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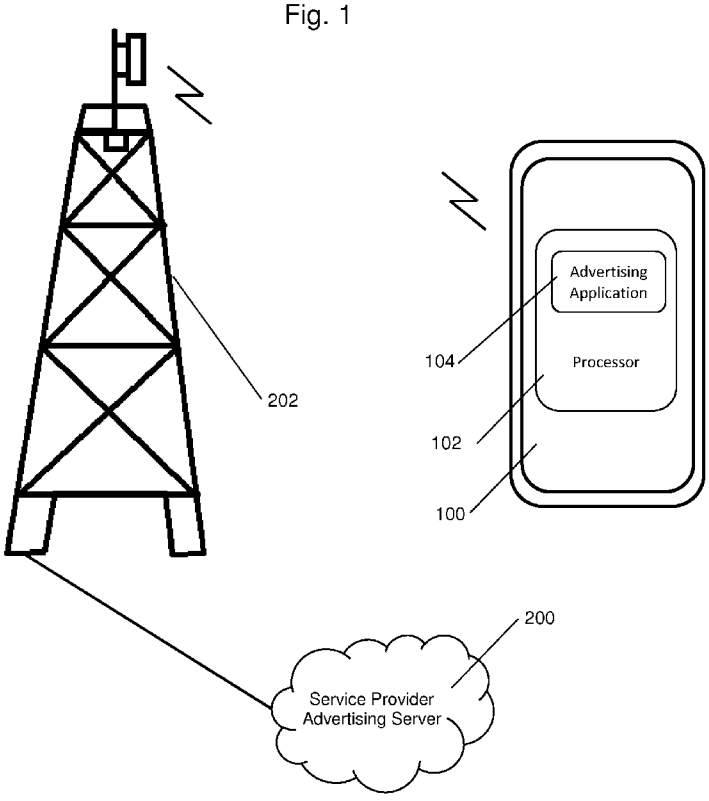
[Continued on next page]

(54) Title: METHOD FOR ADVERTISING DURING CONNECTION OF CALLER

Fig. 1



(57) Abstract: Methods for modification of ringtones and voice mail greetings to provide audible advertising to the recipients of those messages. In certain embodiments, when a caller telephones a participating user, the caller will receive an audible advertisement, which will be selected by a data processing unit, rather than a ringtone while connecting to the participating user or the user's voice mail. In other embodiments, a mobile device user's voice mail greeting is modified to include an advertisement so that the caller must listen to the advertisement before being permitted to leave a message.

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METHOD FOR ADVERTISING DURING CONNECTION OF CALLER

FIELD OF THE INVENTION

[0001] The invention relates to systems and methods for delivering advertising through the use of mobile communication devices. The invention further relates to systems and methods for providing credit to mobile communication device users, such as mobile phone and tablet users, for permitting the appending of advertisements to communications with others.

BACKGROUND

[0002] In the past two decades, mobile communication devices have gone from being considered luxury items to a near necessity for everyday life. The term “mobile communication devices” refers to small, handheld computing devices, often having a display screen with touch input, voice input, and/or a small keyboard. For purposes of this disclosure, reference will be made primarily to mobile phones but is not intended to exclude other types of mobile communication devices.

[0003] According to recent statistics from CTIA-The Wireless Association and the Pew Research Center, there are now more than 320 million mobile phones in use in the United States, and more than 90 percent of adults own a mobile phone. More than half of these mobile phones are smartphones. The term “smartphone” refers to a mobile phone with advanced computing capability and connectivity. In 2012, 2.27 trillion text messages were sent, and 1.1 trillion MB of data was used by owners of mobile communication devices. Approximately 67% of users check their phone for messages, alerts, or calls even when they don’t notice their phone ringing or vibrating, and approximately 29% describe their mobile phones as something they can’t imagine living without.

[0004] Unfortunately for users, the bills for using these phones continue to rise along with people's reliance on use. According to a J.D. Power and Associates report in 2012, U.S. families spent an average of $139 each month, up from $127, each month in 2009. While this would be considered burdensome for many in any economy, it is particularly burdensome in a struggling economy, especially for those at the lower end of the earning scale.

[0005] In light of this financial burden felt by many for a service that is effectively required in everyday life, in accordance with one aspect of this invention, there exists an opportunity for people to offset their mobile device service bills while providing a new mechanism for advertisers to reach consumers.

[0006] Traditional standards and implementations of connecting callers do not provide a means for providing advertising content to the caller during connection. Traditional implementations offer only traditional experiences to users. The present invention overcomes the shortcomings of the traditional implementation described above.

