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Stec et al.

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(54) **ELECTRONIC CARD DELIVERY AND COMMUNICATION CHANNEL INTEGRATION**

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(73) Assignee: **West Corporation**, Omaha, NE (US)

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(51) **Int. Cl.**

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H04W 4/14	(2009.01)
H04M 1/2745	(2006.01)
H04L 29/08	(2006.01)

(52) **U.S. Cl.**
CPC ***H04M 3/42042*** (2013.01); ***H04L 67/146*** (2013.01); ***H04M 1/274516*** (2013.01); ***H04W 4/14*** (2013.01)

(58) **Field of Classification Search**
CPC H04M 3/42042; H04M 1/274516; H04L 67/146; H04W 4/14
USPC 379/207.15
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2004/0254859	A1*	12/2004	Aslanian, Jr.	G06Q 10/107 705/14.73
2009/0163196	A1*	6/2009	Van Steenbergen	H04M 1/72541 455/422.1
2013/0137408	A1*	5/2013	Buschner	H04Q 3/0029 455/415
2013/0335201	A1*	12/2013	Kang	G06K 7/10366 340/10.5

* cited by examiner

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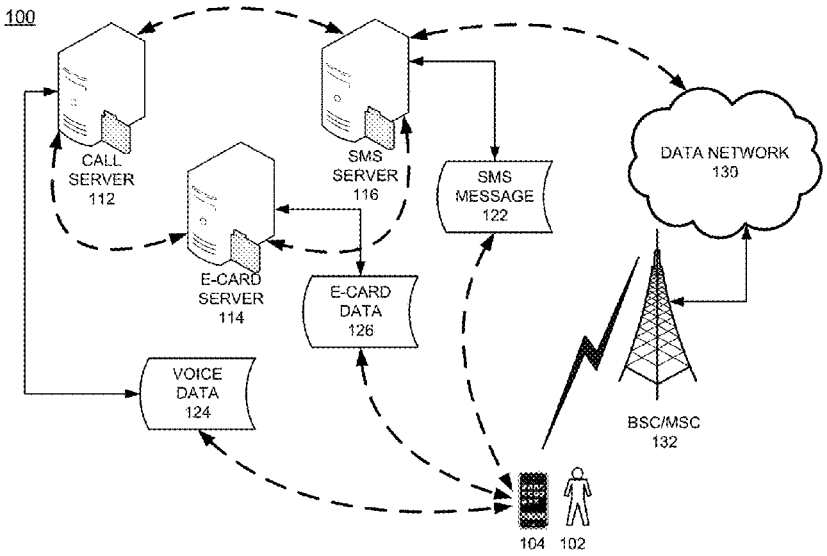
(57) **ABSTRACT**

Personal information, such as professional information normally associated with a business card may be identified and appended to a messaging sequence to provide automated user profile updates. One example embodiment may transmitting an initiation message from a service provider to a user device to initiate a communication session, transmitting a request message to the user device to accept contact information associated with the service provider, receiving a confirmation message responsive to the request message, transmitting the contact information responsive to receiving confirmation of the request, and automatically initiating a contact information update on the user device.

20 Claims, 9 Drawing Sheets



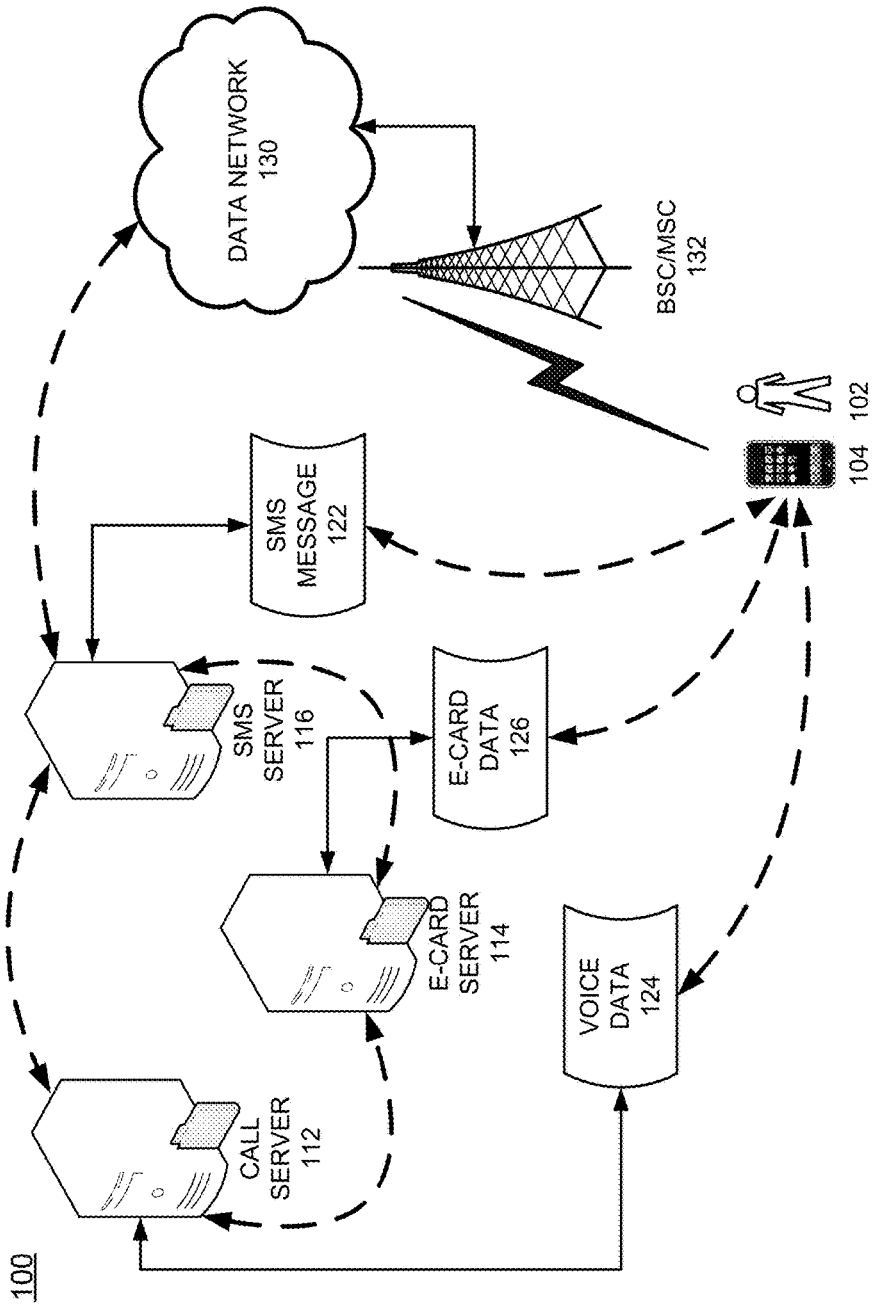

DATA NETWORK
130
BSC/MSC
132
102
104
SMS
MESSAGE
122
SMS
SERVER
116
E-CARD
DATA
126
E-CARD
SERVER
114
VOICE
DATA
124
CALL
SERVER
112
100

