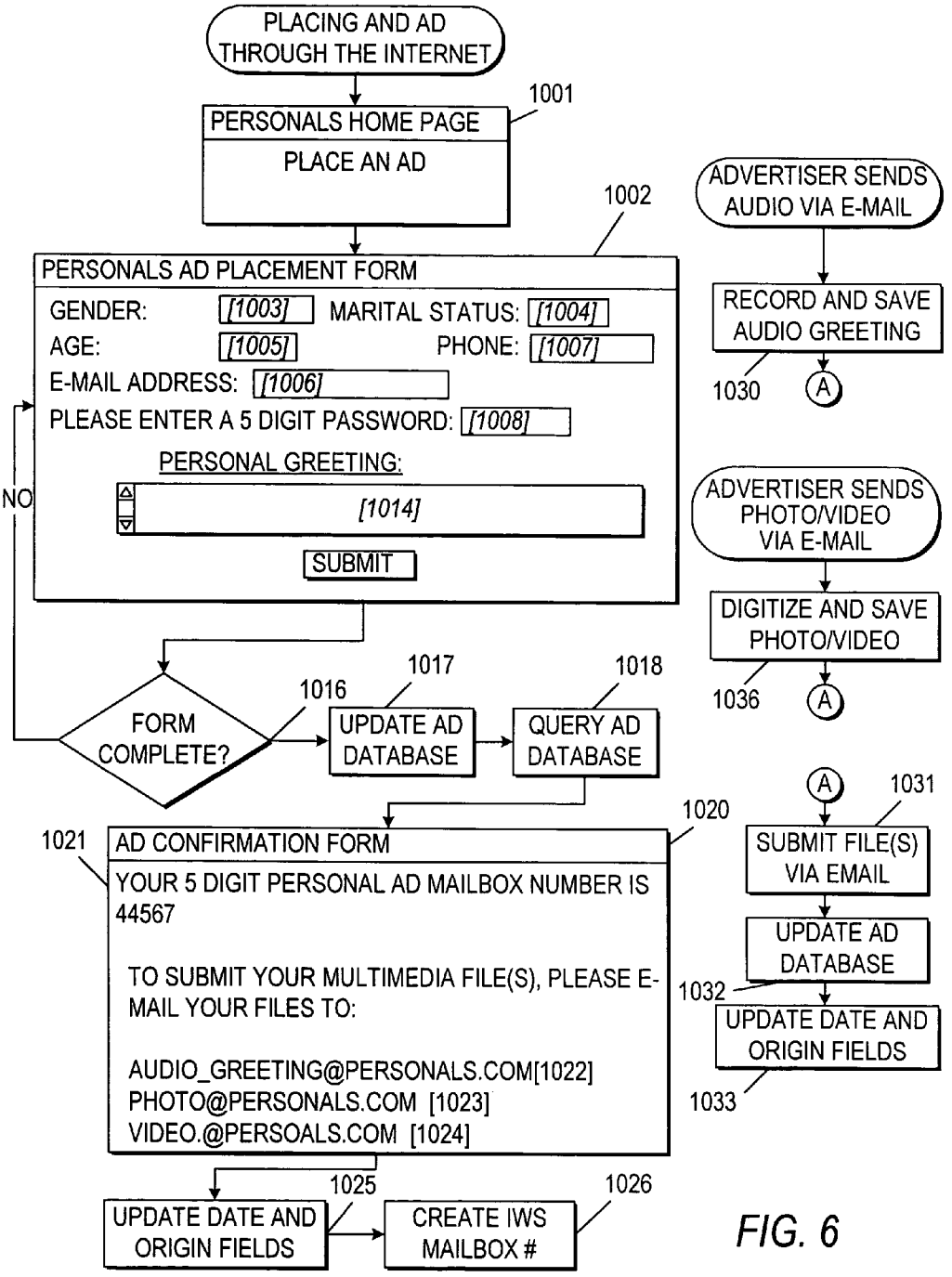

PLACING AND AD THROUGH THE INTERNET
1001
PERSONALS HOME PAGE
PLACE AN AD
1002
PERSONALS AD PLACEMENT FORM
GENDER: [1003] MARITAL STATUS: [1004]
AGE: [1005] PHONE: [1007]
E-MAIL ADDRESS: [1006]
PLEASE ENTER A 5 DIGIT PASSWORD: [1008]
PERSONAL GREETING:
[1014]
SUBMIT
NO
FORM COMPLETE?
1016
1017
UPDATE AD DATABASE
1018
QUERY AD DATABASE
1020
1021
AD CONFIRMATION FORM
YOUR 5 DIGIT PERSONAL AD MAILBOX NUMBER IS 44567
TO SUBMIT YOUR MULTIMEDIA FILE(S), PLEASE E-MAIL YOUR FILES TO:
AUDIO_GREETING@PERSONALS.COM[1022]
PHOTO@PERSONALS.COM [1023]
VIDEO.@PERSOALS.COM [1024]
1025
UPDATE DATE AND ORIGIN FIELDS
1026
CREATE IWS MAILBOX #
ADVERTISER SENDS AUDIO VIA E-MAIL
RECORD AND SAVE AUDIO GREETING
1030
A
ADVERTISER SENDS PHOTO/VIDEO VIA E-MAIL
DIGITIZE AND SAVE PHOTO/VIDEO
1036
A
A
1031
SUBMIT FILE(S) VIA EMAIL
UPDATE AD DATABASE
1032
UPDATE DATE AND ORIGIN FIELDS
1033

FIG. 6

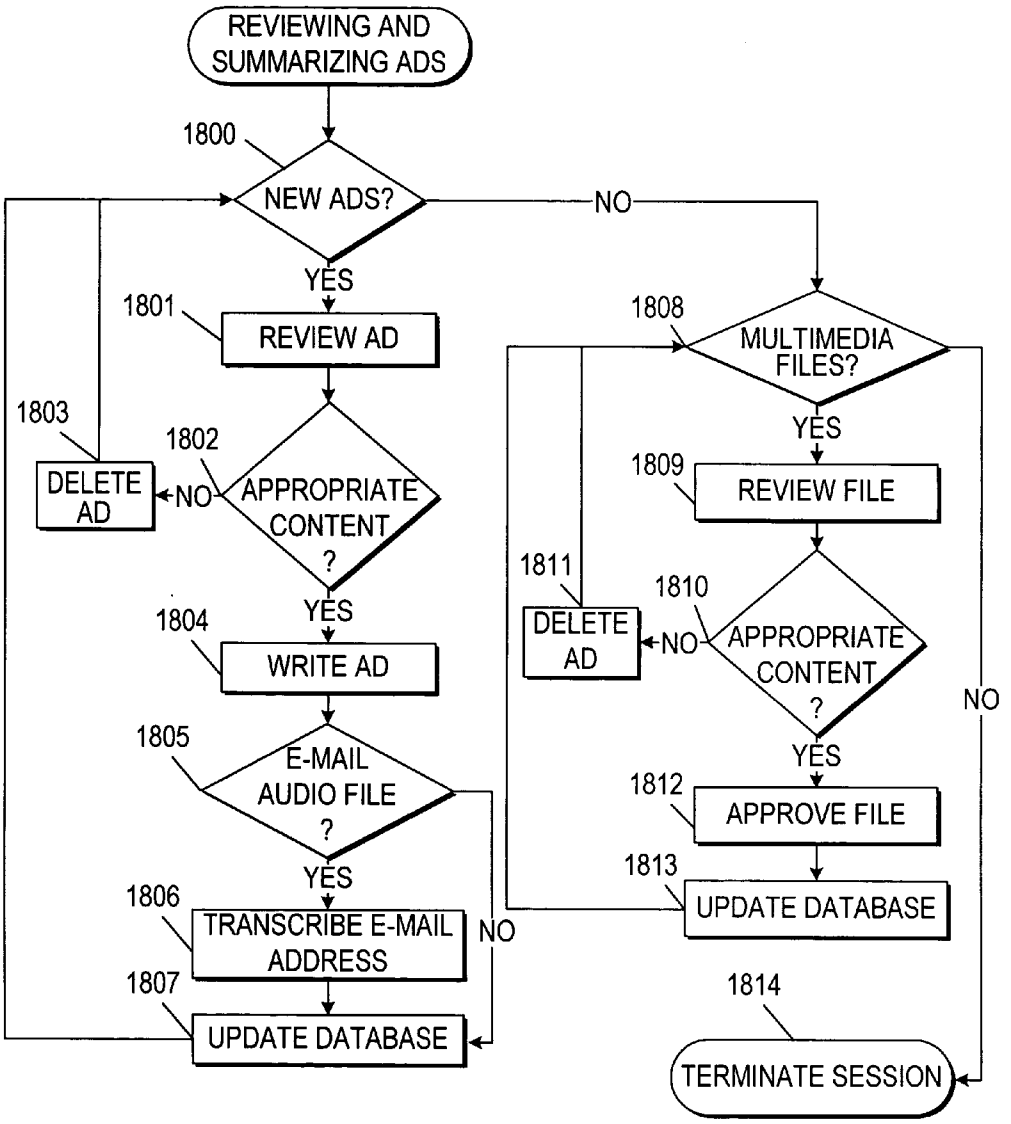

REVIEWING AND SUMMARIZING ADS
1800
NEW ADS?
NO
YES
1801
REVIEW AD
1803
DELETE AD
1802
NO
APPROPRIATE CONTENT ?
YES
1804
WRITE AD
1805
E-MAIL AUDIO FILE ?
YES
1806
TRANSCRIBE E-MAIL ADDRESS
1807
UPDATE DATABASE
NO
1808
MULTIMEDIA FILES?
YES
1809
REVIEW FILE
1811
DELETE AD
1810
NO
APPROPRIATE CONTENT ?
YES
NO
1812
APPROVE FILE
1813
UPDATE DATABASE
1814
TERMINATE SESSION

FIG. 7

FIG. 8

OUTGOING AND FUN 87654

I AM A SINGLE WHITE FEMALE, AGE 25, WHO ENJOYS MOVIES, DINING OUT, TRAVEL AND THE OUTDOORS. I WORK AS A SECRETARY AT A LAW OFFICE AND LOVE MY JOB. I'M LOOKING FOR AN ATTRACTIVE SINGLE WHITE MALE, AGE 25 TO 30, FOR FRIENDSHIP AND POSSIBLE ROMANCE.



NICE GUYS FINISH FIRST 45378

I AM A DIVORCED BLACK MALE, AGE 40, AND AM NEW TO THE AREA. I WAS RECENTLY TRANSFERRED HERE BY MY COMPANY AND AM LOOKING FOR A NEW FRIEND. I'M SEEKING A NICE BLACK FEMALE WHO CAN SHOW ME AROUND.



URBAN COWBOY 67672

I AM A SINGLE WHITE MALE WHO LOVES COUNTRY MUSIC AND THE OUTDOORS. I HAVE A SMALL HORSE FARM OUTSIDE OF TOWN I WOULD LOVE TO SHOW THAT SPECIAL SOMEONE. I ALSO ENJOY COOKING, HIKING, SWIMMING, AND TENNIS. I'M LOOKING FOR SOMEONE WITH SIMILAR INTERESTS.