SUMMARY

[0007] In accordance with the invention, there is provided a different user experience and the opportunity for mobile phone users to reduce their service bills. Techniques for modification of communications during mobile device exchanges are needed and provided herein.

[0008] There are disclosed herein methods for providing advertising to callers while they are being connected to a participating user or the user's voice mail. A system provides for the modification of ringtones and of voice mail greetings to provide advertising to callers. In certain embodiments, a caller is provided with audible advertising while waiting to be connected to a user of the inventive system or the user's voice mail. In other embodiments, the mobile device

user's voice mail greeting is modified to include an advertisement so that the caller is required to listen to the advertisement before being permitted to leave a message. The user will receive some form of credit for providing the opportunity to share the advertisements.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Having briefly described the invention, the same will become better understood from the following description, made with reference to the appended drawings, wherein:

[0010] Fig. 1 is a pictorial representation of components involved in executing one embodiment of the inventive method.

[0011] Fig. 2 is a flow chart representing one embodiment of the invention in which a caller telephones a user of the system.

[0012] Fig. 3 is a flow chart representing an alternative embodiment of the invention in which a caller telephones a user of the system.

[0013] Fig. 4 is a flow chart representing yet another embodiment of the invention in which a caller telephones a user of the system.

DETAILED DESCRIPTION

[0014] The following description of various embodiments is made with reference to the accompanying drawings.

[0015] Mobile device users find their service bills to be burdensome and expensive. Accordingly, these users may be interested in options for offsetting their service bills by allowing

advertisers to implement systems and methods for reaching the users' contacts as described further herein.

[0016] In accordance with an embodiment, a user of the subject invention must first elect to participate in an advertisement program. The user of the system must have a mobile device and may be an individual, a group of people, or a business. Various embodiments of advertising programs are described herein.

[0017] In the event that a user elects to participate in the advertising system, the user will establish an account designating such participation. The term "account" as used herein refers to a collection of data associated with a particular user; the account may be a mobile device contact number, a service provider account number, a user profile, or any number of like options. This participation may be accomplished in a variety of ways. For example, the user may purchase a mobile device or install a software update that has the account information embedded in the device's operating system. The term "operating system" as used herein refers to the software or collection of software, including application software, that supports the mobile device' basic computing functions, such as managing hardware resources by scheduling tasks, executing applications, and controlling peripherals. In the alternative, an account may be created with and stored by a service provider at its servers or created with and stored by a software application installed on the mobile device. In other embodiments, the user's account with a service provider may be set up or modified to reflect the user's enrollment in the advertising system.

[0018] In embodiments employing embedded software or a software application, the system will require use of internal storage space on the mobile device to store not only the software programming but also the advertisements. The system may utilize both the device's main

memory as well as its cache memory. In some embodiments, an advertising server may automatically connect to the mobile device to download new advertisements and delete outdated advertisements on a periodic, streaming, or manual basis. The system will also require that the mobile device contain the typical components necessary to operate, such as a power supply, a display, and an input mechanism for inputting data, instructions, and the like, and the components necessary to communicate with a service provider, such as a processor capable of receiving and transmitting data and executing instructions,

[0019] In certain embodiments, the user may receive credit for participation in the advertising system by enrolling in a discounted service plan. When the user creates or updates his service plan with a service provider, the user may select a discounted service plan that incorporates an agreement to allow callers of the user to be provided with audible advertisements in exchange for the discounted plan. In other embodiments, the user may receive credits, such as cash, points to be redeemed for prizes, hotel points, airline miles, discounts for goods, discounts for services, or charitable donations, as the user participates in the system. The order in which the credit is received and the type of credit received by the user is not critical to the implementation of the inventive advertising system.

[0020] The settings for the user's account may have various options for controlling the content, frequency, or other aspects of the audible advertisements that will be played for his callers. For example, the settings may provide the ability to block certain phone numbers from receiving such advertising, the option to prevent callers from receiving such advertising more than once during a certain period of time, the ability to limit the advertising to exclude certain types of advertisements or even specific advertisements, or other control measures. It may also provide the user with the opportunity to select different embodiments of the inventive system, such as

choosing to share advertising during connection time, append advertising to a voice mail greeting, or both.

[0021] The user account may also allow for advertisers to target or block a particular user based on certain demographics. For example, a user who is a 15 year old female would not be an ideal target for disseminating advertisements regarding Las Vegas vacation or retirement planning. Similarly, a 60 year old male would not be an ideal target to disseminate advertisements regarding feminine hygiene products or the latest hip hop album. Accordingly, in some embodiments, user accounts will collect personal information regarding the user, such as age, gender, location, or personal interests.