FIG. 1

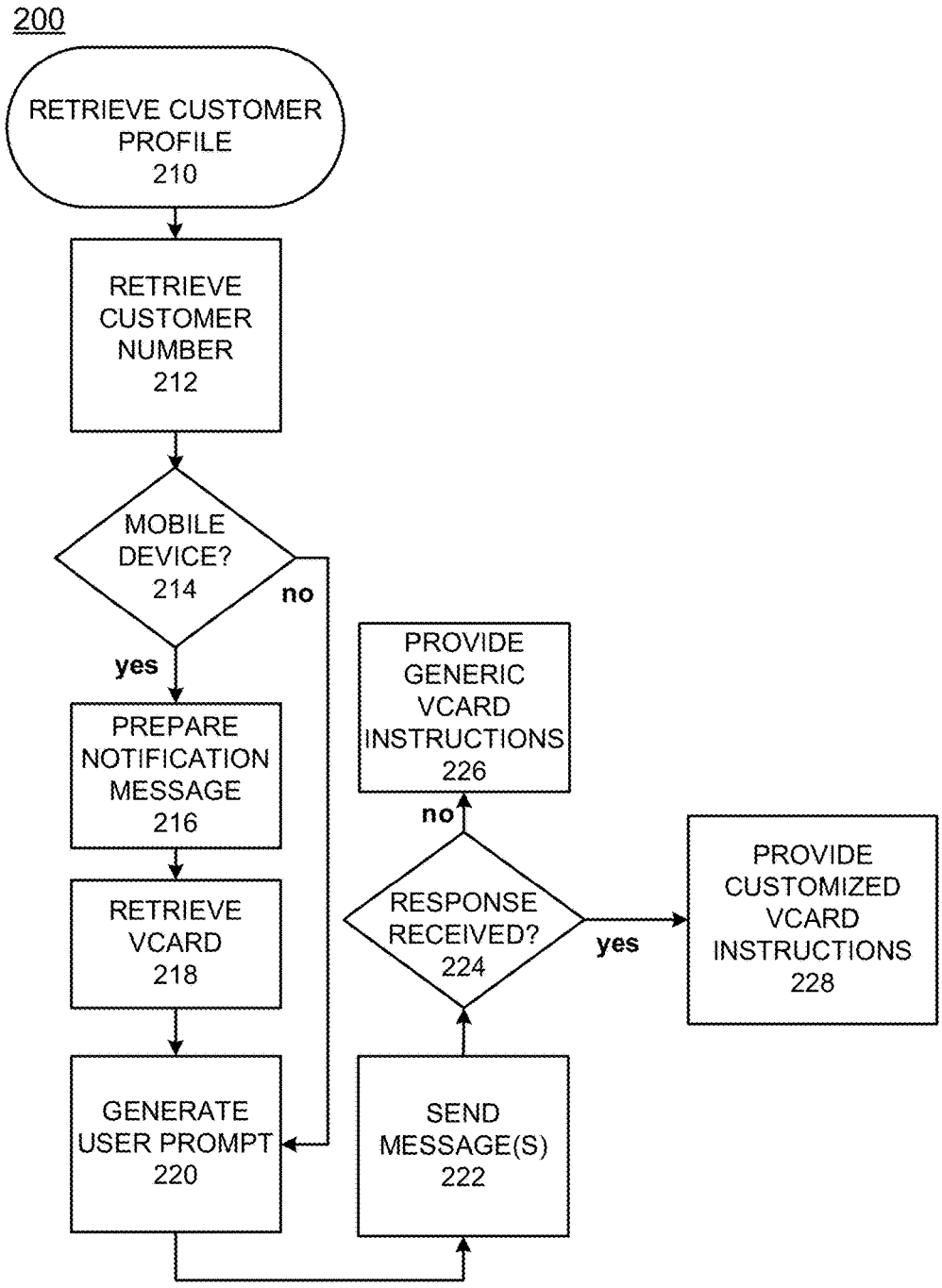

200
RETRIEVE CUSTOMER PROFILE 210
RETRIEVE CUSTOMER NUMBER 212
MOBILE DEVICE? 214
no
yes
PREPARE NOTIFICATION MESSAGE 216
RETRIEVE VCARD 218
GENERATE USER PROMPT 220
SEND MESSAGE(S) 222
RESPONSE RECEIVED? 224
no
yes
PROVIDE GENERIC VCARD INSTRUCTIONS 226
PROVIDE CUSTOMIZED VCARD INSTRUCTIONS 228