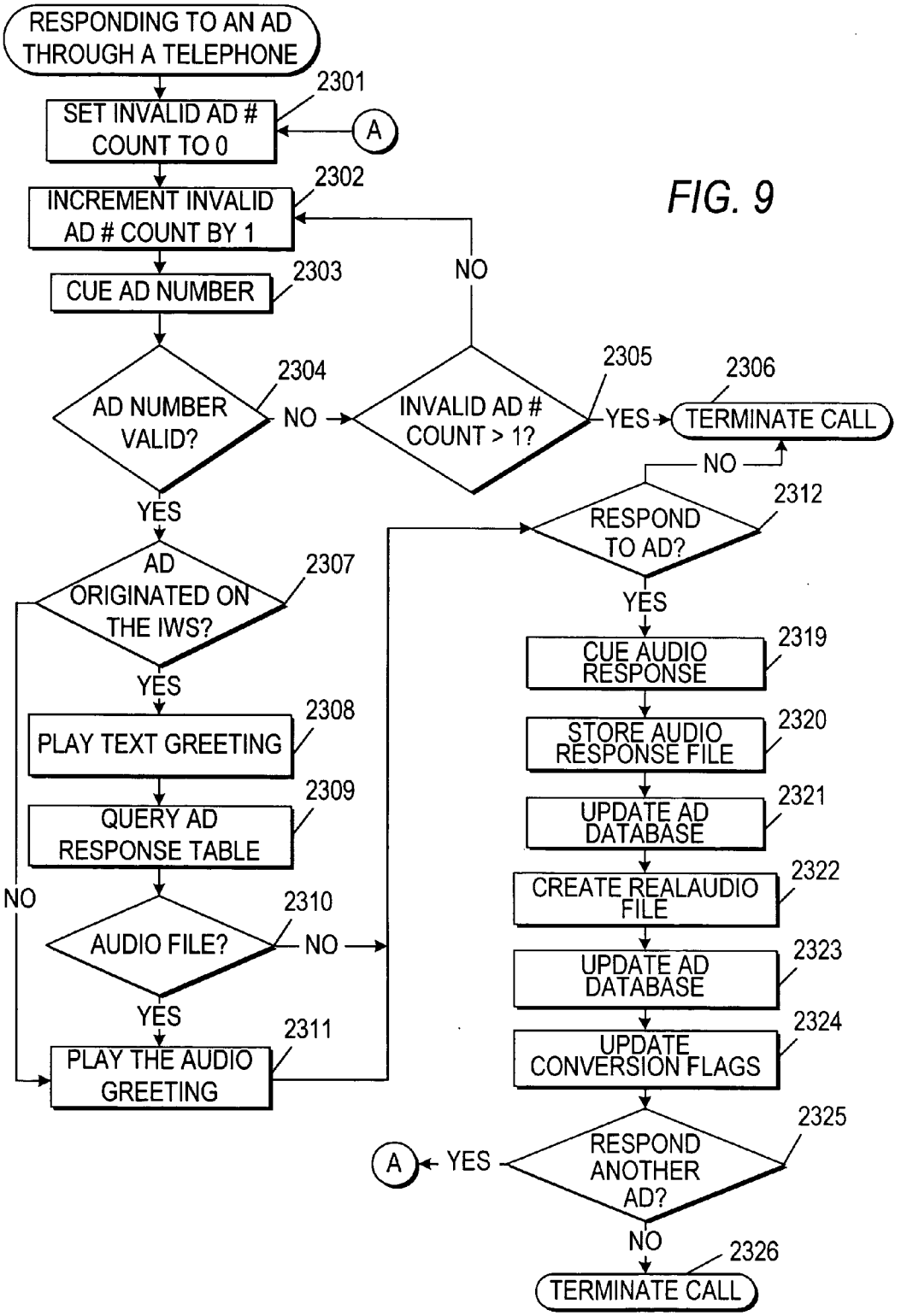

RESPONDING TO AN AD THROUGH A TELEPHONE
2301
SET INVALID AD # COUNT TO 0
A
2302
INCREMENT INVALID AD # COUNT BY 1
2303
CUE AD NUMBER
2304
AD NUMBER VALID?
NO
2305
INVALID AD # COUNT > 1?
YES
2306
TERMINATE CALL
NO
YES
2307
AD ORIGINATED ON THE IWS?
YES
2308
PLAY TEXT GREETING
2309
QUERY AD RESPONSE TABLE
NO
2310
AUDIO FILE?
NO
YES
2311
PLAY THE AUDIO GREETING
2312
RESPOND TO AD?
NO
YES
2319
CUE AUDIO RESPONSE
2320
STORE AUDIO RESPONSE FILE
2321
UPDATE AD DATABASE
2322
CREATE REALAUDIO FILE
2323
UPDATE AD DATABASE
2324
UPDATE CONVERSION FLAGS
2325
RESPOND ANOTHER AD?
A
YES
NO
2326
TERMINATE CALL

FIG. 9

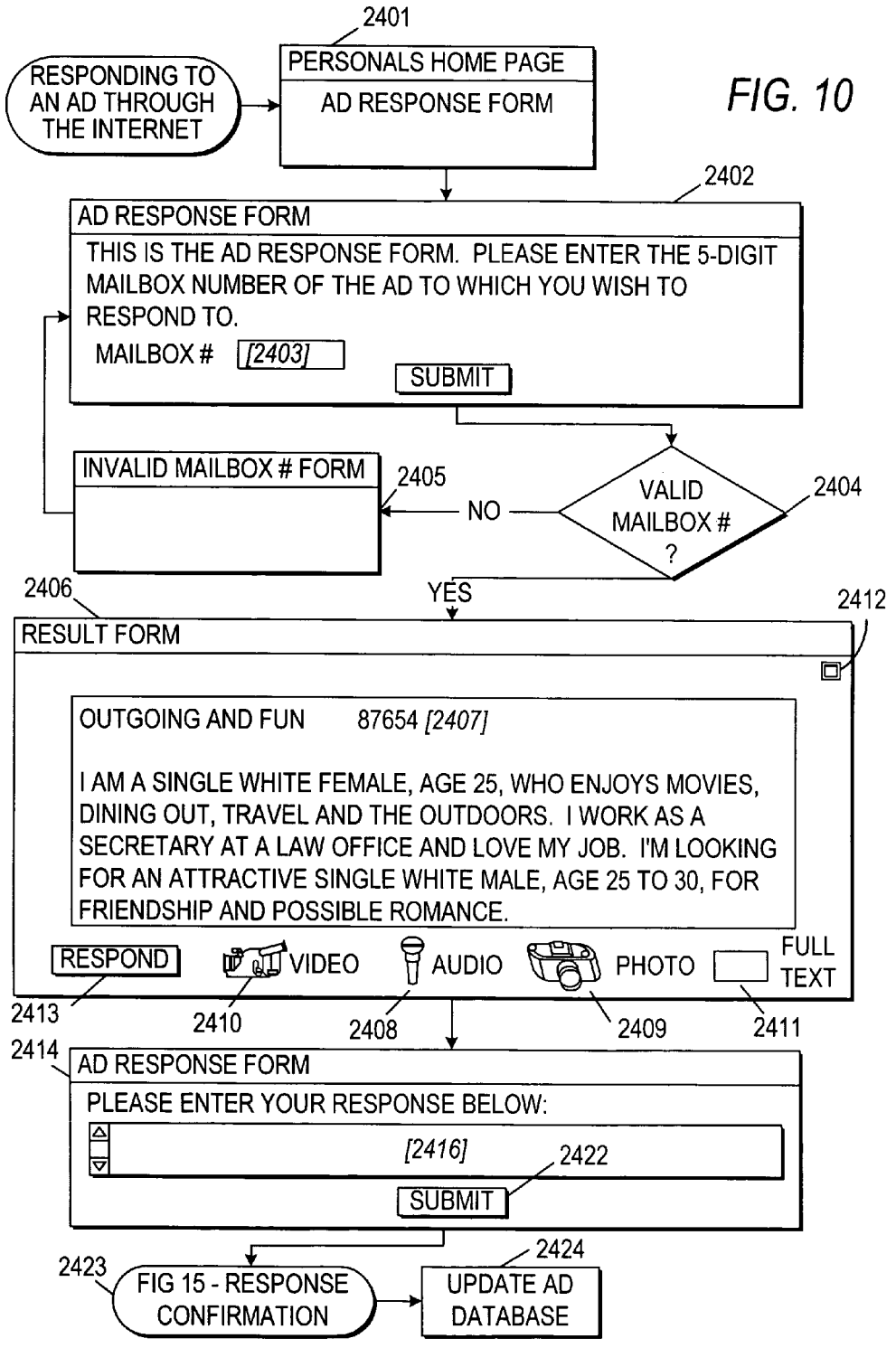

2401
RESPONDING TO AN AD THROUGH THE INTERNET
PERSONALS HOME PAGE
AD RESPONSE FORM
2402
AD RESPONSE FORM
THIS IS THE AD RESPONSE FORM. PLEASE ENTER THE 5-DIGIT MAILBOX NUMBER OF THE AD TO WHICH YOU WISH TO RESPOND TO.
MAILBOX # [2403]
SUBMIT
INVALID MAILBOX # FORM
2405
NO
VALID MAILBOX # ?
2404
YES
2406
RESULT FORM
2412
OUTGOING AND FUN 87654 [2407]
I AM A SINGLE WHITE FEMALE, AGE 25, WHO ENJOYS MOVIES, DINING OUT, TRAVEL AND THE OUTDOORS. I WORK AS A SECRETARY AT A LAW OFFICE AND LOVE MY JOB. I'M LOOKING FOR AN ATTRACTIVE SINGLE WHITE MALE, AGE 25 TO 30, FOR FRIENDSHIP AND POSSIBLE ROMANCE.
RESPOND
VIDEO
AUDIO
PHOTO
FULL TEXT
2413
2410
2408
2409
2411
2414
AD RESPONSE FORM
PLEASE ENTER YOUR RESPONSE BELOW:
[2416]
2422
SUBMIT
2423
FIG 15 - RESPONSE CONFIRMATION
2424
UPDATE AD DATABASE

FIG. 10

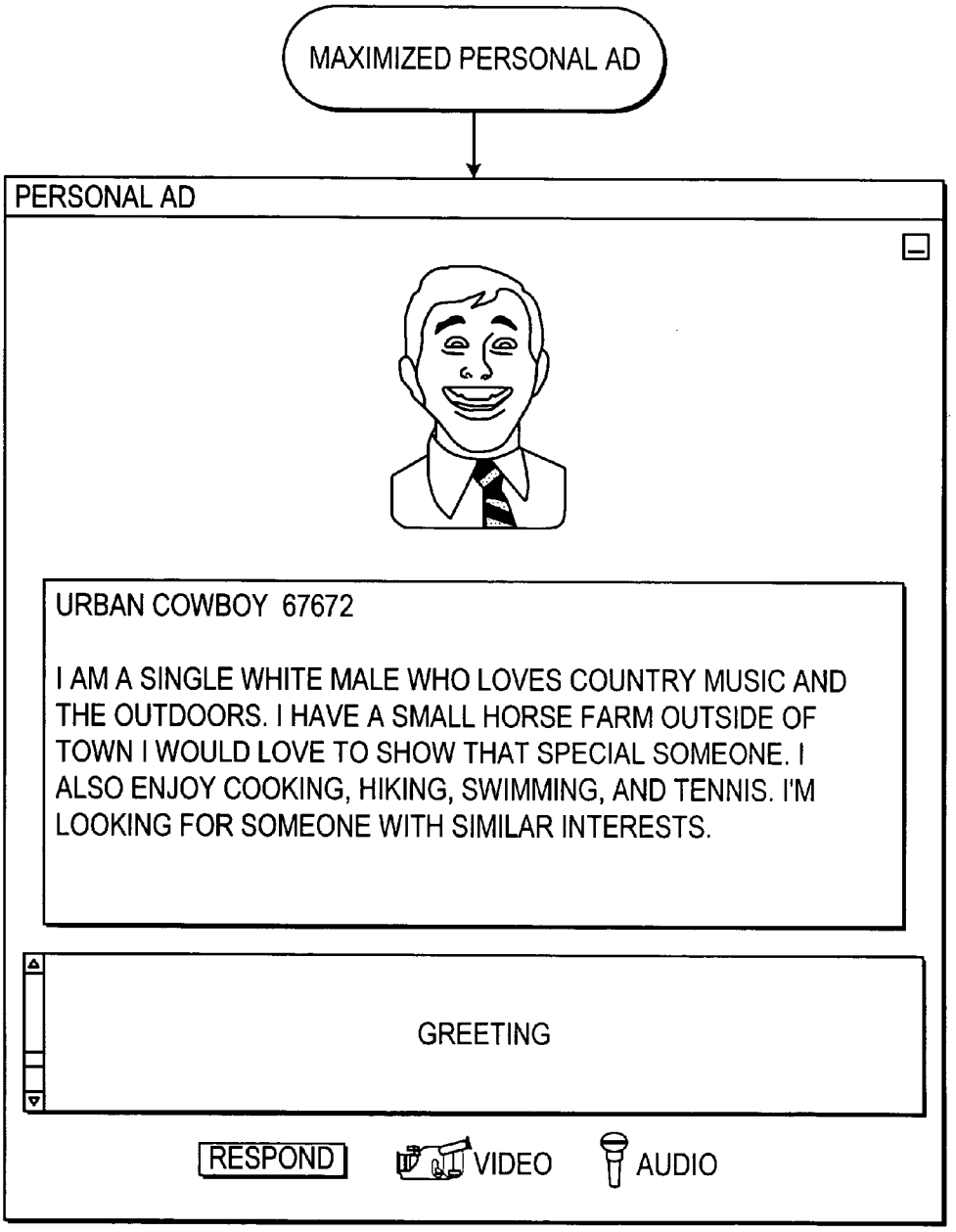

MAXIMIZED PERSONAL AD
PERSONAL AD
URBAN COWBOY 67672
I AM A SINGLE WHITE MALE WHO LOVES COUNTRY MUSIC AND THE OUTDOORS. I HAVE A SMALL HORSE FARM OUTSIDE OF TOWN I WOULD LOVE TO SHOW THAT SPECIAL SOMEONE. I ALSO ENJOY COOKING, HIKING, SWIMMING, AND TENNIS. I'M LOOKING FOR SOMEONE WITH SIMILAR INTERESTS.
GREETING
RESPOND
VIDEO
AUDIO