[0022] As is shown in Fig. 1, in certain embodiments of the invention, a mobile device 100 may have installed in its memory (not shown) an advertising application 104, which may be run on its processor 102. The processor 102 allows the advertising application 104 to connect with the service provider advertising server 200 via a mobile network 202. The advertising server 200 may transmit and receive data from the mobile device 100 regarding the advertising application 104. For example, the advertising server 200 may send new advertisements, send information regarding the expiration of advertisements already sent to the mobile device 100, or receive information regarding the sharing of advertisements by the use of the mobile device 100.

[0023] An embodiment of the inventive method is represented in Fig. 2. When a caller telephones a user, as shown in step 110, a data processing system belonging to the user's service provider will, in accordance with steps 120, 130, select an audible advertisement and provide that advertisement to the caller rather than or in addition to providing a ringtone. In the embodiment as shown in Fig. 2, the data processing system at step 140 may then credit the

user's account for sharing the advertisement. Finally, as is shown in decision step 150 and steps 160, 170, the caller is connected to either the user or the user's voice mail system.

[0024] An additional embodiment of the inventive method is represented in Fig. 3. First, as shown in step 105, a user enrolls in the inventive advertising system and receives credit for doing so. This may be accomplished in a variety of ways, such as by purchasing a mobile device with a user profile designating enrollment embedded in the device's operating system or by establishing an account with the service provider reflecting enrollment such that the enrollment information may be stored in a data processing system controlled by the service provider. When a caller telephones a user, as shown in step 110, a data processing system belonging to the user's service provider will, in accordance with steps 120, 130, select an audible advertisement and provide that advertisement to the caller instead of, before, or after providing a ringtone. Finally, as is shown in decision step 150 and steps 160, 170, the caller is connected to either the user or the user's voice mail system.

[0025] In some embodiments of the inventive method, a caller may receive advertising through voice mail as experienced by a caller for a participating user is illustrated by Fig. 4. At step 210, the caller telephones the user. At the decision step 220, the user may or may not answer the call. If the user answers, as is shown in step 230, the caller is connected to the user. If the user does not answer, the server checks the user's account as shown in step 240. If, as shown in decision step 250, the user's account is set such that the caller will not receive an advertisement, the caller is permitted to leave the user a message at step 280. If, as shown in decision step 250, the user's account is set such that the caller will receive an advertisement, an advertisement is played for the caller as is shown in step 260. Optionally, as shown in step 270, the user's account receives credit for sending the advertisement. Finally, the caller is permitted to leave a message for the user at step 280.

[0026] Certain embodiments may offer variations on this method, such as playing the audible advertisement before the caller hears the user's voicemail greeting, playing the advertisement after the user's voicemail greeting, allowing the caller to bypass or end the advertisement prematurely, or allowing the caller an opportunity to request additional information regarding the advertised goods or services.

[0027] The present invention has been described herein with reference to flowchart illustrations of a method according to embodiments of the invention. It is understood that each step of the flowchart illustrations, and combinations of steps in the flowchart illustrations, can be implemented by programming instructions within a data processing system. These instructions may be provided to a processor of a mobile device, such that the instructions, which execute via the processor of the mobile device, create means for implementing the functions/acts specified in the flowchart block or blocks.

[0028] These instructions may also be stored in a computer-readable memory, for example, in a mobile device, that can direct the mobile device to function in a particular manner, such that the instructions stored in the memory produce an article of manufacture including instructions which implement the function/act specified in the flowchart block or blocks.

[0029] The programming instructions may also be loaded onto a mobile device to cause a series of operational steps to be performed on the mobile device to produce a computer-implemented process such that the instructions which execute on the computer or other programmable apparatus provide steps for implementing the functions/acts specified in the flowchart block or blocks.

[0030] Accordingly, the present invention may be embodied in hardware and/or in software (including firmware, resident software, micro-code, etc.).

[0031] For the purposes of this application, a memory may include any medium capable of storing instructions adapted to be executed by a processor in a mobile device or on a system communicating with a mobile device. Some examples of such media include, but are not limited to, floppy disks, CDROM, magnetic tape, hard drives, and any other device that can store digital information. In one embodiment, the instructions are stored on the medium in a compressed and/or encrypted format. As used herein, the phrase "adapted to be executed by a processor" is meant to encompass instructions stored in a compressed and/or encrypted format, as well as instructions that have to be compiled or installed by an installer before being executed by the processor.