FIG. 2

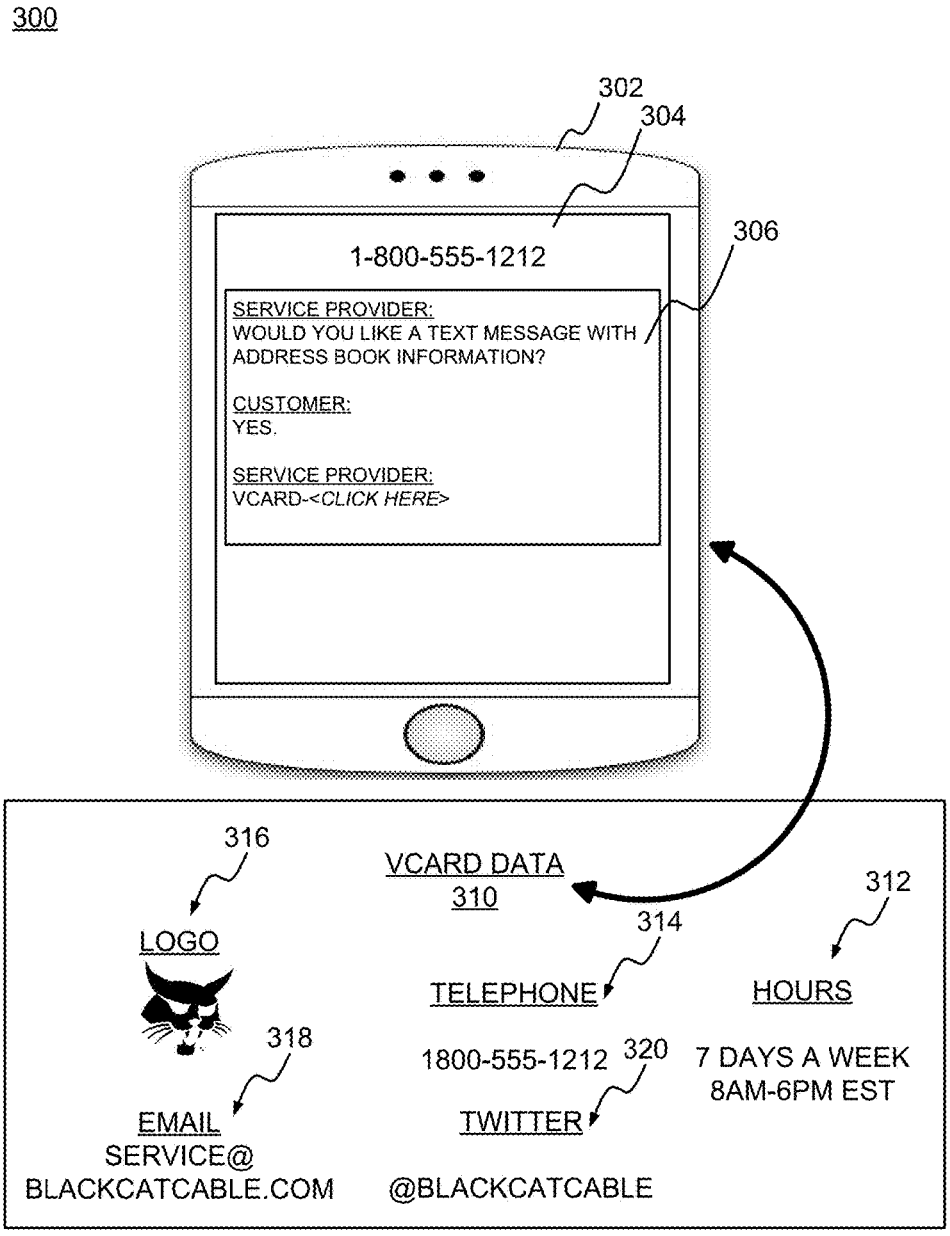

300
302
304
306
1-800-555-1212
SERVICE PROVIDER:
WOULD YOU LIKE A TEXT MESSAGE WITH ADDRESS BOOK INFORMATION?
CUSTOMER:
YES.
SERVICE PROVIDER:
VCARD-<CLICK HERE>
316
LOGO
318
EMAIL
SERVICE@
BLACKCATCABLE.COM
VCARD DATA
310
314
TELEPHONE
1800-555-1212
320
TWITTER
@BLACKCATCABLE
312
HOURS
7 DAYS A WEEK
8AM-6PM EST

FIG. 3A

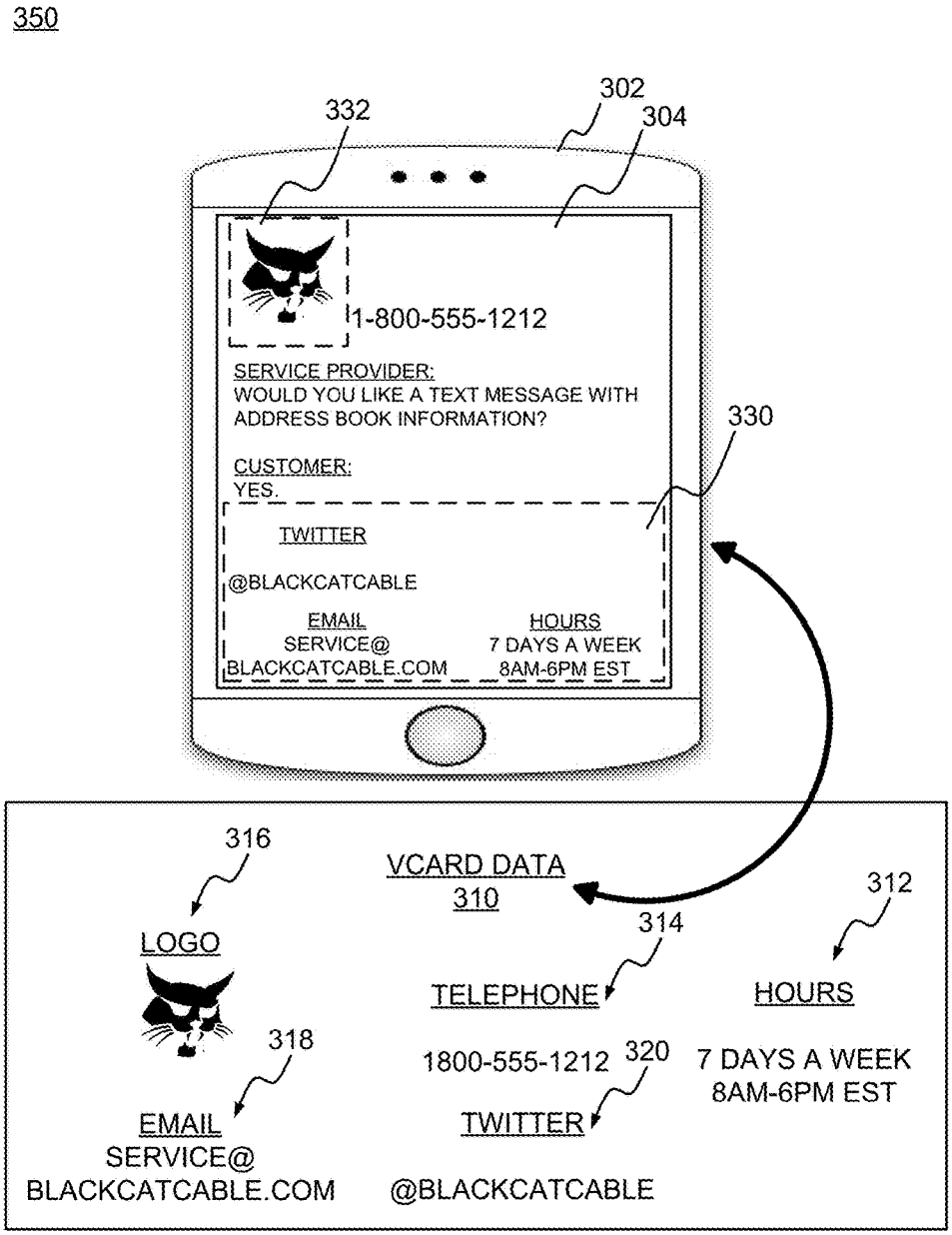

350
332
302
304
1-800-555-1212
SERVICE PROVIDER:
WOULD YOU LIKE A TEXT MESSAGE WITH ADDRESS BOOK INFORMATION?
CUSTOMER:
YES.
330
TWITTER
@BLACKCATCABLE
EMAIL
SERVICE@
BLACKCATCABLE.COM
HOURS
7 DAYS A WEEK
8AM-6PM EST
316
LOGO
318
EMAIL
SERVICE@
BLACKCATCABLE.COM
VCARD DATA
310
314
TELEPHONE
1800-555-1212
320
TWITTER
@BLACKCATCABLE
312
HOURS
7 DAYS A WEEK
8AM-6PM EST