FIG. 11

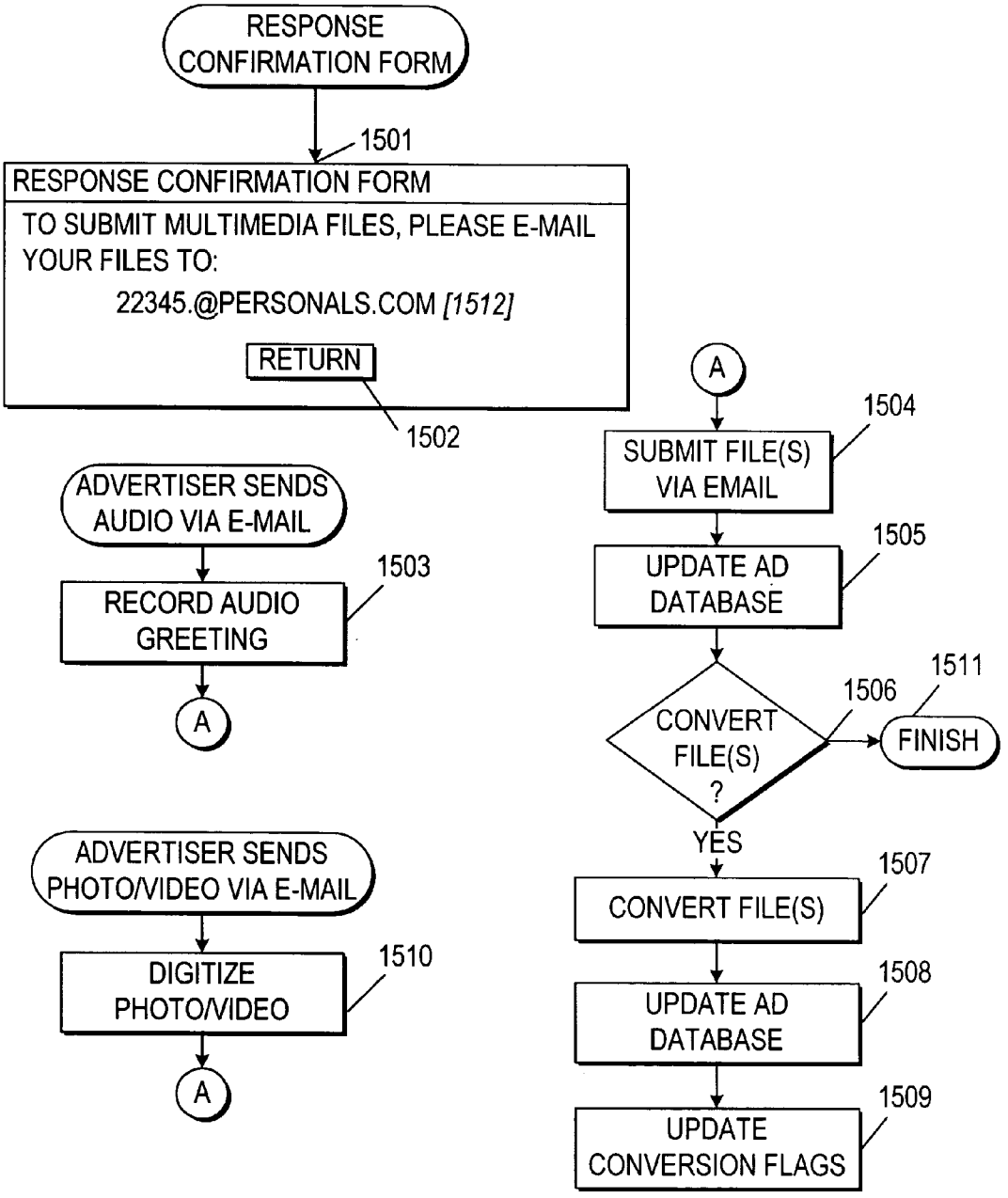

RESPONSE CONFIRMATION FORM
1501
RESPONSE CONFIRMATION FORM
TO SUBMIT MULTIMEDIA FILES, PLEASE E-MAIL YOUR FILES TO:
22345.@PERSONALS.COM [1512]
RETURN
1502
ADVERTISER SENDS AUDIO VIA E-MAIL
RECORD AUDIO GREETING
1503
A
ADVERTISER SENDS PHOTO/VIDEO VIA E-MAIL
DIGITIZE PHOTO/VIDEO
1510
A
A
SUBMIT FILE(S) VIA EMAIL
1504
UPDATE AD DATABASE
1505
CONVERT FILE(S) ?
1506
1511
FINISH
YES
CONVERT FILE(S)
1507
UPDATE AD DATABASE
1508
UPDATE CONVERSION FLAGS
1509

FIG. 12

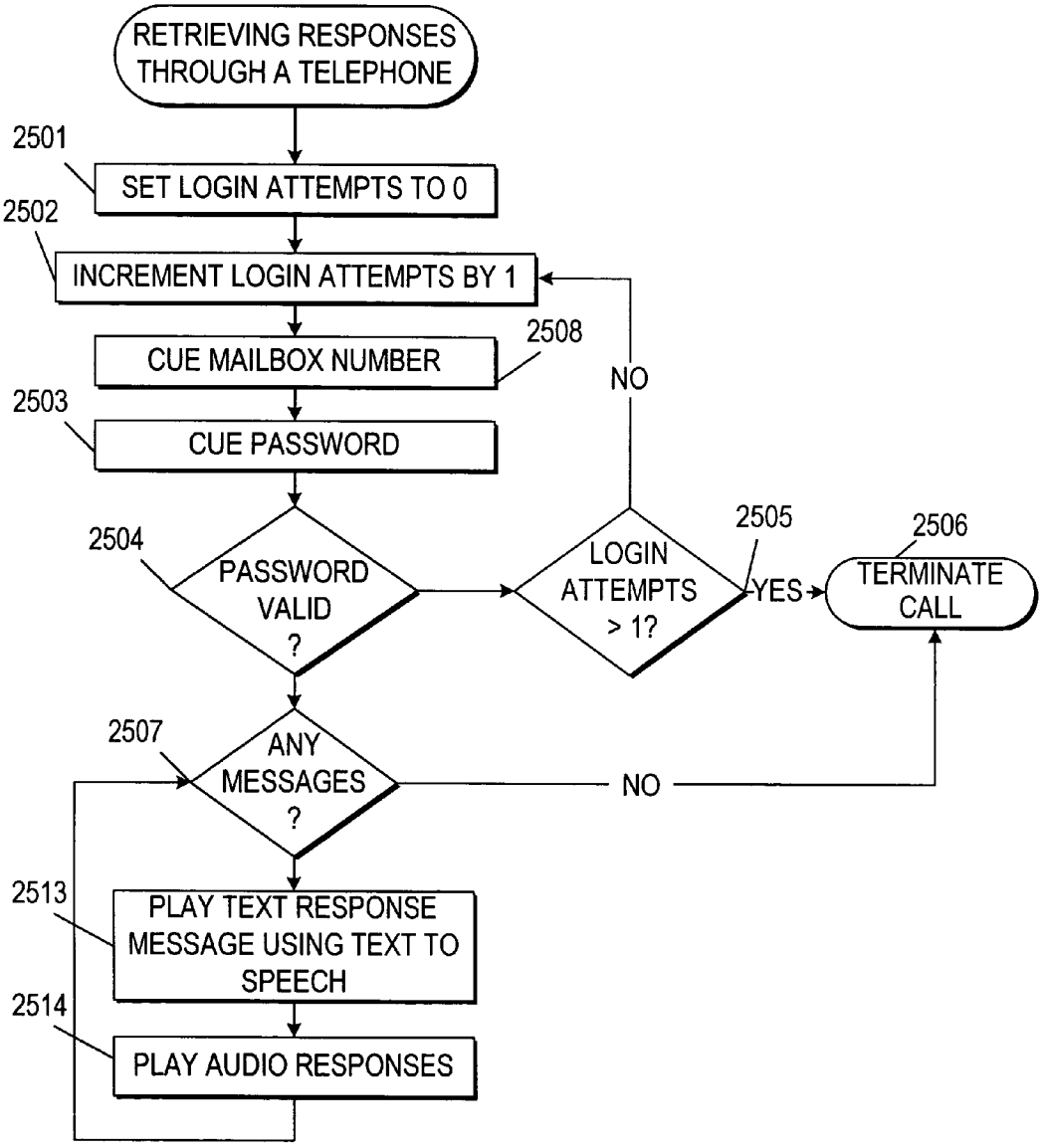

RETRIEVING RESPONSES THROUGH A TELEPHONE
2501
SET LOGIN ATTEMPTS TO 0
2502
INCREMENT LOGIN ATTEMPTS BY 1
2508
CUE MAILBOX NUMBER
2503
CUE PASSWORD
2504
PASSWORD VALID ?
NO
2505
LOGIN ATTEMPTS > 1?
YES
2506
TERMINATE CALL
2507
ANY MESSAGES ?
NO
2513
PLAY TEXT RESPONSE MESSAGE USING TEXT TO SPEECH
2514
PLAY AUDIO RESPONSES

FIG. 13

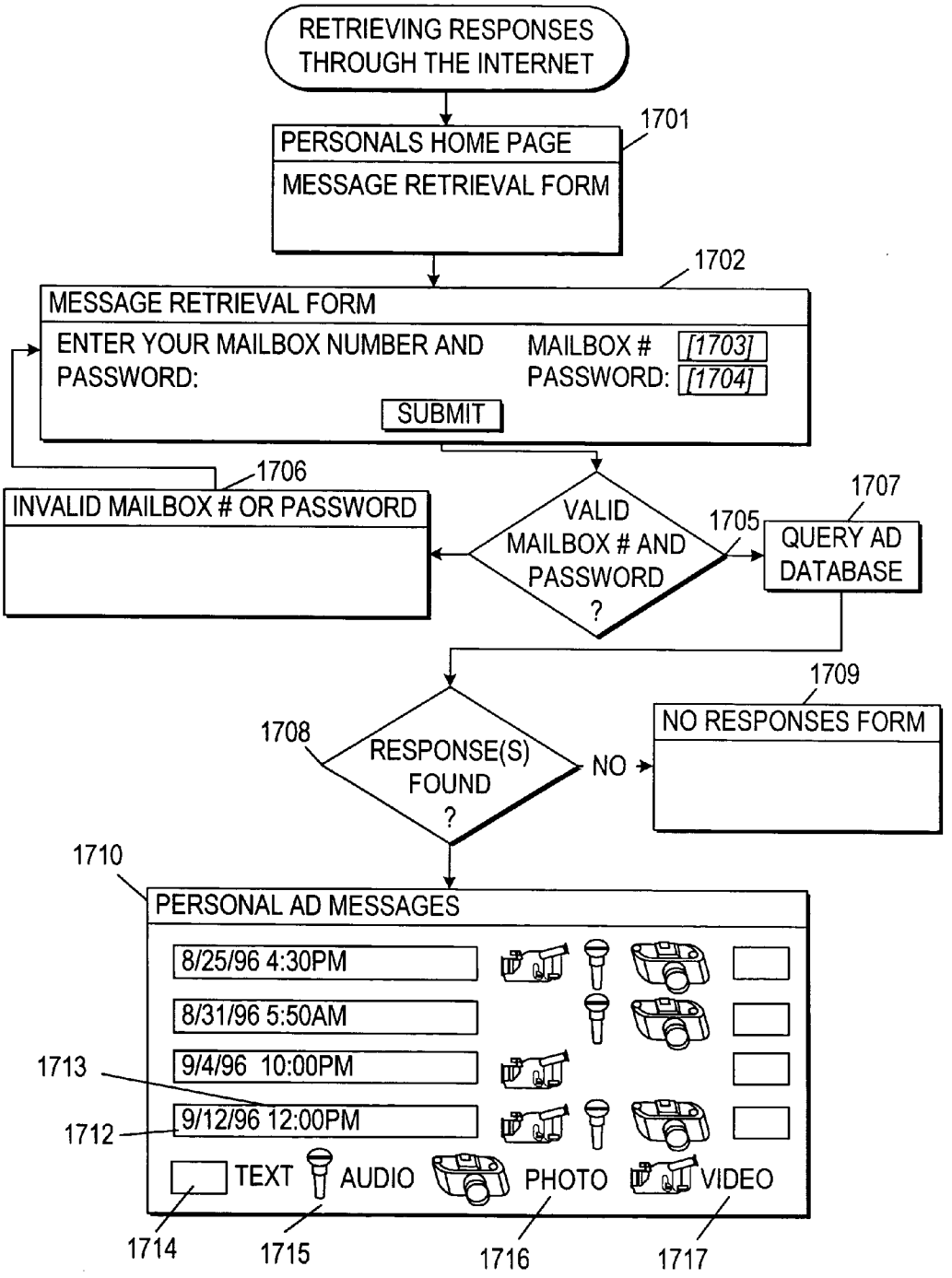

RETRIEVING RESPONSES THROUGH THE INTERNET
1701
PERSONALS HOME PAGE
MESSAGE RETRIEVAL FORM
1702
MESSAGE RETRIEVAL FORM
ENTER YOUR MAILBOX NUMBER AND PASSWORD:
MAILBOX # [1703]
PASSWORD: [1704]
SUBMIT
1706
INVALID MAILBOX # OR PASSWORD
VALID MAILBOX # AND PASSWORD ?
1705
1707
QUERY AD DATABASE
1709
NO RESPONSES FORM
1708
RESPONSE(S) FOUND ?
NO
1710
PERSONAL AD MESSAGES
8/25/96 4:30PM
8/31/96 5:50AM
9/4/96 10:00PM
9/12/96 12:00PM
1713
1712
TEXT
AUDIO
PHOTO
VIDEO
1714
1715
1716
1717