[0032] The foregoing details are exemplary only. Other modifications that might be contemplated by those of skill in the art are within the scope of this invention, and are not limited by the examples illustrated herein. In addition, it is noted that an Abstract of the Disclosure is provided to allow the reader to quickly ascertain the nature of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims. In addition, in the foregoing Detailed Description, it can be seen that various features are grouped together in various embodiments for the purpose of streamlining the disclosure. This method of disclosure is not to be interpreted as reflecting an intention that the claimed embodiments require more features than are expressly recited in each claim. Rather, as the following claims reflect, inventive subject matter lies in less than all features of a single disclosed embodiment. Thus the following claims are hereby incorporated into the Detailed Description, with each claim standing on its own as a separately claimed subject matter.

CLAIMS

1. A method for providing an audible advertisement to a caller of a mobile device user, the method comprising:
    a. identifying, with a data processing system, a user account associated with a mobile device user;
    b. selecting, with a processing unit communicatively coupled to the data processing system, an audible advertisement from a plurality of audible advertisements;
    c. playing the audible advertisement to a caller before the caller is permitted to communicate with the mobile device user; and
    d. providing a credit to the user account.

2. The method of claim 1, in which the user account is controlled by an instruction for at least one of preventing the audible advertisement from being provided to the caller, limiting the frequency with which the audible advertisement will be provided to the caller, and limiting the plurality of audible advertisements to a subset thereof.

3. The method of claim 1, in which the credit is provided to the user account before the caller calls the mobile device user.

4. The method of claim 1, in which the credit is provided to the user account after the caller calls the mobile device user.

5. The method of claim 1, in which the credit is provided to the user account after the audible advertisement is provided to the caller.

6. The method of claim 1, in which the data processing system is stored on a mobile device belonging to the mobile device user.

7. The method of claim 1, in which the processing unit is stored on a mobile device belonging to the mobile device user.

8. The method of claim 1, in which the data processing system is managed by a service provider for the mobile device user.

9. The method of claim 1, in which the processing unit is managed by a service provider for the mobile device user.

10. The method of claim 1, in which the contact is made through accessing a voice mail greeting and voice mail box belonging to the mobile device user.

11. The method of claim 9, in which the method further comprises modifying a voice mail greeting belonging to the mobile device user such that the audible advertisement is provided to the caller before the caller may record a voice mail for the mobile device user.

12. The method of claim 10, in which the audible advertisement is provided to the caller before the caller hears the voice mail greeting.

13. The method of claim 10, in which the audible advertisement is provided to the caller following the voice mail greeting.

14. The method of claim 1, in which the credit comprises at least one of cash, prize points, airline miles, hotel points, discounts for goods, discounts for services, and charitable donations.

15. A computerized system for providing an audible advertisement to a caller of a mobile device user, comprising:
    a. a processor capable of receiving and transmitting data and executing instructions, memory, a display, and an input mechanism; and
    b. said system further programmed to implement a computer implemented method for providing an audible advertisement to a caller of a mobile device user, comprising:
        i. identifying a user profile associated with the mobile device user;
        ii. selecting an audible advertisement from a plurality of audible advertisements;
        iii. playing the audible advertisement to the caller before the caller is permitted to communicate with the mobile device user; and
        iv. providing a credit to the user profile one of before or after providing the audible advertisement.

16. The computerized system of claim 14, in which the contact is made through accessing a voice mail greeting and voice mail box belonging to the mobile device user.

17. The computerized system of claim 15, in which the method further comprises modifying a voice mail greeting belonging to the mobile device user such that the audible advertisement is provided to the caller before the caller may record a voice mail for the mobile device user.

18. The computerized system of claim 14, in which the credit comprises at least one of cash, prize points, airline miles, hotel points, discounts for goods, discounts for services, and charitable donations.

19. A computer implemented method for providing discounted services to a mobile device user in exchange for providing an audible advertisement to a caller of a mobile device user, the method comprising:
    a. enrolling, through use of a data processing system, a mobile device user in a discounted service plan by establishing an account for the mobile device user reflecting agreement to allow for providing an audible advertisement to a caller of the mobile device user in exchange for providing the discounted service plan;
    b. identifying, with the data processing system, when a caller attempts to call the mobile device user that the mobile device user has enrolled in the discounted service plan;
    c. selecting, with a processing unit communicatively coupled to the data processing system, an audible advertisement from a plurality of audible advertisements; and
    d. playing the audible advertisement to the caller before the caller is permitted to communicate with the mobile device user.

20. The method of claim 16, in which the contact is made through accessing a voice mail greeting and voice mail box belonging to the mobile device user.

21. The method of claim 16, in which the method further comprises modifying a voice mail greeting belonging to the mobile device user such that the audible advertisement is provided to the caller before the caller may record a voice mail for the mobile device user.