FIG. 3B

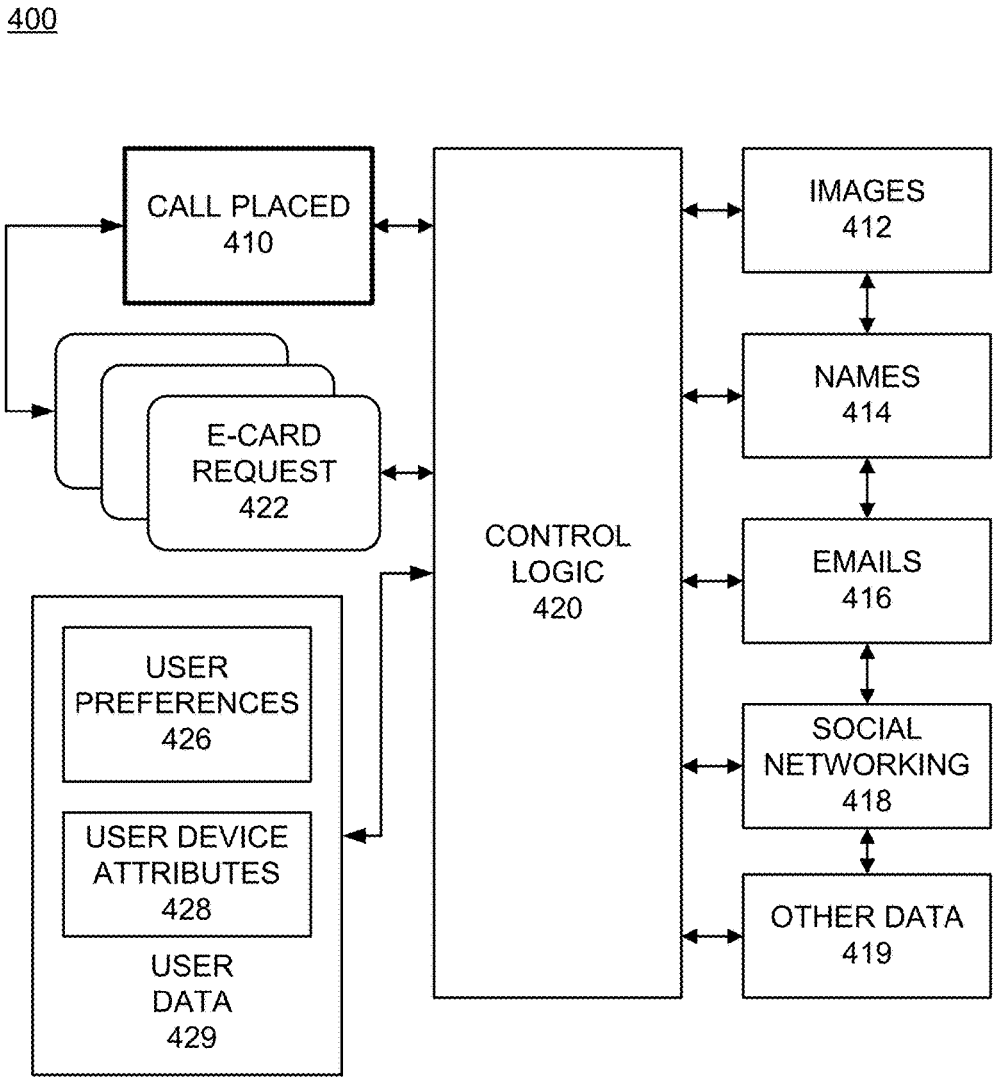

400
CALL PLACED
410
E-CARD
REQUEST
422
USER
PREFERENCES
426
USER DEVICE
ATTRIBUTES
428
USER
DATA
429
CONTROL
LOGIC
420
IMAGES
412
NAMES
414
EMAILS
416
SOCIAL
NETWORKING
418
OTHER DATA
419

FIG. 4

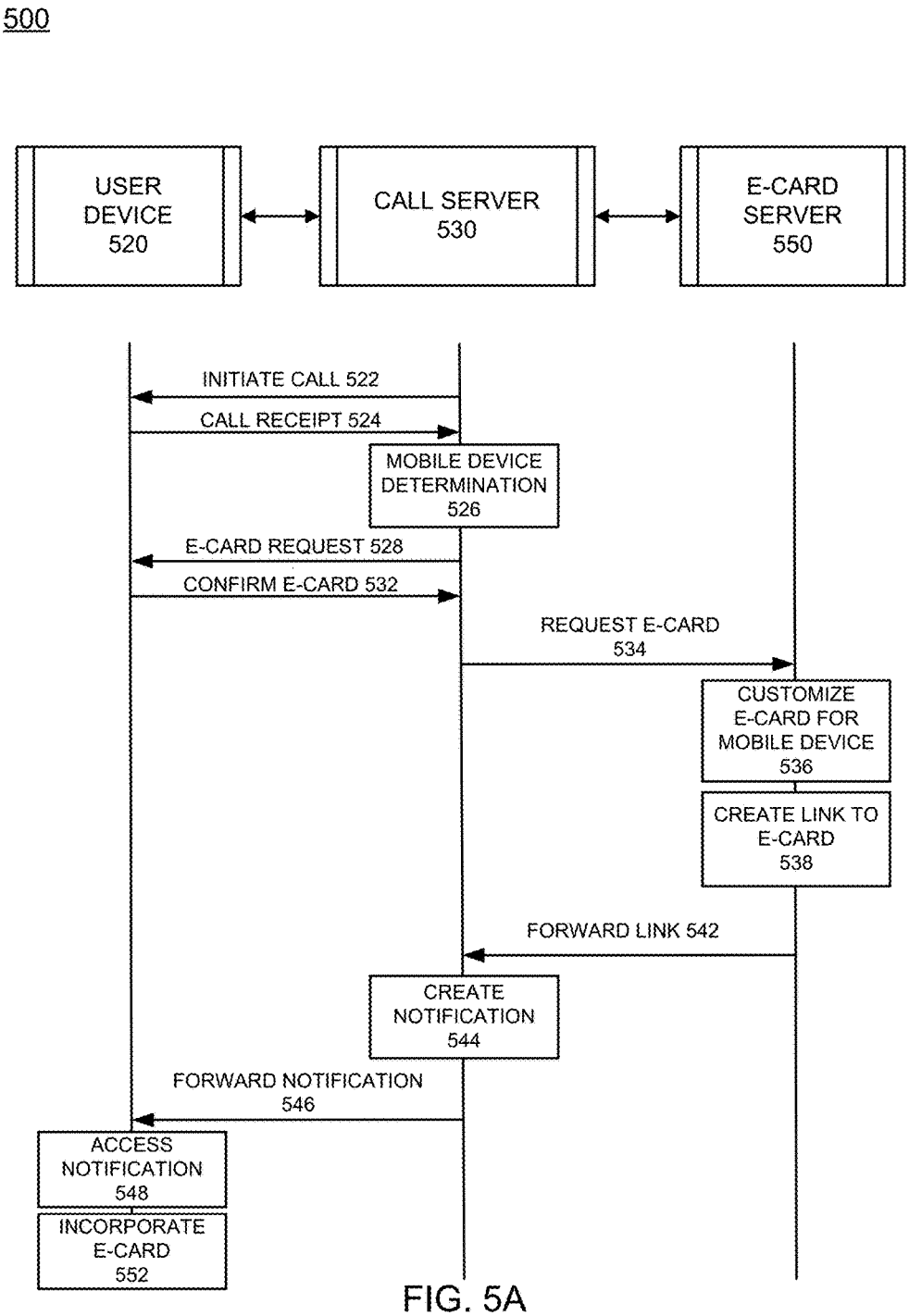

500
USER DEVICE 520
CALL SERVER 530
E-CARD SERVER 550
INITIATE CALL 522
CALL RECEIPT 524
MOBILE DEVICE DETERMINATION 526
E-CARD REQUEST 528
CONFIRM E-CARD 532
REQUEST E-CARD 534
CUSTOMIZE E-CARD FOR MOBILE DEVICE 536
CREATE LINK TO E-CARD 538
FORWARD LINK 542
CREATE NOTIFICATION 544
FORWARD NOTIFICATION 546
ACCESS NOTIFICATION 548
INCORPORATE E-CARD 552