FIG. 14

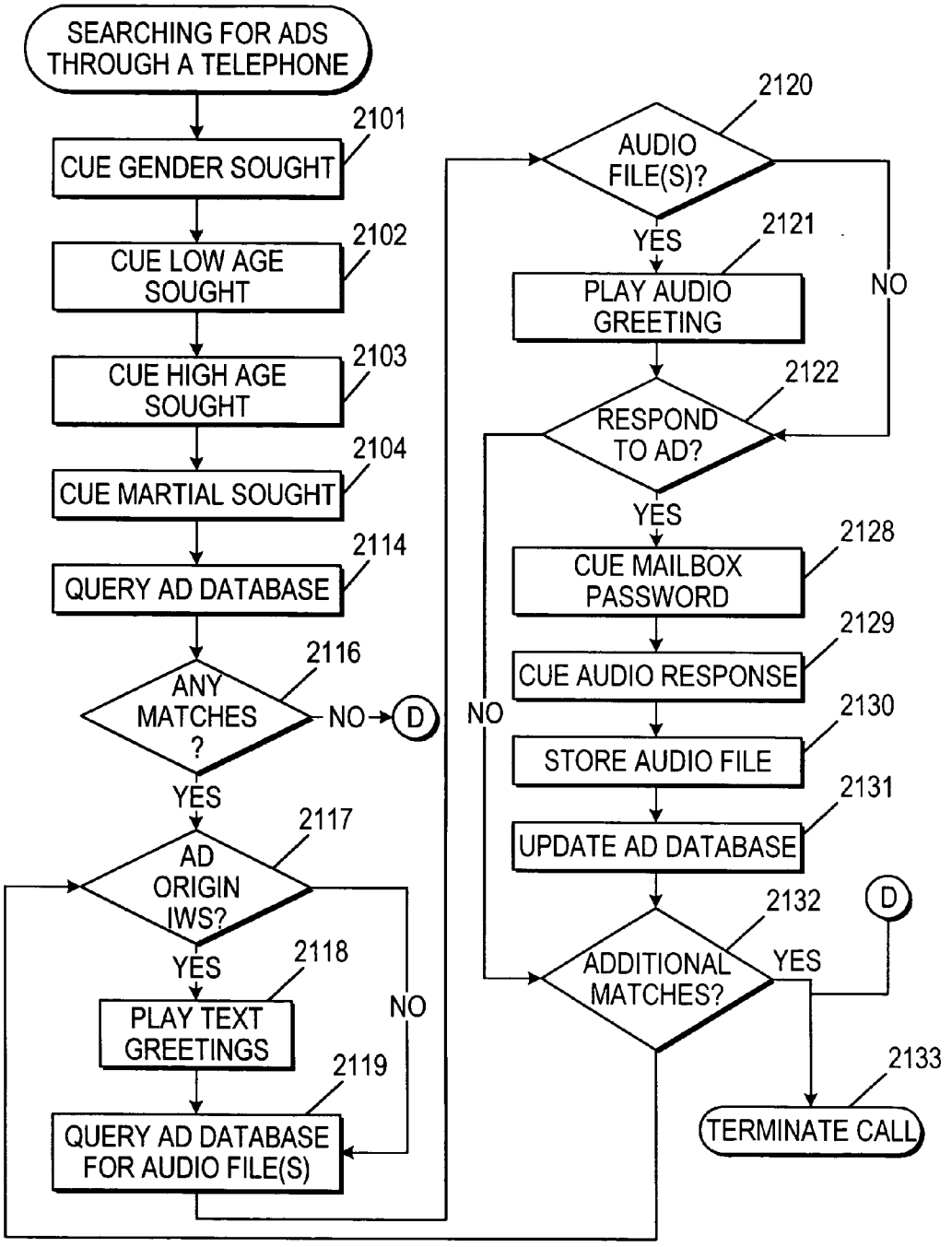

SEARCHING FOR ADS THROUGH A TELEPHONE
2101
CUE GENDER SOUGHT
2102
CUE LOW AGE SOUGHT
2103
CUE HIGH AGE SOUGHT
2104
CUE MARTIAL SOUGHT
2114
QUERY AD DATABASE
2116
ANY MATCHES ?
NO
D
YES
2117
AD ORIGIN IWS?
YES
2118
PLAY TEXT GREETINGS
NO
2119
QUERY AD DATABASE FOR AUDIO FILE(S)
2120
AUDIO FILE(S)?
YES
2121
PLAY AUDIO GREETING
NO
2122
RESPOND TO AD?
YES
2128
CUE MAILBOX PASSWORD
2129
CUE AUDIO RESPONSE
NO
2130
STORE AUDIO FILE
2131
UPDATE AD DATABASE
2132
ADDITIONAL MATCHES?
YES
D
2133
TERMINATE CALL

FIG. 15

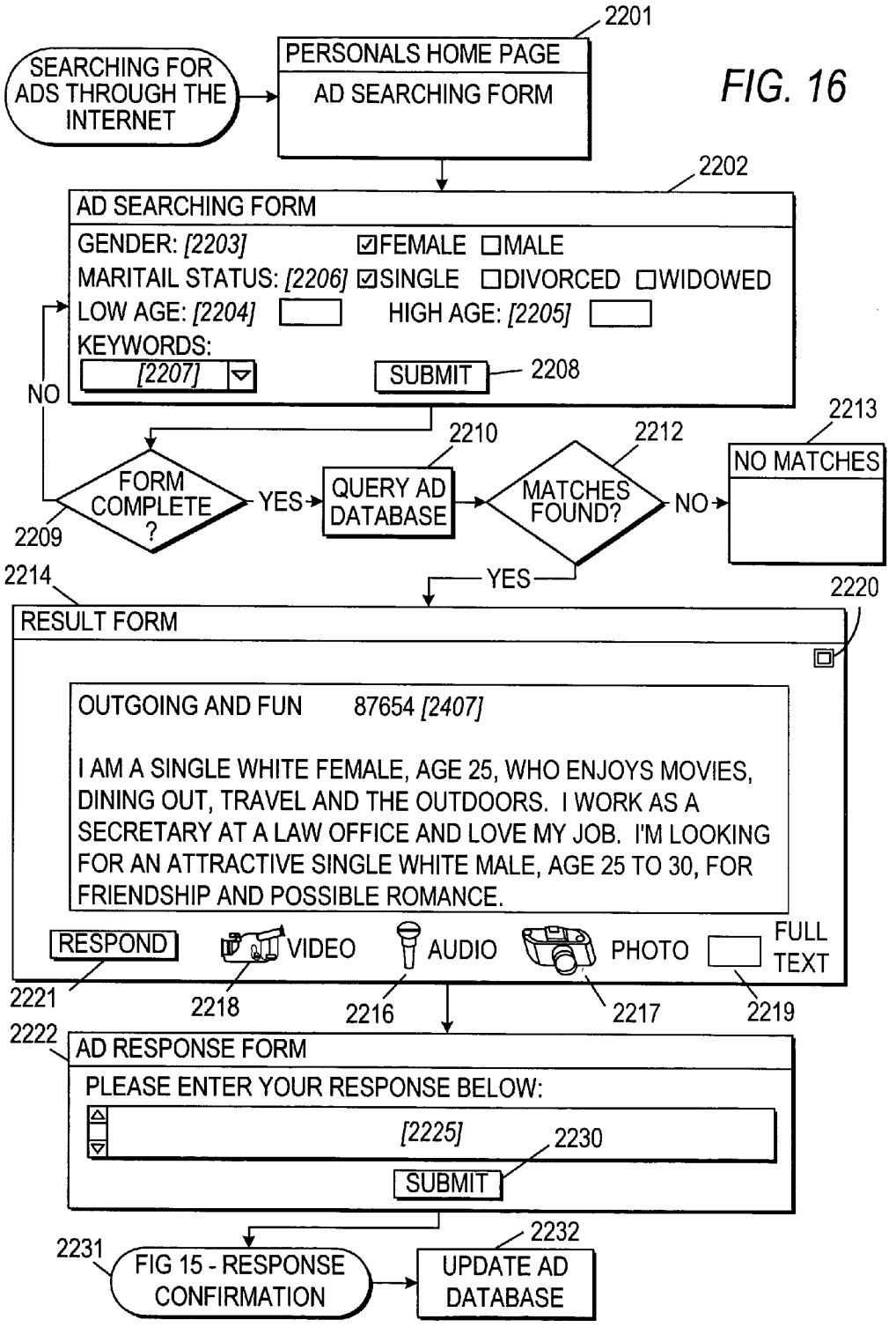

2201
SEARCHING FOR ADS THROUGH THE INTERNET
PERSONALS HOME PAGE
AD SEARCHING FORM
2202
AD SEARCHING FORM
GENDER: [2203] ☑FEMALE ☐MALE
MARITAIL STATUS: [2206] ☑SINGLE ☐DIVORCED ☐WIDOWED
LOW AGE: [2204]
HIGH AGE: [2205]
KEYWORDS:
[2207]
SUBMIT
2208
NO
2209
FORM COMPLETE ?
YES
2210
QUERY AD DATABASE
2212
MATCHES FOUND?
NO
2213
NO MATCHES
YES
2214
RESULT FORM
2220
OUTGOING AND FUN 87654 [2407]
I AM A SINGLE WHITE FEMALE, AGE 25, WHO ENJOYS MOVIES, DINING OUT, TRAVEL AND THE OUTDOORS. I WORK AS A SECRETARY AT A LAW OFFICE AND LOVE MY JOB. I'M LOOKING FOR AN ATTRACTIVE SINGLE WHITE MALE, AGE 25 TO 30, FOR FRIENDSHIP AND POSSIBLE ROMANCE.
RESPOND
VIDEO
AUDIO
PHOTO
FULL TEXT
2221
2218
2216
2217
2219
2222
AD RESPONSE FORM
PLEASE ENTER YOUR RESPONSE BELOW:
[2225]
2230
SUBMIT
2231
FIG 15 - RESPONSE CONFIRMATION
2232
UPDATE AD DATABASE

FIG. 16

INTEGRATED AUDIOTEXT-INTERNET PERSONAL AD SERVICES

TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates to audiotex systems designed to provide full access to traditional databases and telecommunications systems, such as local area networks, the Internet, other external databases, telephones and fax machines, etc., and more specifically to audiotext personal ad services.

BACKGROUND OF THE INVENTION

[0002] Audiotex personal ad services are a popular way for people to meet, and are available in most newspapers and on many cable television systems. In a typical service, an advertiser calls a live operator and places a text personal ad. An advertiser then calls an audiotex system and records an audio message, often referred to as a greeting, which expands upon the advertiser's text ad by describing in more detail the advertiser and the type of person he is seeking. Personal ads are then published in a newspaper. A personal ad includes a 900 telephone number and an ad mailbox number permitting a caller to listen to an advertiser's voice greeting. A caller can respond to an ad by recording a reply voice mail message for the advertiser. An advertiser retrieves a message by calling the audiotex system and entering a password given at the time of ad placement. In another format, no live operator is used. An advertiser first records an audio greeting. An operator then listens to the audio greetings off-line and writes a text summary of each audio greeting for publication in the newspaper.

[0003] With the expansion of the Internet and other on-line services, personal ad services have been created to take advantage of this new medium. A typical service allows an advertiser to place a text personal ad that is published on the Internet on an HTML (HyperText Markup Language) page. An Internet user may respond to a personal ad by sending an advertiser a message via electronic mail. The limitation of this approach is that an Internet user cannot listen to an audio recording of an advertiser, a feature that is the central to audiotex personal ad services. Another limitation is that most people do not have Internet access, thus limiting the number of advertisers and respondents.

[0004] In another format, an attempt is made to integrate audiotex personal ads services with the Internet. Using this approach, a newspaper publishes personal ads in both the newspaper and on the Internet. Each personal ad includes a 900 telephone number and an ad mailbox number permitting a caller to listen to an advertiser's voice greeting. This approach still has the disadvantage of not allowing an Internet user to listen to an advertiser's voice greeting via the Internet. Moreover, an Internet user can only respond to a personal ad via a telephone.

[0005] As the use of audiotex services has grown steadily, related telephonic communication techniques have also expanded. In that reard, telephone systems have been developed that permit telephone callers to exchange telephone messages. At the same time, the Internet has made possible the interaction of large numbers of personal computers. Thus, on the one hand, the public telephone network exists as a principal means of voice communication, while the Internet is the major large scale choice for sharing digital data.

[0006] To date, both the public telephone network and the Internet have been used for both the sharing of voice files and data files. For example, placing telephone calls via the Internet is possible, while data files are often transferred via the public telephone network. Indeed, most people use the public telephone network to access the Internet. However, a system that optimizes the interaction between the public telephone network and the Internet is elusive. For example, in the voice personals industry, service bureaus provide "800" and "900" numbers for callers to access stored voice files, for exchanging information so that matches can be made, and hence, people can date one another. In that industry, service bureaus often use voice boards, such as those provided by Dialogic Corporation, to answer telephone calls, store and access voice files, and match callers with other voice messages.

[0007] Conversely, among Internet users, text messages are stored on a database, and then, users enter various web sites to access messages on diverse so-called bulletin boards or databases. In essence, abstracts of databases can be searched so that users can look for intersting sites to browse.

[0008] Howver, to date, there has not been a seamless database interface contructed that allows telephone users of audiotex systems to access Internet messages, and allows Internet users to access audiotex services, without need for any special hardware or software modifications at the user's site.

[0009] Telephone systems have been developed that allow callers to exchange recorded messages for the puposes of meeting and possibly developing a relationship. Traditional telephone instruments have been utilized to provide and exchange various digital and audio information. Consequently various operations have performed. In a typical operation a caller calls a live operator and places a text ad that appears in some form of mass media, such as a newspaper or cable television show. The caller then calls a telephone system and records a voice message that is heard by those responding to the ad. In another format, a caller places an ad via an automated ad taking service by recording an audio message describing himself. The audio recording is then transcribed into a text ad that appears in a mass medium as described above. In addition, callers may be asked to provide information about themselves in the form of digital input data that is used to match them with other advertisers. Others can, in turn, respond to ads by calling the telephone system and leaving messages which are then accessed and listened to by advertisers. Meetings of advertisers and respondents may result.

[0010] With the expansion of the Internet and other on-line services, personal ad services have been developed to take advantage of this new communication medium. One type of Internet personals service allows a person to place a text personal advertisement which other on-line users may respond to via electronic mail. The limitation of this approach is that an on-line user cannot hear a voice recording of the person who placed the advertisement, a feature proven very useful and desirable to users of audiotex-based voice personal services. Another limitation of this type of on-line personals service is that it is inaccessible to the majority of individuals that do not have access to on-line services.

[0011] In another format, text ads are taken from newspaper and television personals programs and published on

the Internet. Each personal advertisement also contains a number and an associated telephone number. By calling the telephone number and entering an advertisement's number a caller can hear a voice recording of the advertiser and respond to the ad, if desired. This approach still has the limitation of not allowing on-line users to listen to a voice recording of the person who placed the personal advertisement. It also requires on-line users to go off line to respond to ads which defeats the very reason for going on-line in the first place.