Fig. 1

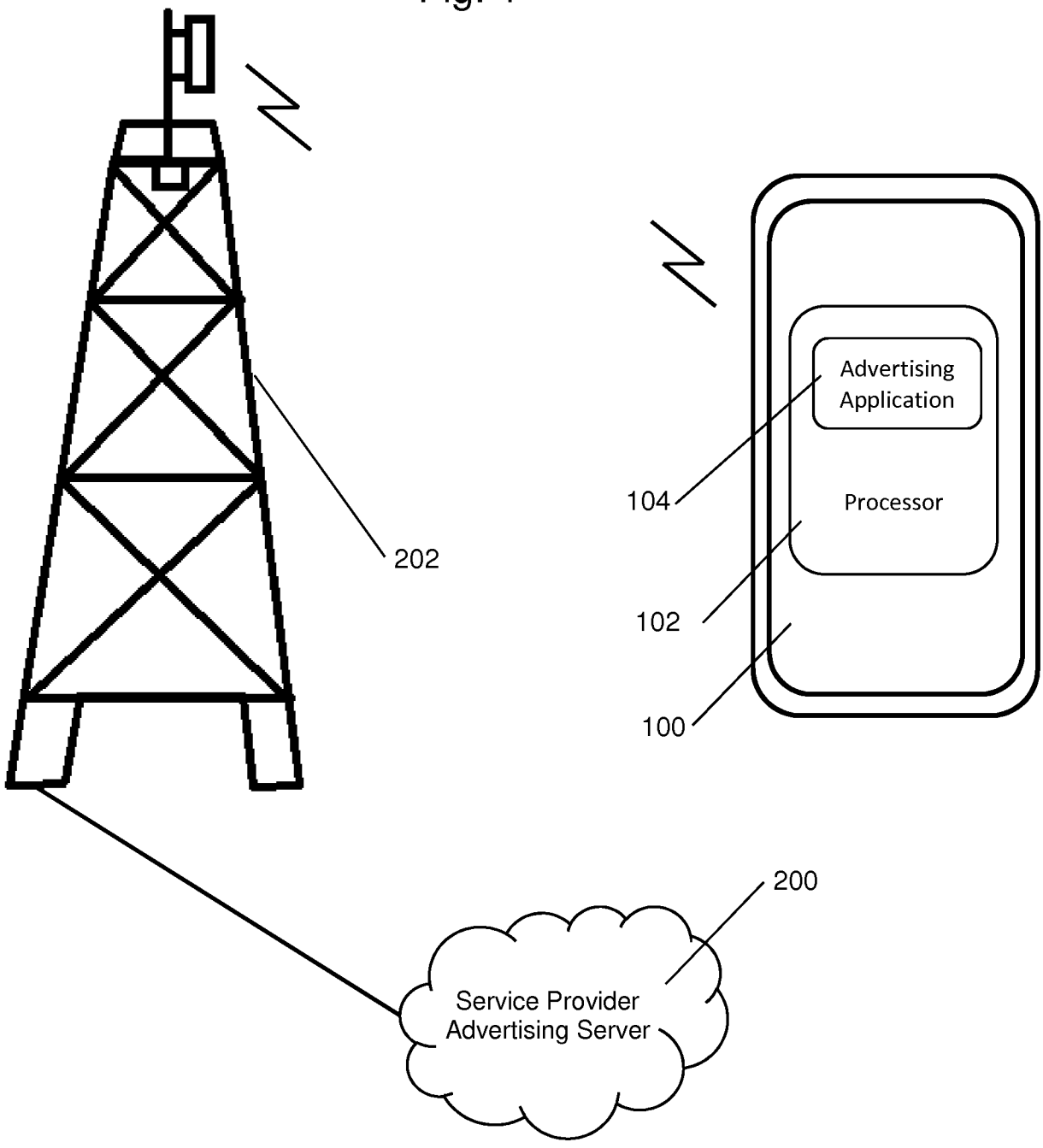

Advertising Application
Processor
104
102
100
202
200
Service Provider Advertising Server