FIG. 5A

570

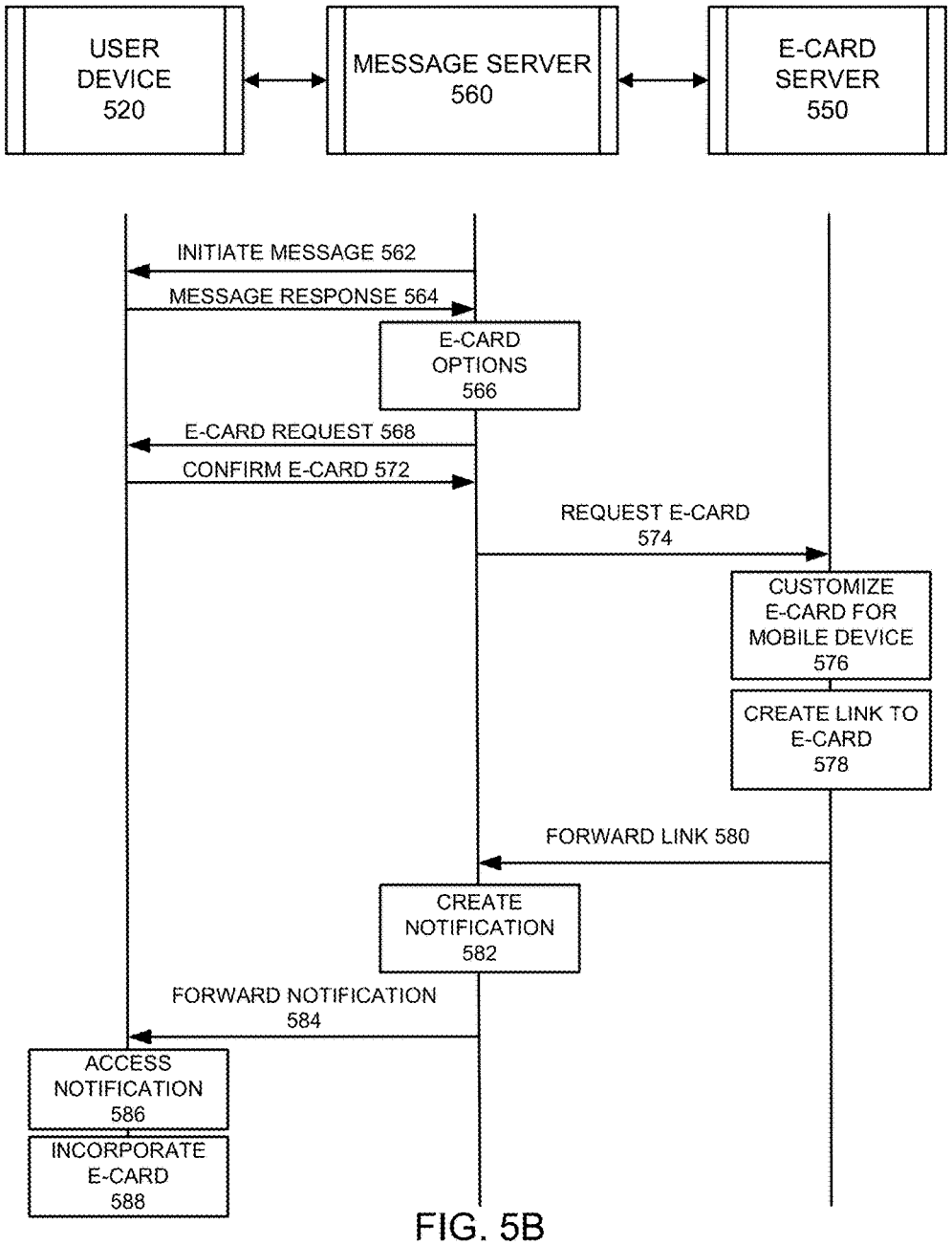

USER DEVICE 520
MESSAGE SERVER 560
E-CARD SERVER 550
INITIATE MESSAGE 562
MESSAGE RESPONSE 564
E-CARD OPTIONS 566
E-CARD REQUEST 568
CONFIRM E-CARD 572
REQUEST E-CARD 574
CUSTOMIZE E-CARD FOR MOBILE DEVICE 576
CREATE LINK TO E-CARD 578
FORWARD LINK 580
CREATE NOTIFICATION 582
FORWARD NOTIFICATION 584
ACCESS NOTIFICATION 586
INCORPORATE E-CARD 588

FIG. 5B

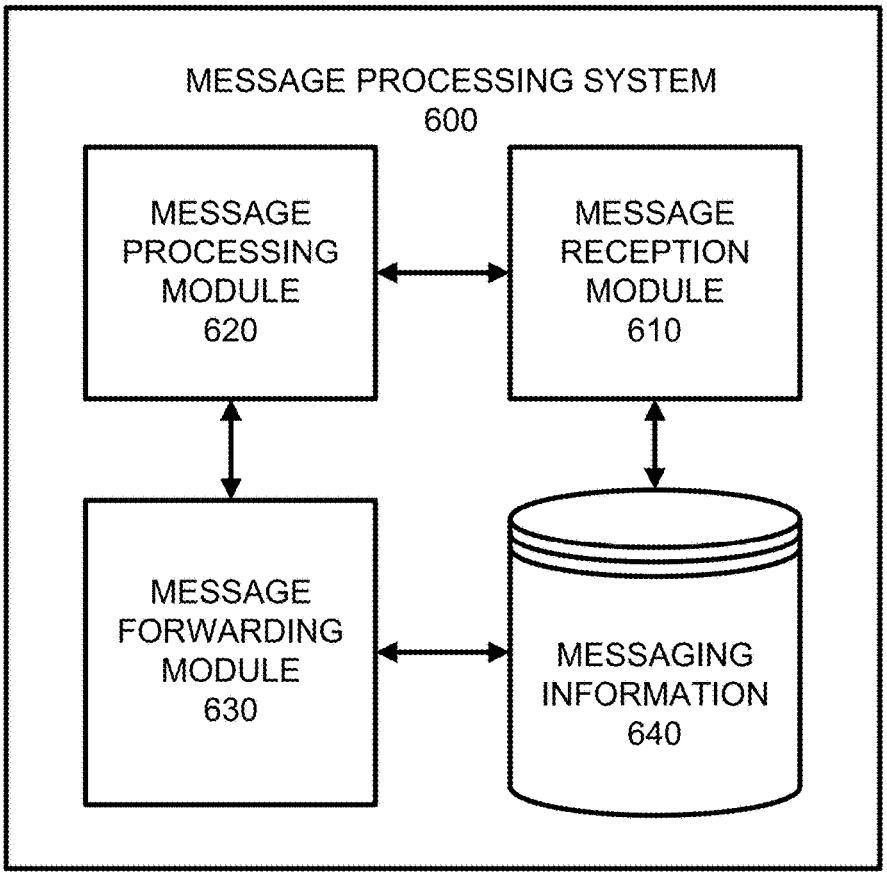

MESSAGE PROCESSING SYSTEM
600
MESSAGE PROCESSING MODULE
620
MESSAGE RECEPTION MODULE
610
MESSAGE FORWARDING MODULE
630
MESSAGING INFORMATION
640