[0012] Accordingly, it is desirable to increase the intelligence of a system for processing telephone calls. It is also desirable to increase the flexibility in a system for processing telephone calls. It is also desirable to provide greater interaction between a caller and a system for processing telephone calls. It is also desirable to provide greater accessibility to information from external systems by a system for processing telephone calls. It is also desirable to augment the existing process of directing calls to service agents. It is also desirable to route a caller to the appropriate agent based on information about the caller. It is also desirable to provide routing of a call and its associated data to the appropriate agent. It is also desirable to provide network reliability in routing a caller tothe appropriate agent.

[0013] Multi-media messaging involves integrating discrete messages or individual message components of different media, e.g., voice, text, video, and the ability to deliver the integrated messages through a single universal mailbox. For example, the integration of voice and facsimile (fax) messages is well known in the art. For example, U.S. Pat. No. 5,008,926, discloses an integrated voice-and-facsimile store-and-forward message system that provides for the sending, storage, and delivery of voice messages, fax messages, fax messages annotated with voice messages, and voice messages annotated with fax messages. The disclosed system additionally provides for display of fax messages on terminal screens, and the conversion of fax printed text messages into voice messages via text-to-speech conversion facilities.

[0014] Electronic mail, or e-mail, systems are also well known in the art. They provide for the sending, storage, and delivery between computer terminals of displayable data-text and/or graphics-messages.

[0015] Integration of e-mail systems with voice-and-fax message systems is highly desirable. For example, it is becoming common for salesmen to work out of "mobile offices"—their cars—which are equipped normally with telephones, often with fax machines, but generally not with data terminals, yet the salesmen would like to have the capability of receiving in their mobile offices messages sent to them in any form-voice, fax, or e-mail The integration of fax and e-mail messaging is readily accomplished through conversion of e-mail messages into fax messages for delivery to their recipients. But while fax machines are more likely to be available to mobile recipients of the messages than data terminals, they are not as readily available as telephones. Therefore, it is often preferable to instead accomplish the integration of voice and e-mail messaging through conversion of e-mail messages into voice messages for delivery to their recipients. This type of conversion is also readily accomplished if the e-mail messages constitute text only.

[0016] A problem arises, however, when e-mail messages constitute information other than text-such as diagrams, charts, special symbols, computer code fragments, pictures, etc.—which is not suitable for conversion into a voice message. Attempts to convert such data message segments into speech result in unintelligible garble. This may be avoided by simply identifying and discarding the non-voiceable data message segments, but this results in the delivery of an incomplete message to the recipient—an unacceptable result.

[0017] To summarize, existing Internet personal ad services are limited in that they lack many of the features available on audiotex personal ad services. Also, existing personal ad services do not provide a means for those using a audiotex personal ad service to effectively communicate with those using an Internet personal ad service and visa versa. Although some attempts have been made to improve and integrate existing services, all personal ad services heretofore known suffer from a number of disadvantages:

[0018] (a) Existing systems do not allow an Internet user via a computer connected to the Internet to listen to an audio greeting from an audiotex personal ad service.

[0019] (b) Existing systems do not allow an Internet user to record an audio greeting via a computer connected to the Internet that can be listened to by other Internet users via the Internet.

[0020] (c) Existing services do not allow an advertisers to record an audio greeting via a computer connected to the Internet that can be listened to from a telephone.

[0021] (d) Existing services do not allow an advertiser to place a personal ad on an audiotex personal ad service and receive a message on the Internet via electronic mail.

[0022] (e) Existing services do not allow a telephone caller to access a text personal ad placed on the Internet.

[0023] (f) Existing services do not allow an Internet advertiser to receive a response message from a telephone caller.

[0024] (g) Existing services do not allow a telephone caller to do a key word full-text search of personal ads.

[0025] (h) Existing services do not allow a telephone caller to retrieve a text message left in response to her personal ad.

[0026] (i) Existing services do not allow a telephone caller to retrieve audio messages left in response to her personal ad where said audio responses are left via a computer connected to the Internet.

[0027] (j) Existing personal ad services that publish personal ads in a newspaper or on a cable television show limit the number of words of a text personal ad.

[0028] In the use of such services, the need is recognized for improved capability regarding the features available to Internet users, and the integration of audiotex personal ad services and Internet personal ad services.

SUMMARY AND OBJECTS OF THE PRESENT INVENTION

[0029] The present invention contemplates that audiotex systems will be retrofitted with an input/outport interface which accesses computer databases such as the Internet. In real time, or in a batched mode search and store operation, an audiotex system accesses those databases of interest to it. For example, an audiotex system established for dating services will be equipped with an information translator suitable for accessing databases and/or web sites on the Internet. In that manner, the audiotex system, which stores user input digitized messages, can expand its capability or messages at its disposal by accessing databases.

[0030] In general, the present invention is based on recognizing the need to allow a seamless exchange of messages and personal advertisements between traditional audiotex personals services and Internet or on-line based personals services. In addition, the present invention recognizes the need for Internet personals services to offer enhanced features that give on-line users the ability to exchange voice messages on-line.

[0031] The present invention comprises the integration of an audiotex system and a web server. As with traditional audiotex personals services, this allows individuals to place a personal advertisement in the form of a digital audio recording that can be listended to and responded to by other individuals calling the audiotex system. Now, for the first time, the digital audio recording of the personal advertisement is also available on the Internet or similar on-line service. On-line users can now listen to the digital audio recording entirely on-line by either downloading the audio file or by listening to it in real time. On-line users respond to these ads by recording a digital audio message that is forwarded to the advertisers' audiotex voice mailboxes. Thus, the invention accommodates on-line users with varying degrees of multi-media computing capabilities.

[0032] Conversely, an on-line user places a personal advertisement on-line by typing a text ad that can be published in the external media (newspaper or television cable show, for example) and recording a digital audio message that is available to both on-line and on a traditional audiotex system through the use of synthesized (text to speech) speech. (On-line user could also be given a telephone number to call to complete their ad by recording a digital audio message.) Audiotex users and on-line users respond to Internet ads by recording a digital audio message that is forwarded to the on-line advertiser via electronic mail. The on-line advertiser can listen to the digital audio response in real time or download the audio file. If the Internet advertiser lacks sufficient multimedia capability, response is converted to a text message (speech to text) for inclusion with the electronic mail message.

[0033] In accordance with the present invention, a method and apparatus for delivering personal ad services are provided which substantially eliminate or reduce the disadvantages and problems associated with prior systems that deliver such personal ad services.

[0034] In the use of such services, the need is recognized for improved capability regrding the features available to Internet users, and the integration of audiotex personal ad services and Internet personal ad services. Several objects and advantages of the present invention are the following:

[0035] (a) to allow an Internet user via a computer connected to the Internet to listen to an audio greeting from a audiotex personal ad system. This invention uses compression and data streaming to allow an Internet user to listen to an audio file without downloading. An audio file begins playing while it is being transferred. The advantage is audio that begins playing in real time.

[0036] (b) to allow an Internet user to record an audio greeting via a computer connected to the Internet that can be listened to by other Internet users via the Internet.

[0037] (c) to allow an advertiser to record an audio greeting via a computer connected to the Internet that can be listened to from a telephone.

[0038] (d) to allow an advertiser to place a personal ad via a telephone and receive a message on the Internet via electronic mail.

[0039] (e) to allow a telephone caller to access a text personal ad placed on the Internet using text-to-speech whereby a computer uses a synthesized voice to speak text over a telephone.

[0040] (f) to allow a telephone caller to respond to a personal ad that is placed via the Internet, where said response can be retrieved via the Internet.

[0041] (g) to allow a telephone caller to do a key word full-text search of personal ads.

[0042] (h) to allow a telephone caller to retrieve a text message left in response to her personal ad by an Internet user by using text-to-speech whereby a computer uses a synthesized voice to speak text over a telephone.

[0043] (i) to allow a telephone caller to retrieve an audio message left in response to her personal ad where said audio response is left via a computer connected to the Internet.

[0044] (j) to allow an advertiser to have virtually no limit on the number of words in his text personal ad by publishing personal ads on the Internet.

[0045] Further objects and advantages are to allow an advertiser to include a photograph and video clip with his personal ad by submitting a file via a computer connected to the Internet. With the present invention, a personal ad published in a newspaper includes graphical icons which denote if an ad has additional text or multimedia files (a photograph or a video clip) available on the Internet. In addition, this invention reduces 800 number or toll charges associated with an advertiser retrieving her messages via a telephone by allowing an advertiser to retrieve her messages on the Internet, thereby eliminating 800 number and toll charges. Still further objects and advantages will become apparent from a consideration of the ensuing description and drawings.

BRIEF DESCRIPTION OF DRAWINGS

[0046] For a more complete understanding of the present invention, referrence is made to the following drawings, in which:

[0047] **FIG. 1** shows a schematic representation of the present invention.

[0048] **FIG. 2** shows a table of the fields used for storing personal data, including a brief description of the particular fields.

[0049] **FIG. 3** shows a table of the fields used for storing greetings data, including a brief description of the particular fields.

[0050] **FIG. 4** shows a table of the fields used for storing response data, including a brief description of the particular fields.

[0051] **FIG. 5** shows a flow diagram of an examplary operation of the present invention, more specifically placing an ad through a telephone.

[0052] **FIG. 6** shows a flow diagram of an examplary operation of the present invention, more specifically placing an ad through the Internet.

[0053] **FIG. 7** shows a flow diagram of an examplary operation of the process of reviewing and summarizing ads as accomplished by the present invention.

[0054] **FIG. 8** shows personal ads as they would appear in a local newspaper.

[0055] **FIG. 9** shows a flow diagram of an examplary operation of the process of responding to an ad through a telephone as accomplished by the present invention.

[0056] **FIG. 10** shows a flow diagram of an examplary operation of the process of responding to an ad through the Internet as accomplished by the present invention.

[0057] **FIG. 11** shows a maximized personal ad as seen by the Internet user who chooses to expand the ad to full-page size.

[0058] **FIG. 12** shows a flow diagram of the response confirmation process, including the Response Confirmation Form which gives the Internet user instructions on how to enhance a response to an ad with, audio, video or a photograph.

[0059] **FIG. 13** shows a flow diagram of an examplary operation of the process of retrieving responses through a telephone as accomplished by the present invention.

[0060] **FIG. 14** shows a flow diagram of an examplary operation of the process of retrieving responses through the Internet as accomplished by the present invention.

[0061] **FIG. 15** shows a flow diagram of an examplary operation of the process of searching for ads through a telephone as accomplished by the present invention.

[0062] **FIG. 16** shows a flow diagram of an examplary operation of the process of searching for ads through the Internet as accomplished by the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0063] As required, a detailed illustrative embodiment of the present invention is disclosed herein. However, telephone techniques, physical communication systems, data formats and operating structures in accordance with the present invention may be embodied in a wide variety of forms and modes, some of which may be quite different from those in the disclosed embodiment. Consequently, the specific structural and functional details disclosed herein are merely representative, yet in that regard, they are deemed to afford the best embodiment for purposes of disclosure and to provide a basis for the claims herein which define the scope of the present invention.

[0064] Referring initially to **FIG. 1**, a series of remote telephone terminals T1-Tn are represented. In addition, a series of remote computer terminals CT1-CTn are represented. The indicated terminals T1-Tn represent the multitude of telephone terminals existing in association with the public telephone network PTN. The indicated computer terminals CT1-CTn represent the multitude of computer terminals connected to the Internet.

[0065] The public telephone network PTN, which accommodates the individual terminals T1-Tn, is coupled to an Interactive Voice Response System IVR. The Internet, which accommodates individual computer terminals CT1-CTn, is coupled to an Internet Web Server IWS. Individual callers use the individual telephone stations T1 through Tn to interface the IVR through the public telephone network PTN. Individual users at computer terminals CT1 through CTn use the Internet to interface the Internet Web Server. Telephone callers and Internet users may record digital audio messages that can be listened to from any of the remote telephone terminals T1-Tn or from any of the remote computer terminals CT1-CTn. Internet users may leave digital text messages that may be accessed from any of the remote telephone terminals T1-Tn using text to speech or from the remote computer terminals CT1-CTn via computer monitor.

[0066] Considering the system of **FIG. 1** in somewhat greater detail, it is to be understood that the public telephone network has multiplexing capability for individually coupling the terminals T1-Tn to the IVR on request. In the illustrative embodiment of the system, the individual terminals T1-Tn take the form of existing traditional or conventional telephone instruments. It is also to be understood that the Internet has the capability for individually connecting the computer terminals CT1-CTn to the Internet Web Server. In the illustrative embodiment of the system, the individual computer terminals CT1-CTn take the form of personal computers that comprise a central processing unit CPU, modem, monitor, keyboard, hard drive, sound card, and microphone.

[0067] Considering the IVR in somewhat greater detail, the public telephone network PTN is coupled to an IVR **FIG. 1**. In the disclosed embodiment, from the public telephone network PTN, forty-eight lines are connected to the IVR and, accordingly, the IVR may accommodate up to forty-eight simultaneous calls from the public telephone network PTN. The IVR contains a processor, an exemplary form of which is an Intel 166 MHz Pentium Processor. The forty-eight lines from the public telephone network (PTN) are connected to the processor though an interface **15**, an exemplary form of which is a series of commercially available Dialogic (D240SC-TI) cards. The interface incorporates modems, tone decoders, switching mechanisms, DNIS and ANI capability. The Dialogic card stores audio information in the Dialogic .VOX format.