Fig. 2

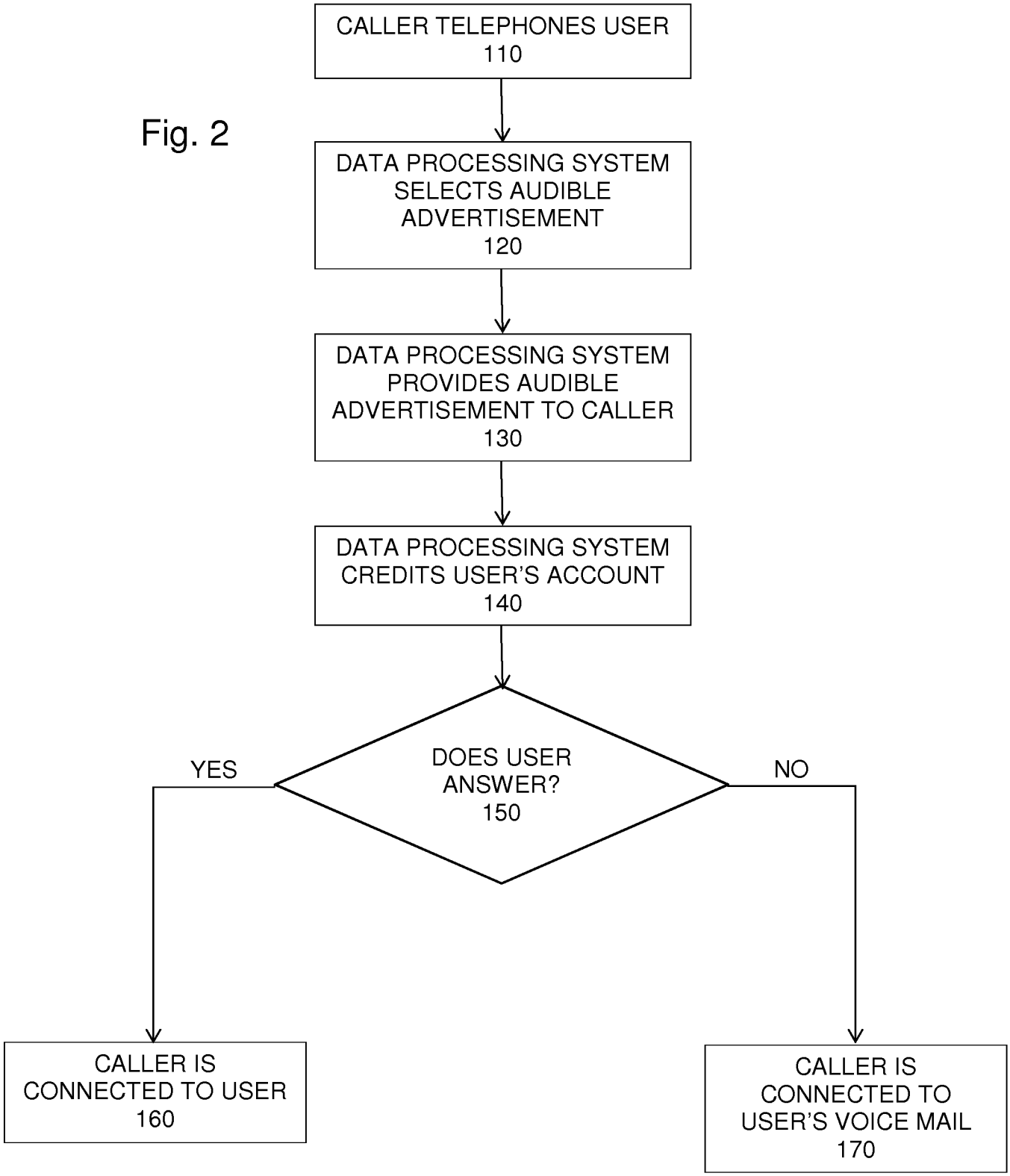

CALLER TELEPHONES USER
110
DATA PROCESSING SYSTEM SELECTS AUDIBLE ADVERTISEMENT
120
DATA PROCESSING SYSTEM PROVIDES AUDIBLE ADVERTISEMENT TO CALLER
130
DATA PROCESSING SYSTEM CREDITS USER'S ACCOUNT
140
DOES USER ANSWER?
150
YES
NO
CALLER IS CONNECTED TO USER
160
CALLER IS CONNECTED TO USER'S VOICE MAIL
170