FIG. 6

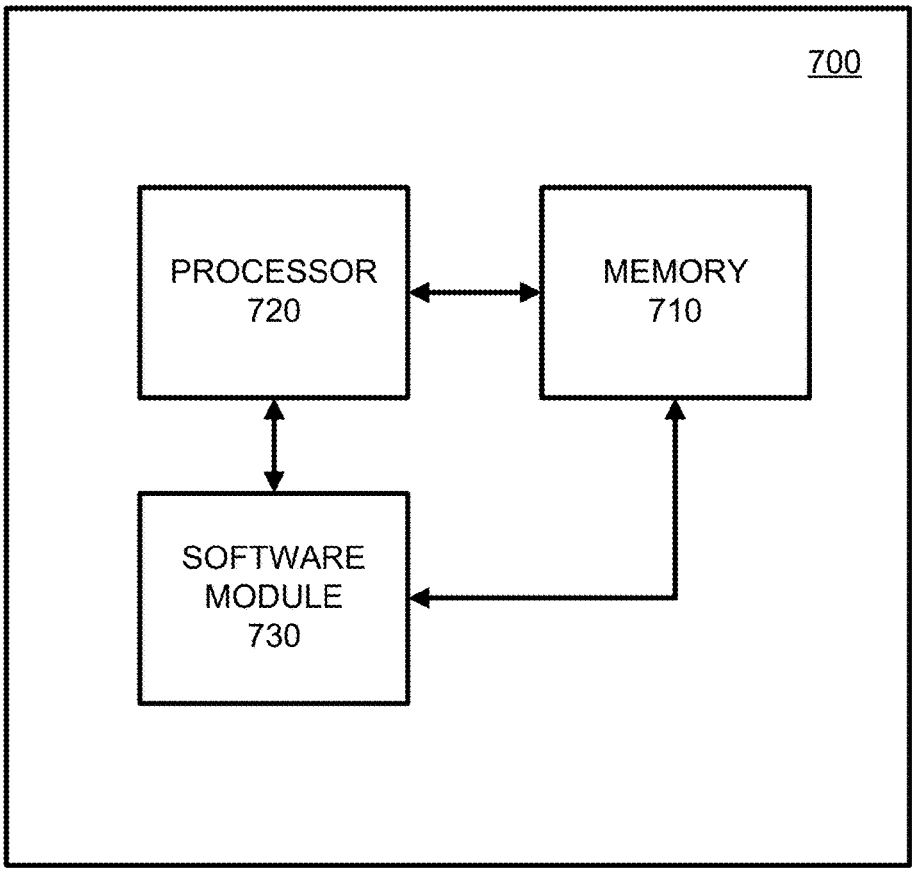


FIG. 7

ELECTRONIC CARD DELIVERY AND COMMUNICATION CHANNEL INTEGRATION

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation from U.S. patent application Ser. No. 14/797,403, filed Jul. 13, 2015, entitled ELECTRONIC CARD DELIVERY AND COMMUNICATION CHANNEL INTEGRATION, the entire contents of which is incorporated by reference herein in its entirety.

TECHNICAL FIELD OF THE APPLICATION

This application relates to a communication session initiating a caller identification procedure, and more particularly, an automated identification procedure that initiates during a voice call or message session.

BACKGROUND OF THE APPLICATION

Conventionally, when a user operating a calling device (e.g., landline phone, smartphone, mobile phone, Internet phone, etc.) receives a call, the user may or may not recognize the number. For example, many numbers are associated with third parties which the user does not normally receive calls, such as business affiliations (e.g., banks, airlines, retailers, etc.). As a result, those numbers are often confused with spam, automated calls, telemarketers, etc., and the user may decide not to answer the call even though it may be important to the user.

Also, in a similar context, a user may receive various text messages from third parties which relate to services or products which the user may be interested in pursuing but which are not sent from known parties. Also, many retailers and service providers use short codes to communicate with a user's mobile device. In this case, the short code is not a readily recognizable number and will generally not assist the user with a speedy identification of the sender of such short message service (SMS) messages.

SUMMARY OF THE APPLICATION

One example embodiment of the present application may provide a method that includes at least one of transmitting a call from a calling party to a user device and establishing a call channel, transmitting a request to the user device to accept contact information associated with the calling party via a data channel separate from the call channel, receiving confirmation via a confirmation message that the request is accepted, and transmitting the contact information responsive to receiving the confirmation message.

Another example embodiment may include an apparatus that includes at least one of a transmitter configured to transmit a call from a calling party to a user device and establish a call channel, transmit a request to the user device to accept contact information associated with the calling party via a data channel separate from the call channel, and a receiver configured to receive confirmation via a confirmation message that the request is accepted, and the transmitter is further configured to transmit the contact information responsive to receiving the confirmation message.

Another example embodiment may include a non-transitory computer readable storage medium configured to perform at least one of store instructions that when executed causes a processor to perform transmitting a call from a calling party to a user device and establishing a call channel, transmitting a request to the user device to accept contact information associated with the calling party via a data channel separate from the call channel, receiving confirmation via a confirmation message that the request is accepted, and transmitting the contact information responsive to receiving the confirmation message.

Still another example embodiment includes a method configured to perform at least one of transmitting an initiation message from a service provider to a user device to initiate a communication session, transmitting a request message to the user device to accept contact information associated with the service provider, receiving a confirmation message responsive to the request message, transmitting the contact information responsive to receiving confirmation of the request, and automatically initiating a contact information update on the user device.

Still yet another example embodiment includes an apparatus with at least one of a transmitter configured to transmit an initiation message from a service provider to a user device to initiate a communication session, and transmit a request message to the user device to accept contact information associated with the service provider, and a receiver configured to receive a confirmation message responsive to the request message, and the transmitter is further configured to transmit the contact information responsive to receiving confirmation of the request, and automatically initiate a contact information update on the user device.

Still yet another example embodiment includes a non-transitory computer readable storage medium configured to store instructions that when executed causes a processor to perform at least one of transmitting an initiation message from a service provider to a user device to initiate a communication session, transmitting a request message to the user device to accept contact information associated with the service provider, receiving a confirmation message responsive to the request message, transmitting the contact information responsive to receiving confirmation of the request, and automatically initiating a contact information update on the user device.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** illustrates an example communication network diagram according to example embodiments of the present application.