[0068] Generally, DNIS capability is a function of the public telephone network PTN to provide digital data indi-

cating the called number. ANI capability is a similar function whereby the digital data indicates the calling number.

[0069] Considering the Internet Web Server in somewhat greater detail, the IWS is coupled to the Internet via a DSI line to a local Internet provider service. The IWS may accommodate a multitude of simultaneous Internet users. As represented, the IWS is a micro computer programmed for Internet information server operations. The IWS contains a processor and Internet server software, exemplary forms of which are an Intel 166 Mhz Pentium Processor and Microsoft Internet Information Server software.

[0070] The IWS is also loaded with RealAudio Server software from Progressive Network. RealAudio allows a Microsoft Windows .WAV files to be converted into a RealAudio .RA file, a compressed format that allows play back over the Internet in real time, as opposed to first downloading a file and then listening to it. RealAudio accomplishes this by playing an audio file while it is still downloading, using a process called data streaming.

[0071] The IWS is also loaded with VDOLive Server software. VDOLive allows a video clip in the Microsoft Windows AVI, Apple Quicktime, or MPEG video files formats to be converted into a VDOLive .VDO format, a compressed format that allows play back over the Internet in real time, as opposed to first downloading a file and then listening to it. VDOLive also utilizes data streaming.

[0072] The IVR and the IWS are coupled to a Database Server DBS via an Ethernet hub as shown in **FIG. 1**. The system includes one or more Operator Workstations OW1-OWn, through which an operator can interact with and control the DBS, IVR and IWS.

[0073] The database server DBS is a computer programmed for database operations. In the illustrated embodiment, the DBS manages a personal Ad Database which is comprised of multiple tables that manage ad creation, the audio greeting files, ad response files, photograph and video files and keyword searching of ads. The Ad Database comprises an electronic equivalent of the personal classified ads placed via telephone and the Internet, and responses placed to ads.

[0074] In addition, the DBS converts audio files received via telephone into the RealAudio .RA format for real time retrieval via the Internet. Conversely, the DBS converts audio files received via the Internet into Dialogic .VOX files for retrieval via telephone. Audio file conversions are done through audio file conversion software, a exemplary form of which is Vox Studio by Xentec.

[0075] The DBS contains a processor and an SQL (Structured Query Language) relational database software, exemplary forms of which are the Intel 166 Mhz Pentium Processor and Microsoft SQL Server.

[0076] The Operator Workstation OWS is a conventional personal computer equipped with a sound card capable of playing the audio data and a video display capable of displaying digitally stored photographs and movies. An exemplary form of the OWS is a microcomputer equipped with an Intel 166 Mhz Pentium Processor and a Creative Labs Sound Blaster sound card. Operators review all incoming advertiser files—text, audio, photograph, and video—to insure that their content is appropriate. Also, operators use advertisers' text messages and audio recordings to create summary text ads for publication in a newspaper.

[0077] The following sections describe in greater detail the interaction between the IVR, the DBS, the IWS, and the OWS.

[0078] Placing a Personal Ad Through a Telephone

[0079] An exemplary operation of the system, with regard to a specific telephone caller placing a personal advertisement will now be treated to accomplish the process as indicated in **FIG. 5**. First, suppose a telephone caller at terminal T1 makes a call to place a personal advertisement in response to an advertisement in XYZ newspaper. The assumed call involves the telephone caller actuating the buttons to input the number 1 800 555 3333, for example. As a result, signals are provided to the public telephone network resulting in a connection from the remote terminal T1 to the IVR. Using standard DNIS techniques, the IVR associates the called number 1 800 555 3333 with a specific format, for example, a voice personals ad taking format.

[0080] The caller is first prompted to create a profile of himself by answering a series of questions using the buttons on his touch tone phone. Referring initially to **FIG. 5**, upon receiving a call, the IVR cues the caller to enter his telephone number **801**. The IVR stores the telephone number **802** in the field AD_PHONE **203**. Next, the IVR cues the caller to enter his gender **803**. For example: "If you are a woman, press 1. If you are a man, press 2." The IVR stores the caller's gender **804** in the field AD_GENDER **207**. Next, the IVR cues the caller for his marital status **805**. For example: "If you are single, press 1. If you are divorced, press 2. If you are widowed, press 3." The caller responds and the IVR stores the caller's marital status **806** in the field AD_MARITAL_STATUS **208**. Next, the IVR cues the caller for his age **807**. For example: "Please enter your age." The caller's age is then stored **808** in the field AD_AGE **209**.

[0081] Next, the IVR cues the caller to record an audio greeting **812**. The advertiser's audio greeting is then stored to a disk file on the IVR **813** and Ad database is updated **809**. Specifically, the AD_REVIEW_FLAG **210** in the AD_PERSONAL_TABLE **FIG. 2** is set to FALSE indicating that the ad must be reviewed by an operator. In addition, a new record is created in the AD_GREETINGS_TABLE **FIG. 3** and the field GR_REVIEW_FLAG **303** set to FALSE to indicate that the audio greeting has not been reviewed. In the new record, the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the table AD_GREETINGS **FIG. 3** are also populated to indicate the advertiser's mailbox number, the format of the audio file, and the location of the audio file on the IVR, and the date and time the greeting was recorded. The field GR_TYPE is set to VOX to indicate that the audio recording is in the Dialogic .VOX file format. Finally, the field GR_CONVERSION_FLAG is set to FALSE to indicate that the audio file must be converted from the Dialogic .VOX format to create a new audio file in the RealAudio .RA format for playback on the Internet.

[0082] The IVR then cues the caller to indicate if he wishes to record an e-mail address **816**. (The e-mail address is used notify the advertiser via the Internet when someone responds to his ad.) For example: "Press 1 to input an e-mail address. Press 2 to decline." If the caller elects to leave an

e-mail address, the IVR cues the caller to record his e-mail address **817**. The audio recording is stored to a disk file on the IVR **818** and the field AD_EMAIL_FILENAME **205** in table AD PERSONAL **FIG. 2** is set, indicating that an e-mail audio file exists and its location on the IVR.

[**0083**] Next, the IVR assigns the advertiser a five digit mailbox number **819**. For example: "Your 5-digit mailbox number is 12345." The mailbox number is then stored **820** in the field AD_MAILBOX_NUMBER **201**. The IVR then cues the caller to enter a five digit password **821**. The password is stored **822** in the field AD_PASSWORD **202**.

[**0084**] In addition, the IVR stores the date the ad is taken in the field AD_DATE_TIME **206**, and updates the field AD_ORIGIN **211** to indicate that the personal ad originated on the telephone **823**. Finally, the IVR creates an electronic mailbox for the advertiser on the IWS **824** and stores it in the field AD_MAILBOX_NUMBER **201** to allow respondents to submit audio, video and photographic files in response to the advertiser's ad.

[**0085**] Placing an Ad Through the Internet

[**0086**] An exemplary operation of the system, with regard to a specific Internet user placing a personal advertisement will now be treated to accomplish the process as indicated in **FIG. 6**. First, suppose a Internet user at terminal CT**1** connects to the Internet to place a personal advertisement in response to an advertisement in XYZ newspaper. The assumed Internet user connects to the Internet and inputs a Uniform Reference Locator URL, for example: http://www.personal_ads.com, resulting in a connection from the remote terminal CT**1** to a Home Page **1001** on the Internet Web Server.

[**0087**] Referring to **FIG. 6**, from the Home Page **1001** on the IWS, the Internet user selects an Ad Placement Form **1002**. The Ad Placement Form **1002** contains the following input fields corresponding to fields in the Ad database as indicated:

Gender 1003	AD_GENDER 207
Marital Status 1004	AD_MARITAL_STATUS 208
Age 1005	AD_AGE 209
E-mail address 1006	AD_EMAIL_ADDRESS 204
Phone Number 1007	AD_PHONE 203
Password 1008	AD_PASSWORD 202
Greeting Text 1014	GR_FILENAME 304

[**0088**] This process largely parallels the process of placing a personal ad via a telephone. The password **1008** is used by the advertiser to retrieve messages and the e-mail address **1006** and telephone number **1007** are used to contact the advertiser. The gender **1003**, age **1005**, and marital status **1004** fields create a profile of the advertiser. Finally, the field Greeting Text **1014** describes the advertiser and the person she is seeking.

[**0089**] The Internet user completes the Ad Placement Form **1002** and presses the "Submit" button to submit her ad. The form is checked by the IWS for completeness **1016**. If the form is incomplete, the user is returned to the Ad Placement Form **1002**. If the form is complete, the IWS assigns the user a five digit mailbox number **1021** and stores it in the field AD_MAILBOX_NUMBER **201**. In addition, the advertiser's profile, contact information, password and greetings are stored in their respective fields, as indicated above.

[**0090**] The advertiser's text greeting is then stored to a disk file on the IWS and the Ad database is updated **1017**. Specifically, the AD_REVIEW_FLAG **210** in the AD_PERSONAL_TABLE **FIG. 2** is set to FALSE indicating that the ad must be reviewed by an operator **10**. In addition, a new record is created in the AD_GREETINGS_TABLE **FIG. 3** and the field GR_REVIEW_FLAG **303** is set to FALSE to indicate that the audio greeting has not been reviewed. In the new record, the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the table AD_GREETINGS **FIG. 3** are also populated to indicate the advertiser's mailbox number, the file format, and the location of the text file on the IWS, and the date and time the greeting was placed. Specifically, the field GR_TYPE is set to TEXT. Finally, the field GR_CONVERSION_FLAG is set to TRUE to indicate that the text does not need to be converted to a different format.

[**0091**] Lastly, the Internet Web Server creates an Ad Confirmation Page **1020**. The Ad Confirmation Page **1020** performs two functions: (1) it confirms the advertiser's mailbox number **1021**, and (2) it gives the advertiser instructions on how to include an audio greeting **1022**, photograph **1023**, or video clip **1024** with her personal ad. Finally, the Internet Web Server stores the date and time the ad is taken in the field AD_DATE_TIME **206**, and updates the field AD_ORIGIN **211** to indicate that the personal ad originated on the Internet **1025**. In addition, the IWS creates an electronic mailbox for the advertiser and stores it in the field AD_MAILBOX_NUMBER **1026** to allow respondents to submit audio, video and photographic files in response to the advertiser's ad.

[**0092**] Enhancing an Internet Ad with Audio, Photograph and Video

[**0093**] A more detailed explanation of how an advertiser submits an audio greeting, photograph, or video clip via CT**1** will now be given. To submit an audio greeting, the advertiser first makes an audio recording using a WAV file editor and then saves the file using her five digit mailbox number as the file name **1030**, for example: 44567.wav. The advertiser then submits the audio file using e-mail to an audio greeting electronic mailbox **1031**, for example: audio_greeting@personals.com. The advertiser's audio recording is stored to a disk file on the Internet Web Server.

[**0094**] In addition, a new record is created in the AD_GREETINGS_TABLE **FIG. 3** and the Ad database is updated **1033**. Specifically, the field GR_REVIEW_FLAG **303** is set to FALSE to indicate that the audio greeting has not been reviewed. Also, the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the AD_GREETINGS_TABLE **FIG. 3** are also populated to indicate the advertiser's mailbox number, the format of the audio file, and the location of the audio file on the IWS, and the date and time the greeting placed. The field GR_TYPE is set to WAV to indicate that the audio recording is in the Microsoft .WAV file format. Finally, the field GR_CONVERSION_FLAG is set to FALSE to indicate that the audio file must be converted from the Microsoft .WAV format to create two new audio files: one in the

RealAudio .RA format for playback on the Internet, and another in the Dialogic .VOX format for playback via the telephone.

[0095] To enhance a personal ad with a photograph, the advertiser first digitizes a photograph using a scanner or takes a photograph with a digital camera and then saves the image to a .GIF file using her five digit mailbox number as the file name **1036**, for example: 44567.gif. The advertiser then submits the graphic file using e-mail to an photograph electronic mailbox, for example: photo@personals.com **1031**.

[0096] The advertiser's photo is stored to a disk file on the IWS and the Ad database is updated **1032**. Specifically, a new record is created in the AD_GREETINGS_TABLE **FIG. 3** and the field GR_REVIEW_FLAG **303** set to FALSE to indicate that the graphic file has not been reviewed. In each new record, the fields GR_MAILBOX-_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the table AD_GREETINGS **FIG. 3** are also populated to indicate the advertiser's mailbox number, the format of the graphic file, and the location of the graphic file on the IWS, and the date and time the photograph was received. The field GR_TYPE **302** is set to GIF to indicate that the graphic file is in the .GIF file format. Finally, the field GR_CONVERSION_FLAG **306** is set to TRUE to indicate that no file conversion is necessary as .GIF is the graphic file format used by the IWS. If other graphic formats were accepted, they might have to be converted to a .GIF format, depending on the file formats the IWS supported. If file conversion were necessary, the field GR_CONVERSION_FLAG **306** would be set to FALSE.

[0097] To enhance a personal ad with video, the advertiser first digitizes a video clip and then saves the image to a Microsoft .AVI file using her five digit mailbox number as the file name **1036**, for example: 44567.avi. Other video formats such as Apple Quicktime, or MPEG video could also be used. The advertiser then submits the graphic file using e-mail to an electronic mailbox, for example: video@personals.com **1031**. The advertiser's video clip is stored to a disk file on the IWS and the Ad database is updated **1032**.