Fig. 3

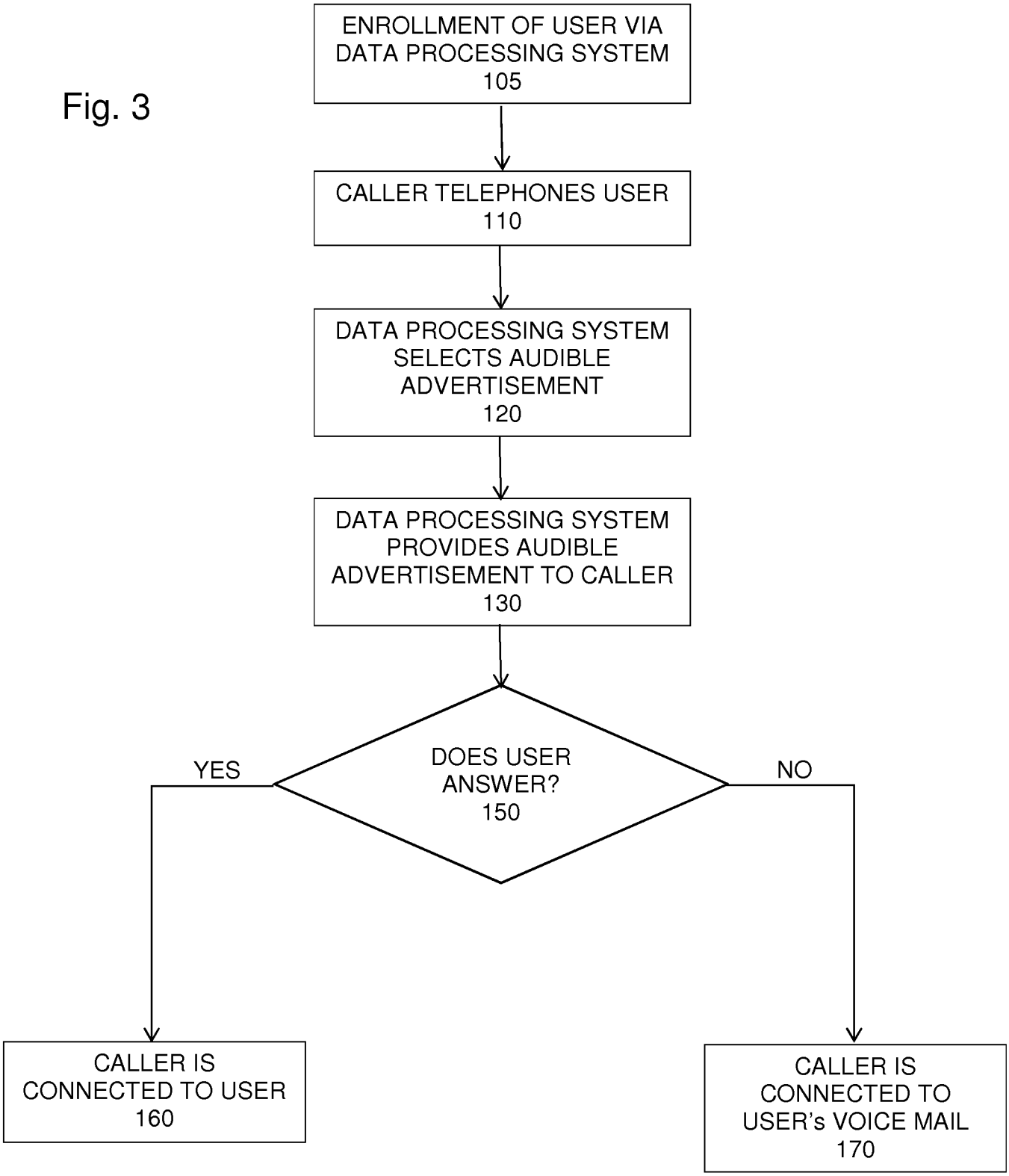
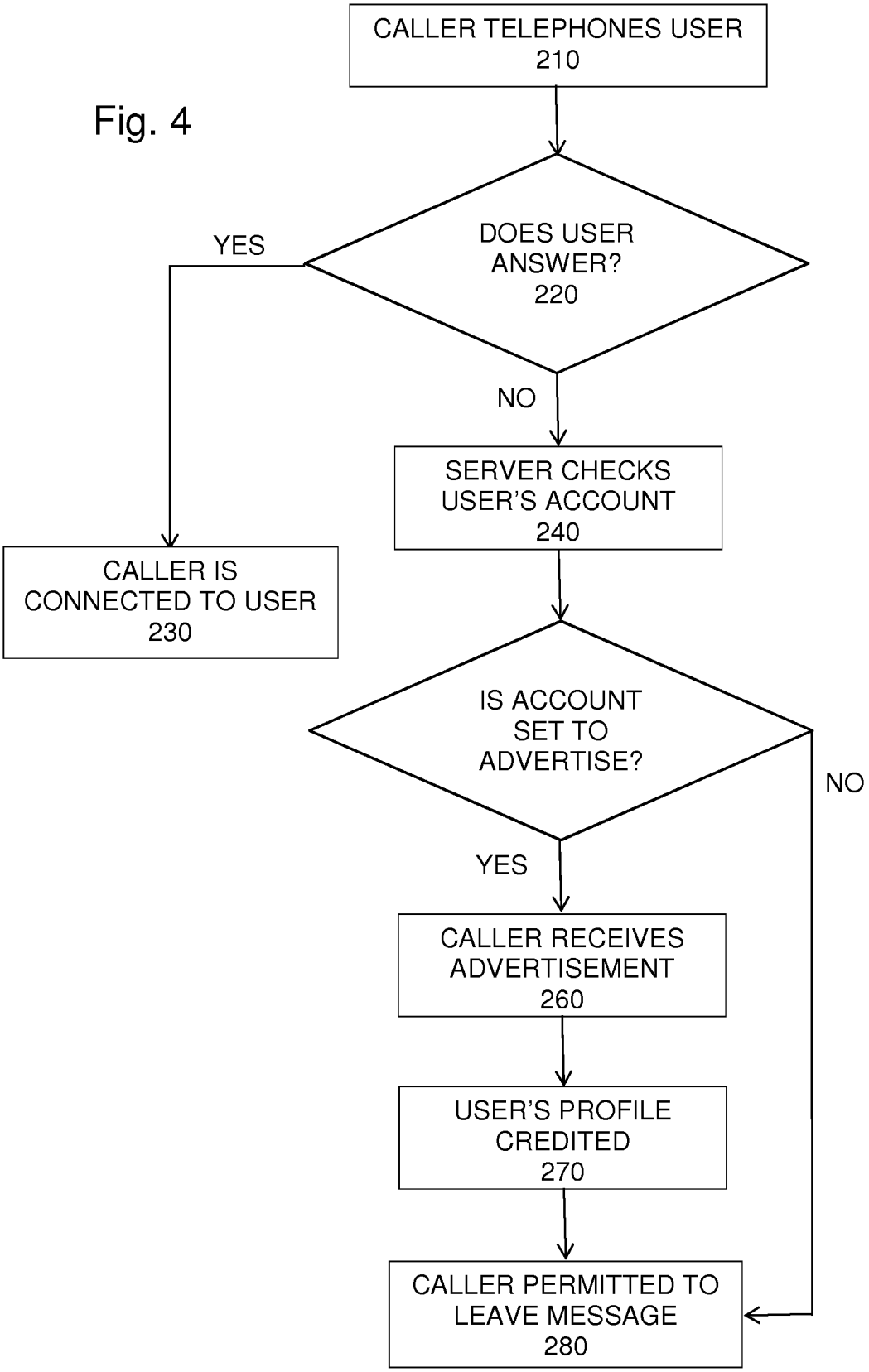