FIG. **2** illustrates an example logic flow diagram according to example embodiments.

FIG. **3**A illustrates an example user interface for managing the electronic card information according to example embodiments of the present application.

FIG. **3**B illustrates an example user interface for incorporating the electronic card information into the user interface according to example embodiments of the present application.

FIG. **4** illustrates an example logic diagram of the input and output data according to example embodiments of the present application.

FIG. **5**A illustrates an example system communication diagram of a voice call electronic card integration according to example embodiments of the present application.

FIG. **5**B illustrates an example system communication diagram of a messaging session electronic card integration according to example embodiments of the present application.

FIG. **6** illustrates an example electronic card processing system configuration according to example embodiments.

FIG. **7** illustrates an example network entity device configured to store instructions, software, and corresponding hardware for executing the same, according to example embodiments of the present application.

DETAILED DESCRIPTION OF THE APPLICATION

It will be readily understood that the components of the present application, as generally described and illustrated in the figures herein, may be arranged and designed in a wide variety of different configurations. Thus, the following detailed description of the embodiments of a method, apparatus, and system, as represented in the attached figures, is not intended to limit the scope of the application as claimed, but is merely representative of selected embodiments of the application.

The features, structures, or characteristics of the application described throughout this specification may be combined in any suitable manner in one or more embodiments. For example, the usage of the phrases "example embodiments", "some embodiments", or other similar language, throughout this specification refers to the fact that a particular feature, structure, or characteristic described in connection with the embodiment may be included in at least one embodiment of the present application. Thus, appearances of the phrases "example embodiments", "in some embodiments", "in other embodiments", or other similar language, throughout this specification do not necessarily all refer to the same group of embodiments, and the described features, structures, or characteristics may be combined in any suitable manner in one or more embodiments.

In addition, while the term "message" has been used in the description of embodiments of the present application, the application may be applied to many types of network data, such as, packet, frame, datagram, etc. For purposes of this application, the term "message" also includes packet, frame, datagram, and any equivalents thereof. Furthermore, while certain types of messages and signaling are depicted in exemplary embodiments of the application, the application is not limited to a certain type of message, and the application is not limited to a certain type of signaling.

FIG. **1** illustrates an example communication network **100** according to example embodiments. Referring to FIG. **1**, a user **102** of a mobile device or smartphone **104** may communicate with a communication base station controller and/or mobile switching controller **132** to receive a mobile communication signal as a voice signal and/or a data signal. A data network **130** may provide a communication network to receive and forward communication with one or more communication servers used to initiate communication with the mobile device **104**.

According to one example, the user device **104** may receive a call from a third party call server **112**, such as an automated call dialer on behalf of a live agent and/or an automated voice call from a service provider seeking to inform the user **102** of a change in service or other type of reminder (i.e. pay bill, new service, etc.). The user generally has no knowledge of the caller's number as the number is usually restricted, not available or is a toll free number that is not known or linked to an identification name or other form of identification. For example, a user's contact list may include a number of different contact tags for each user contact including a user name, photograph, email address, social network link (e.g., FACEBOOK), aliases, etc. However, the unexpected caller or first time caller may have no recognition by the contact library of the user's mobile device.

The caller could easily be identified via an electronic card that is presented to the user or selected by the user's mobile device. An example of an electronic card composition is provided below:

```
BEGIN:ELECTRONIC CARD
VERSION:4.0
N:Wayne;John;;;
FN:John Wayne
ORG:Old West Co.
TITLE:Cowboy
PHOTO;MEDIATYPE=image/gif:http://www.example-
  .com/dir_photos/my_photo.gif
TEL;TYPE=work,voice;VALUE=uri:tel:+1-111-555-
  1212
TEL;TYPE=home,voice;VALUE=uri:tel:+1-404-555-
  1212
ADR;TYPE=work;LABEL="123 Main street\nOld West,
  CA 90210\nUnited States of America"
:;;123 Main Street;Old West;CA;90210;United States of
  America
ADR;TYPE=home;LABEL="123 Main Street\nOld
  West, CA 90210\nUnited States of America"
:;; 123 Main Street;Old West;CA;90210;United States of
  America
EMAIL:johnwayne@example.com
REV: 20080424T195243Z
END:ELECTRONIC CARD.
```

A electronic card may provide any number of information segments used to provide convenience and identification of the caller. The electronic card may be part of the vCARD series of information types. Delivering electronic cards contemporaneously with a live call and/or short message service (SMS) communication may offer an increased level of optimization to a recipient of such information. An electronic card may be created for a branded product or application. This may include information segments, such as images, addresses, alternate phone contacts, email contacts, etc. among other information types. The electronic card could be hosted on a web "electronic card" server **114** in a static form and/or served up dynamically from a database-backed application.

Retrieving, forwarding and providing an electronic card in certain situations may create an optimized communication experience. In one example embodiment, a user may receive a call from a service provider call server **112** which includes voice data **124**. After a predetermined period of time (e.g., 15 seconds, 30 seconds, etc.), an electronic card organization procedure may ensue that includes any of retrieving an electronic card from memory, customizing the electronic card for delivery via the electronic card server **114** and providing a message **126** with an electronic card embedded inside that is customized for the user's mobile device. Customization may include all information included in the electronic card that the user may desire based on device attributes of the mobile device **104** and/or user preferences. Alternatively, the communication session may be a short message service session via a SMS server **116** which generates and transmits SMS messages **122** to and from the user device. The electronic card would be delivered in a SMS message.

FIG. **2** illustrates an example logic flow diagram of an electronic card communication procedure conducting during a live call or messaging session. Referring to FIG. **2**, the procedure begins with retrieving a customer profile **210**,

such as a user name, number, email address, preferences, history, etc. The customer number **212** may be used to initiate a communication session with the mobile device. The next determination that can be performed is to determine whether the user device is a mobile device **214** or other type of communication device (i.e., landline). If the device is a mobile device, a notification may be prepared as a message **216** and electronic card may be retrieved and/or customized **218** to a user's needs and requests. A user prompt may be generated **220** to inform the user to access, download, etc., the electronic card contents. The message **222** may be sent to the user's device as a SMS message with a link or other data access format to retrieve the electronic card contents. The user may respond with certain preferences or requests via a SMS message response and if so then the user may be provided with a customized electronic card **228** or alternatively a generic electronic card **226** with basic name and/or email information.

FIG. **3**A illustrates a user interface on a user device according to example embodiments. Referring to FIG. **3**A, the user device and data interface **300** includes a user device **302** with a display interface including a current number **304** and message interface **306**. The electronic card data **310** may include a plurality of different data tags including a logo **316**, a telephone number **314**, company hours **312**, an email address **318**, social networking identifiers **320**, etc. In operation, the dialogue of an active user call may include a voice channel being established between the user device and the calling entity. The number of the caller may appear **304** along with dialogue of the voice from the call and/or separate SMS messages **306** received and exchanged during the call. The service provider may ask questions regarding address book information to confirm that the user is trying to receive such information prior to sending the information to the user device.