[0098] Specifically, a new record is created in the AD_GREETINGS table **FIG. 3** and the field GR_REVIEW-_FLAG **303** set to FALSE to indicate that the video file has not been reviewed. In each new record, the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the table AD_GREETINGS **FIG. 3** are populated to indicate the advertiser's mailbox number, the format of the video file, and the location of the video file on the IWS, and the date and time the video was received. Specifically, the field GR_TYPE **302** is set to AVI to indicate that the video clip is in the Microsoft .AVI file format. Finally, the field GR_CONVERSION_FLAG **306** is set to FALSE to indicate that the video file must be converted to the VDOLive format for real time playback on the Internet.

[0099] Reviewing and Summarizing Ads

[0100] All new personal ads are reviewed by an operator at an Operator Workstation to insure that their content is appropriate. Also, each greeting submitted by an advertiser, whether it be an audio greeting recorded by an advertiser via a telephone or a text greeting placed by an advertiser via the Internet, is summarized by an operator to create a twenty word classified text ad for publication in a newspaper. The twenty word limit is a function of newspaper imposed space limitations. It should be noted that space limitations, if they exist at all, may vary widely from newspaper to newspaper. In another format, text ads that are published in the newspaper are first placed with a live operator via a telephone, precluding the need to summarize an audio recording.

[0101] An exemplary operation of the process of reviewing and summarizing ads with regard to a specific operator at OP1 will now be treated to accomplish the process as indicated in **FIG. 7**. The operator first queries the database to determine if there are new ads to review **1801**. Specifically, the query looks for all ads in the AD_PERSONAL table **FIG. 2** where the field AD_REVIEWED **210** is set to FALSE. If the query finds a new ad, the operator first reviews the ad's greeting **1802** as found in the AD_GREETINGS table **FIG. 3**. If the ad was placed via telephone, this consists of listening to the ad's audio greeting. If the ad was placed via the Internet, this consists of reading the text greeting. The operator then determines if the greeting's contents are appropriate **1803**. If the greeting's contents are inappropriate, the ad is deleted and the record purged from the database **1804** and the operator is returned to block **1801**. If the greeting's contents are appropriate, the operator writes a twenty word summary of the greeting **1804**. The operator then queries the database to determine if the advertiser recorded an e-mail address **1805**. If an e-mail address audio recording is found, the operator transcribes the e-mail address **1806**. The operator then updates the database **1807**.

[0102] Specifically, the advertiser's twenty word text summary is stored to a disk file on the IWS. The AD_REVIEW-_FLAG **210** in the AD_PERSONAL table **FIG. 2** is set to TRUE indicating that the ad has been reviewed. In addition, a new record for the text summary is created in the AD_GREETINGS table **FIG. 3** and the field GR_REVIEW-_FLAG **303** set to TRUE indicating that the record has been reviewed. In the new record, the fields GR_MAILBOX-_NUMBER **301**, GR_TYPE **302**, GR_FILENAME **304**, GR_DATE_TIME **305** in the table AD_GREETINGS **FIG. 3** are also populated to indicate the advertiser's mailbox number, the file format, and the location of the text file on the IWS, and the date and time. The field GR_TYPE is set to TEXT. Finally, the field GR_CONVERSION_FLAG **306** is set to TRUE to indicate that the text does not need to be converted to a different format.

[0103] The operator then returns to block **1801** to continue processing ads. If no new ads are found, the operator queries the database to determine if any multimedia files (audio, video, or photo) have been submitted via the Internet to enhance a personal ad **1808**. Specifically, the query looks for all ads in the AD_PERSONAL table **FIG. 2** where the field AD_REVIEWED **210** is set to TRUE that has files in the AD_GREETING_TABLE **FIG. 3** where the GR_REVIEW-_FLAG **303** is set to FALSE. If the query finds a multimedia file, the operator first reviews the file **1809**. If it is an audio file, this consists of listening to the ad's audio greeting. If it is a video or graphic file, this consists of viewing the file. The operator then determines if the greeting's contents are appropriate **1810**. If the greeting's contents are inappropriate, the filed is deleted and the record purged from the database **1811**. The operator is then returned to block **1808**

to continue processing multimedia files. If the file's contents are appropriate, the operator approves the file **1812** and updates the database **1813**. Specifically, this consists in setting the field GR_REVIEW_FLAG **303** to TRUE to indicate that the file has been reviewed.

[**0104**] If the file is an audio file, the Operator Workstation converts the file to create a new RealAudio RA file and stores the file on the IWS. The Operator Workstation also converts the file to create a Dialogic VOX file and stores the file on the IVR. For each new audio file, a new record is created in the AD_GREETINGS table **FIG. 2** and the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_DATE_TIME **305**, and GR_FILENAME **304** are populated to indicate the mailbox number of the advertiser, the format of the file, the date and time, and the location of the audio file on the IVR. Also, the field GR_REVIEW_FLAG **303** is set to TRUE to indicate that the file has been reviewed. Finally, the field GR_CONVERSION_FLAG is set to TRUE to indicate that the audio file does not need to be converted.

[**0105**] If the file is a video file, the Operator Workstation converts the Microsoft AVI file to create a new VDOLive file and stores the file on the IWS. Also, a new record is created in the AD_GREETINGS table **FIG. 2** and the fields GR_MAILBOX_NUMBER **301**, GR_TYPE **302**, GR_DATE_TIME **305**, and GR_FILENAME **304** are populated to indicate the mailbox number of the advertiser, the format of the file, the date and time, and the location of the video file on the IVR. Also, the field GR_REVIEW_FLAG **303** is set to TRUE to indicate that the file has been reviewed. Finally, the field GR_CONVERSION_FLAG **306** is set to TRUE to indicate that the video file does not need to be converted.

[**0106**] The operator then returns to block **1808** to continue processing multimedia files. If no new multimedia files are found, the session is terminated **1814**.

[**0107**] Publishing in the Newspaper

[**0108**] Each week, all the twenty-word summary text ads from personal ads submitted via telephone and via the Internet are published in a newspaper along with their five digit mailbox numbers. **FIG. 8** depicts personal ads as they would appear in the local newspaper. Icons are included in each ad that represent the origin of an ad (via telephone or via the Internet) and what additional information or multimedia, if any, is available on the Internet. For example, an ad placed via the telephone contains a telephone icon **2001**; an ad placed via the Internet contains a computer icon **2002**. If there is additional text on the Internet, an ad contains an icon denoting additional text **2004**. The presence of a photo or video clip is be indicated respectively by a still camera **2004** and video camera **2005** icons.

[**0109**] Responding to a Personal Ad Through a Telephone

[**0110**] An exemplary operation of the system, with regard to a telephone caller responding to a personal advertisement will now be treated to accomplish the process as indicated in **FIG. 9**. First, suppose a telephone caller at terminal **T1** places a call to respond to a personal ad advertised in XYZ newspaper. The assumed call involves the telephone caller actuating the buttons to input the number 1 900 777 3333, for example. As a result, signals are provided to the public telephone network resulting in a connection from the remote terminal **T1** to the IVR. Using standard DNIS techniques, the IVR associates the called number 1 900 777 3333 with a specific format, for example, a voice personals response format.

[**0111**] Referring to **FIG. 9**, upon receiving a call, the IVR sets the "invalid mailbox number count" equal to zero **2301**. The IVR then increments the "invalid mailbox number count" by one **2302** and cues the caller for a mailbox number **2303**. Upon the caller entering a mailbox number, the IVR queries the field AD_MAILBOX_NUMBER **201** to determine if the mailbox number is valid **2304**. If the mailbox number is invalid, the IVR determines if the caller has exceeded the maximum number of attempts allowed **2305**. If the caller has exceeded the maximum number of attempts allowed, the call is terminated **2306**. If the maximum number of attempts allowed has not been exceeded, the IVR increments the "invalid mailbox number count" by one **2302** and again cues the caller for a mailbox number **2303**.

[**0112**] If the mailbox number is valid, the IVR queries the field AD_ORIGIN **211** to determine if the ad originated on the Internet **2307**. If the ad originated on the telephone, the IVR plays the ad's audio greeting **2311**. If the ad originated on the Internet, the IVR uses text to speech to play the ad's text greeting as placed on the Internet **2308**. The IVR then queries the AD_GREETINGS table **FIG. 2** to determine if the Internet advertiser also submitted an audio greeting **2309**. If the query does not find an audio greeting **2310**, the IVR prompts the caller to indicate if he wishes to respond to the ad **2312**. If the query finds an audio greetings **2310**, the IVR plays the audio greetings **2311**. The IVR then prompts the caller to indicate if he wishes to respond to the ad **2312**.

[**0113**] If the caller elects not to respond to the ad, the call is terminated **2306**. If the caller elects to respond to the ad, the IVR next cues him to record his response **2319**. The IVR then stores the response to a disk file and updates the database **2321**. Specifically, the IVR creates a new record in the AD_RESPONSE table **FIG. 4** populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IVR. The field RSP_TYPE **504** is set to VOX to indicate that the audio recording is in the Dialogic .VOX file format. Finally, the field RSP_CONVERSION_FLAG **506** is set to FALSE to indicate that the audio must be converted from the Dialogic .VOX format to create a new audio file in the RealAudio .RA format for playback on the Internet.

[**0114**] The IVR creates a new RealAudio .RA file from Dialogic .VOX file and stores the RealAudio file to a disk file **2322** on the IWS and updates the database **2323**. Specifically, the IVR creates a new record in the AD_RESPONSE table **FIG. 4** and populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IVR. The field RSP_TYPE **504** is set to RA to indicate that the audio recording is in the RealAudio .RA file format.

[**0115**] Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE for both the audiotex .VOX file and the RealAudio .RA file to indicate that the audio files do not need to be converted **2324**.

[0116] The caller is then prompted to respond to another ad **2325**. If the caller chooses to respond to another ad, the IVR continues processing at block **2303**, otherwise the call is terminated **2326**.

[0117] Responding to a Personal Ad Through the Internet

[0118] An exemplary operation of the system, with regard to a specific Internet user responding to a personal ad via the Internet will now be treated to accomplish the process as indicated in **FIG. 10**. First, suppose an advertiser at terminal CT1 connects to the Internet to respond to a personal advertisement advertised in XYZ newspaper. The assumed Internet user connects to the Internet and inputs a Uniform Reference Locator URL, for example: http://www.personal_ads.com, resulting in a connection from the remote terminal CT1 to a Home Page on the Internet Web Server.

[0119] Referring to **FIG. 10**, from the Home Page **2401** on the IWS, the Internet user selects an Ad Response Form **2402**. The Ad Response Form instructs the Internet user to enter the five digit mailbox number of the ad she wishes to respond to **2403**. Upon the Internet user entering her mailbox number, the IWS queries the field AD_MAILBOX_NUMBER in the Ad database to determine if the mailbox number is valid **2404**. If the mailbox number is invalid, the Internet user is presented with an Invalid Mailbox Number Form **2405**.

[0120] If the mailbox number is valid, the IWS presents the Internet user with a Results Form **2406**. The Results Form **2406** shows the ad the Internet user selected. Specifically, the Results Form shows the twenty word text ad that appears in the newspaper **2407**. In addition, the ad contains one or more icons that represent any additional text or multimedia files (audio, video, photograph) for the ad that are available on the IWS. These icons include an audio icon **2408** to denote the ad's audio greeting, a still camera icon **2409** to denote a photograph of the advertiser, a video camera icon **2410** to denote a video clip of the advertiser, or a paper icon **2411** to denote the ad's full text greeting, if the ad was placed on the Internet. It is to be understood that these icons are merely representative and that many other possibilities exist to denote the existence of text and multimedia files. By clicking on an icon, the Internet user can view or listen to the associated file. In addition, by selecting a maximize bar **2412**, the Internet user can expand an ad to full page size **FIG. 11**. The Internet user responds to an ad by selecting the "Respond" button **2413**.

[0121] When the Internet user selects the respond button, she is presented with an Ad Response Form **2414**. The Internet user creates a response by completing a response text field **2416**. After completing the Ad Response Form, the Internet user submits the form by pressing the "Submit" button **2422**. The advertiser is then presented with a Response Confirmation Form **2423**. The Response Confirmation Form gives the advertiser information on enhancing her response with an audio message, photograph, or video clip.

[0122] The IWS then stores the response to a disk file and updates the database **2424**. Specifically, the IWS creates a new record in the AD_RESPONSE table **FIG. 4** and populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IWS. The field RSP_TYPE **504** is set to TEXT. Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE to indicate that the text does not need to be converted to a different format.

[0123] Enhancing a Response with Audio, Photograph and Video

[0124] As already indicated, after a text response has been submitted via the Internet, the Internet user is shown a Response Confirmation Form **FIG. 121501**. The response confirmation form gives the Internet user instructions on how to enhance a response to an ad with audio, video, or a photograph.

[0125] A more detailed explanation of how a respondent submits an audio response, photograph, or video clip via CT1 will now be given. To submit an audio response, the Internet user first makes an audio recording using a WAV file editor and then saves the file using her five digit mailbox number as the file name **1503**, for example: 44567.wav. The Internet user then submits the audio file using e-mail to the recipient's electronic mailbox on the IWS **1504**, for example: 22345@personals.com **1512**. The Internet user's audio response is stored to a disk file on the IWS and the AD database is updated **1505**.

[0126] Specifically, the IVR creates a new record in the AD_RESPONSE table **FIG. 4** and populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **506** to indicate the mailbox number of the ad responded to, the date of the response, the format of the audio file, and the location of the audio file on the IVR. The field RSP_TYPE **504** is set to WAV to indicate that the audio recording is in the Microsoft .WAV file format. Also, the field RSP_CONVERSION_FLAG **506** is set to FALSE to indicate that the audio file must be converted from the Microsoft .WAV format to create two new audio response files: one in the RealAudio .RA format for playback on the Internet, and another in the Dialogic .VOX format for playback via the telephone.