ENROLLMENT OF USER VIA DATA PROCESSING SYSTEM 105
CALLER TELEPHONES USER 110
DATA PROCESSING SYSTEM SELECTS AUDIBLE ADVERTISEMENT 120
DATA PROCESSING SYSTEM PROVIDES AUDIBLE ADVERTISEMENT TO CALLER 130
DOES USER ANSWER? 150
YES
NO
CALLER IS CONNECTED TO USER 160
CALLER IS CONNECTED TO USER's VOICE MAIL 170

Fig. 4


CALLER TELEPHONES USER
210
DOES USER ANSWER?
220
YES
NO
CALLER IS CONNECTED TO USER
230
SERVER CHECKS USER'S ACCOUNT
240
IS ACCOUNT SET TO ADVERTISE?
NO
YES
CALLER RECEIVES ADVERTISEMENT
260
USER'S PROFILE CREDITED
270
CALLER PERMITTED TO LEAVE MESSAGE
280

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US14/35324

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06Q 30/02; H04M 1/64; 3/42 (2014.01)
CPC - G06Q 30/0241; H04M 1/64, 3/42
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) Classifications: G06Q 30/02; H04M 1/64, 3/42 (2014.01)
CPC Classifications: G06Q 30/0241; H04M 1/64, 3/42; USPC Classifications: 705/14.4, 14.64, 14.73

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)
MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); ProQuest; IP.com; Google; play, launch, audible, sound, audio, ad, advertisement, commercial, mobile, phone, smart, cell, call, conversation

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	WO 2006/070407 A2 (SIVAKUMAR, R) July 06, 2006; abstract; pages 1, 7-11, 14, 15; figure 1, 2	1-5, 8-10, 15, 16, 19, 20 --- 6, 7, 11-14, 17, 18, 21
Y	US 8407089 B2 (TRIVELY, M) March 26, 2013; figure 1; column 2, lines 3-8	6, 7
Y	US 8041604 B1 (GLASER, L) October 18, 2011; column 12, lines 8-13, 23-29	11-13, 17, 21
Y	US 8386321 B2 (GRANT, D et al.) February 26, 2013; column 15, lines 13-18	14, 18

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"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)
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"P" document published prior to the international filing date but later than the priority date claimed
"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
"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
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
12 August 2014 (12.08.2014)	09 SEP 2014
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)