[0127] The IWS determines if conversion of audio files are needed **1506**, and then creates a new RealAudio .RA file and Dialogic .VOX file from the Microsoft .WAV file **1507**. The RealAudio file is stored on the IWS and the Dialogic file is stored on the IVR. The IWS also updates the AD database **1508**. Specifically, for each new audio file, the IWS creates a new record in the AD_RESPONSE table **FIG. 4** and populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date of the response, the format of the response, and the location of the response file on the IWS. Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE for both the source audio file (.WAV) and the target audio files (.VOX and .RA) to indicate that the audio files do not need to be converted **1509**.

[0128] To send a photograph in response to an ad, the Internet users first digitizes a photograph using a scanner or takes a photograph with a digital camera and then saves the image to a .GIF file using her five digit mailbox number as the file name **1510**, for example: 44567.gif. The respondent then submits the graphic file using e-mail to the recipient's electronic mailbox, for example: 22345@personals.com

1504. The respondent's photo is stored to a disk file on the IWS and the database is updated **1505**.

[**0129**] Specifically, the IWS creates a new record in the AD_RESPONSE table **FIG. 4** and populates the RSP-_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date of the response, the file format of the photograph, and the location of the file on the IWS. The field RSP_TYPE **504** is set to GIF to indicate that the graphic file is in the .GIF file format. Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE to indicate that no file conversion is necessary as .GIF is the graphic file format used by the IWS **1506**. It should be noted that file conversion may or may not be necessary depending on what file formats are supported by the IWS and IVR and what formats the system allows users to submit files in.

[**0130**] To send an advertiser a video clip, the Internet user first digitizes a video clip and then saves the image to a Microsoft .AVI file using her five digit mailbox number as the file name **1510**, for example: 44567.avi. Other video formats such as Apple Quicktime, or MPEG video could also be used. The respondent then submits the graphic file using e-mail to the recipient's electronic mailbox, for example: 22345@personals.com **1504**. The respondent's video is stored to a disk file on the IWS and the AD database is updated **1505**.

[**0131**] Specifically, the IVR creates a new record in the AD_RESPONSE table **FIG. 4** and populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date of the response, the file format of the video clip, and the location of the video file on the IWS. Specifically, the field RSP-_TYPE **504** is set to AVI to indicate that the audio recording is in the Microsoft .AVI file format. Finally, the field RSP_CONVERSION_FLAG **506** is set to FALSE to indicate that the VDOLive file must be converted to the VDO-Live format for real time playback on the Internet

[**0132**] The IWS determines that the video file must be converted to VDOLive format **1506**. The IWS creates a new VDOLive file from the Microsoft AVI file and stores the new file to a disk file **1507** on the IWS and updates the AD database **1508**. A new record in the AD_RESPONSE table **FIG. 4** is created and the IWS populates the RSP_MAIL-BOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** fields to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the video file, and the location of the video file on the IWS. Finally, the field RSP_CONVER-SION_FLAG **506** is set to TRUE for both record formats (AVI and VDOLive) in the database to indicate that the video file(s) does not need to be converted **1509**.

[**0133**] Retrieving Responses Through the Telephone

[**0134**] An exemplary operation of the system, with regard to an advertiser retrieving responses to his personal ad will now be treated to accomplish the process as indicated in **FIG. 13**. First, suppose an advertiser at terminal T1 places a call to retrieve messages left in response to his ad. The assumed call involves the advertiser actuating the buttons to input the number 1-900-777-4444, for example. As a result, signals are provided to the public telephone network resulting in a connection from the remote terminal T1 to the IVR. Using standard DNIS techniques, the IVR associates the called number 1 900 777 4444 with a specific format, for example, a message retrieval format.

[**0135**] Referring to **FIG. 13**, upon receiving a call, the IVR sets the "logon attempts" equal to zero **2501**. The IVR then increments the "logon attempts" by one **2502** and cues the caller for a mailbox number and password **2503**. The IVR then queries the AD database to determine if the mailbox number and password are valid. If the entries are not valid, the IVR determines if the caller has exceeded the maximum number of logons attempts allowed **2505**. If the caller has exceeded the maximum number of logon attempts allowed, the call is terminated **2506**. If the maximum number of logon attempts allowed has not been exceeded, the IVR increments the "logon attempts" by one **2502** and again cues the caller for a mailbox number and password **2503**.

[**0136**] If the entries are valid, the IVR then queries the AD_RESPONSE table to determine if the advertiser has any responses **2507**. If the advertiser has no responses, the call is terminated **2506**. If the IVR finds a response, the IVR plays the text **2513** and audio **2514** messages from the respondent. If a response is in text form, the IVR uses text to speech to play the message. If there are additional responses, the caller is returned to block **2513**. Otherwise, the call is terminated **2506**.

[**0137**] Retrieving Responses Through the Internet

[**0138**] An exemplary operation of the system, with regard to an advertiser retrieving her responses via the Internet will now be treated to accomplish the process as indicated in **FIG. 14**. First, suppose an advertiser at terminal CT1 connects to the Internet to retrieve messages. The assumed Internet user connects to the Internet and inputs a Uniform Reference Locator URL, for example: http://www.person-al_ads.com, resulting in a connection from the remote terminal CT1 to a Home Page **1701** on the Internet Web Server.

[**0139**] Referring to **FIG. 14**, from the Home Page **1701** on the Internet Web Server, the advertiser selects a Message Retrieval Form **1702**. The Message Retrieval Form **1702** instructs the advertiser to enter a mailbox number **1703** and password **1704**. The IWS then queries the AD database to determine if the mailbox number and password are valid **1705**. If the entries are not valid, the Internet user is presented with an Invalid Mailbox and Password Form **1706**. If the entries are valid **1705**, the IWS queries the Ad Database **1707** to find responses to the advertiser's ad.

[**0140**] If there are no responses, the IWS presents the advertiser with a No Responses Form **1709**. If the IWS finds one or more responses, the IWS presents the advertiser with a Personal Ad Messages Form **1710**. The Personal AD Messages Form **1709** shows any messages for the advertiser. Each message shows the date **1712** and time **1713** the message was received and contains one or more icons that represent the contents of the message. A text icon **1714** denotes a text message; an audio icon **1715** denotes an audio message; a still camera icon **1716** denotes a photograph; a video camera icon **1717** denotes a video clip. By clicking on an icon, the advertiser can view or listen to the associated file.

[0141] Searching for Personal Ads Through the Telephone

[0142] An exemplary operation of the system, with regard to a specific telephone caller searching for personal ads will now be treated to accomplish the process as indicated in **FIG. 15**. First, suppose a telephone caller at terminal **T1** places a call to search personal advertisements in response to an advertisement in XYZ newspaper. The assumed call involves the telephone caller actuating the buttons to input the number 1 900 555 6666, for example. As a result, signals are provided to the public telephone network resulting in a connection from the remote terminal **T1** to the IVR. Using standard DNIS techniques, the IVR associates the called number 1 800 555 6666 with a specific format, for example, a voice personals ad searching format.

[0143] The caller is first prompted to indicate his preferences regarding the type of person he wishes to meet. Referring to **FIG. 15**, the IVR cues the caller to enter the gender of the person he wishes to meet **2101**. Next, the IVR cues the caller to enter the lowest age of the person he wishes to meet **2102**. Next, the IVR cues the caller to enter the highest age of the person he wishes to meet **2103**. Finally, IVR cues the caller for the marital status of the person he wishes to meet **2104**.

[0144] Next, the IVR queries the database to find ads that match the caller's preferences **2114**. If the query does not find any ads, the call is terminated **2133**. If the query returns one or more ads, the IVR queries the field AD_ORIGIN **211** to determine if the ad originated on the Internet **2117**. If the ad originated on the telephone, the IVR plays the ad's audio greeting **2119**. If the ad originated on the Internet, the IVR uses text to speech to play the ad's text greeting as placed on the Internet **2118**. The IVR then queries the AD_GREETING_TABLE to determine if the Internet advertiser also submitted an audio greeting **2120**. If the query does not find an audio greeting **2120**, the IVR prompts the caller to indicate if he wishes to respond to the ad **2122**. If the query finds an audio greetings **2120**, the IVR plays the audio greetings **2121**. The IVR then prompts the caller to indicate if he wishes to respond to the ad **2122**.

[0145] If the caller elects not to respond to the ad, the IVR determines if there are additional matches **2132**. If the there are no additional matches, the call is terminated **2133**. If there are additional matches, the caller is returned to block **2116**.

[0146] If the caller elects to respond to the ad, the IVR next cues him to record his response **2129**. The IVR then stores the response to a disk file **2130** and updates the database **2131**. Specifically, a new record in the AD_RESPONSE table **FIG. 4** is created and the IVR populates the RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** fields to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IVR. The field RSP_TYPE **504** is set to VOX to indicate that the audio recording is in the Dialogic .VOX file format. Finally, the field RSP_CONVERSION_FLAG **506** is set to FALSE to indicate that the audio file must be converted from the Dialogic .VOX format to create a new audio file in the RealAudio .RA format for playback on the Internet.

[0147] The IVR creates a new RealAudio .RA file from Dialogic .VOX file and stores the RealAudio file to a disk file **2130** on the IWS and updates the database **2131**. A new record in the AD_RESPONSE table **FIG. 4** is created and the IVR populates the RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** fields to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IVR. The field RSP_TYPE **504** is set to RA to indicate that the audio recording is in the RealAudio .RA file format. Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE for both files (.VOX and .RA) to indicate that the audio file does not need to be converted.

[0148] Next, the IVR determines if there are additional matches **2132**. If the there are no additional matches, the call is terminated **2133**. If there are additional matches, the caller is returned to block **2116** to continue.

[0149] Searching for Ads Through the Internet

[0150] An exemplary operation of the system, with regard to a specific Internet user searching for personal ads via the Internet will now be treated to accomplish the process as indicated in **FIG. 16**. First, suppose an advertiser at terminal **CT1** connects to the Internet to search for ads that match her preferences. The assumed Internet user connects to the Internet and inputs a Uniform Reference Locator URL, for example: http://www.personal_ads.com, resulting in a connection from the remote terminal **CT1** to a Home Page on the Internet Web Server.

[0151] Referring to **FIG. 16**, from the Home Page **2201** on the IWS, the Internet user selects an Ad Searching Form **2202**. The Ad Searching Form instructs the Internet user to indicate the gender **2203**, low age **2204**, high age **2205**, and marital status **2206** of the person she wishes to meet. When the form is complete, the Internet users submits it by pressing the "Submit" button **2208**. The IWS then checks the submitted form for completeness **2209**. If the form is incomplete, the Internet user is returned to the Ad Searching Form **2202**. If the form is complete, the IWS queries the database to find ads that match the Internet user's preferences **2210**. If the query returns no matches **2212**, the Internet user is presented with a No Matches Page **2213**. If the query returns matches for one or more ads **2212**, the IWS presents the Internet user with a Results Form **2214**.

[0152] The Results Form **2214** shows the ads that match the Internet user's preferences. Specifically, the Results Form shows the twenty word text ad that appears in the newspaper **2215**. In addition, each ad contains one or more icons that represent any additional text or multimedia files (audio, video, photograph) for the ads that are available on the IWS. These icons include an audio icon **2216** to denote the ad's audio greeting, a still camera icon **2217** to denote a photograph of the advertiser, a video camera icon **2218** to denote a video clip of the advertiser, or a paper icon **2219** to denote the ad's full text greeting, if the ad was placed on the Internet. It is to be understood that these icons are merely representative and that many other possibilities exist to denote the existence of text and multimedia files. By clicking on an icon, the Internet user can view or listen to the associated file. In addition, by selecting a maximize bar **2220**, the Internet user can expand the ad to a full page size **FIG. 11**.

[0153] The Internet user responds to an ad by selecting the "Respond" button **2221**. When the Internet user selects the

respond button, she is presented with an Ad Response Form **2222**. The Internet user creates a response by typing in a response text field **2225**. After completing the Ad Response Form, the Internet user submits the form by pressing the "Submit" button **2230**. The advertiser is then presented with a Response Confirmation Form **2231**. The Response Confirmation Form gives the advertiser information on enhancing her response with an audio message, photograph, or video clip.

[**0154**] The IWS then stores the response to a disk file and updates the database **2232**. Specifically, the IWS creates a new record in the AD_RESPONSE table **FIG. 4** and then populates the fields RSP_MAILBOX_NUMBER **501**, RSP_DATE_TIME **503**, RSP_TYPE **504**, and RSP_FILENAME **505** to indicate the mailbox number of the ad responded to, the date and time of the response, the format of the response, and the location of the response file on the IWS. The field RSP_TYPE **504** is set to TEXT. Finally, the field RSP_CONVERSION_FLAG **506** is set to TRUE to indicate that the text does not need to be converted to a different format.

[**0155**] The Internet user can then return to the Results Form at any time by using the "Back" key on her browser.

What is claimed is:

1. A method for storing an audio file and listening to said audio file via the Internet, said method comprising:

a means for storing an audio file in digital memory;

a means for transferring said audio file to an Internet access node;

a means for controling said transfer;

wherein said means for transferring said audio file formats said audio message for output into humanly perceivable form.

2. An apparatus for storing audio files and transferring said audio files to the Internet comprising:

a digital information storage device;

a transfer means;

an Internet access node;

wherein said digital information storage device stores phonemes indicative of audio and wherein said transfer means formats said digital information for output in humanly perceivable form via said Internet access node.

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