FIG. **3**B illustrates an example of the user device receiving and incorporating such information from the electronic card. For example, the user device may have accessed the electronic card via the link or another data access option and incorporated the electronic card tags including the company logo **332**, the various contact information **330**, etc. The information may be populated on a contact page once the electronic card is accessed. Alternatively, the information may be automatically populated after a predetermined period of time has elapsed or after a set of user preferences are identified which correlate to the information in the electronic card.

FIG. **4** illustrates a logic configuration of data processing for a communication session. Referring to FIG. **4**, the input and output data of the logic configuration **400** provides a basis for setting up and executing a communication session with information logging (i.e., contact list updates). In an initial processing operation, the call or message **410** may be transmitted to an end user device. As a result, the control logic **420** may begin to create an electronic card request **422** and identifying the end user device attributes **428** and its corresponding user preferences **426** from a set of user data **429**. The control logic **420** may then customize an electronic card via images **412** associated with the caller, names **414**, emails **416**, social networking identifiers **418** and/or other data linked to the company **419**. The electronic card can have a generic template of all the data tags or may add the tags to the generic template to create a customized electronic card for the recipient.

FIG. **5**A illustrates an example communication session **500** of a user device **520** and a call server **530** according to example embodiments. Referring to FIG. **5**A, during interaction with an interactive voice response (IVR) application on a live call either outbound or inbound, the call server **530** would determine whether or not a user device a mobile phone or not to determine if we a text message can even be sent to the device. There are databases that provide assistance with this decision procedure or other third party information sources. A call may be initiated **522** from the call server **530** to the user device **520** and a call receipt **524** may be transmitted to notify the server that the call was successful. On inbound calls, indicators from the network may offer information as to the device type, such as a hardware address, mobile switching center identifiers, home location resource (HLR) database information, etc. Also, a user prompt notification may be generated and sent to the mobile device to confirm the device type **526** in the event of a failed attempt. If the user responds, a SMS text message could be sent, such as "Add us to your address book by visiting http://url.com/myco.vcf". The URL may be a static URL, or a shortened URL. When the user visits the link with the electronic card, the electronic card is delivered to their device using a standard HTTP/HTTPS protocol. The device will then initiate a prompt to the user through to add that contact record to their address book on their phone or may do so automatically.

The electronic card request **528** may be sent and a confirmation **532** may be received prior to transmitting any electronic card to the user device **520**. The call server **530** may then request the electronic card **534** from an electronic card server or database **550** which may then retrieve known electronic card data and customize the electronic card for the mobile device **536** based on user preferences, device attributes or a combination of both attributes. The electronic card could then be created **538** and transmitted to the user device **520** based on the capabilities of the device and/or user preferences to have all or some of the information included in the contact list and corresponding data-tag repository. The link for the electronic card may be forwarded **542** to the call server which creates the notification message **544** with the electronic card information included. The notification can then be forwarded **546** to the user device **520** which can then access the notification **548** and incorporate the electronic card data automatically **552**.

A more specific example method of operation may include transmitting a call from a calling party to a user device and establishing a call channel and transmitting a request to the user device to accept contact information associated with the calling party via a data channel separate from the call channel. The data channel may be an alternative communication medium, such as a data cellular channel as opposed to a voice cellular channel. Then, once a confirmation message is received that the request is accepted, the contact information can be identified, formatted and forwarded automatically.

The example method may also include identifying a device type associated with the user device, and creating an electronic card based on the identified device type. The contact list information may include an electronic card with a plurality of information tags associated with the calling party, such as a calling party telephone number, a calling party name, a calling party image logo, a calling party social networking identifier. The process may also include waiting a predetermined amount of time prior to transmitting the electronic card request to the user device, and automatically applying a user preference to the electronic card creation procedure. The user preference indicates which of a plurality of information tags associated with the calling party to include in the electronic card. If no preference is identified,

a default set of tags or attributes will be applied to the electronic card creation and sharing procedure. One approach to sharing the e-card information may include creating a uniform resource locator (URL) to a location of user information or a formatted card format and inserting the electronic card information in memory at a location specified by the URL, and transmitting the URL to the user device in a SMS message.

In an alternative embodiment, the e-card information may be automatically identified and retrieved from a social networking profile account that is accessible via an API of the social network service. For example, responsive to a call or message received, if the call or message is a first time caller or contact, the application may seek to create an e-card by identifying the user's social networking profile and retrieving one or more of a user image, user interests, user skills, user location, user groups, user affiliations, etc. and incorporate them into the e-card creation service. The e-card may be previewed by the user prior to being forwarded to the recipient. Also, the e-card creation service may seek to only share professional information so as not to share personal information about the user with the first time caller or recipient.

FIG. **5**B illustrates an example communication session **570** of a user device **520** and a message server **560** according to example embodiments. Referring to FIG. **5**B, when interacting with a SMS text messaging application either by receiving an outbound notification, or interacting with a two-way SMS application that may be user initiated, SMS 'shortcodes' may be utilized, such as 4 or 5 digit numbers, or standard 10-digit phone numbers. These numbers are not descriptive, and are normally not recognizable by users. As a result, delivering a contact card/entry to a user's mobile phone using text messaging is possible.

In FIG. **5**B, the message server **560** may initiate a message **562** to the user device **520**. The response **564** may be sent to confirm receipt and/or to make a selection (i.e., pay bill, order service, etc.). The message server **560** may then elect a electronic card option **566** and request a confirmation from the user device **568** prior to transferring an electronic card. Upon receiving an electronic card confirmation **572**, the message server **560** may request an electronic card **574** from the electronic card server **550**. Once a user accepts the electronic card, the message server **560** may request the electronic card **574** form the electronic card server. The electronic card may be customized **576** and a link may be created **578** to access the electronic card location. The link can be forwarded **580** and the notification **582** may be created and sent **548** to the user device **520**. Once the access notification **586** is received and the information is retrieved **588**, a new contact entry would be added to the user's phone calendar so subsequent messaging to/from that application would be appropriately branded with text and possibly pictures and there would be no confusion who is on the other side of the shortcode/longcode. As an electronic card is created for the brand/application it may include images, addresses, alternate phone contacts, email contact points, etc., or any useful information.

In one specific example method of operation, an initiation message may be transmitted from a service provider to a user device to initiate a communication session, and a request message may be transmitted to the user device to accept contact information associated with the service provider. The contact information may be transmitted responsive to receiving confirmation of the request, and then a contact information update on the user device may be performed automatically. Next, a device type associated with the user device may be determined, and then an electronic card can be created based on the identified device type. A predetermined amount of time may be waited prior to transmitting the request message to the user device, and a user preference can be automatically applied to an electronic card creation procedure responsive to receiving the confirmation message. For example, the user may have a preference to only share interests or professional information. The user's preference can be used to only retrieve work related experiences from work related social networking profiles (e.g., LINKEDIN v. FACEBOOK), which ensures the information will be professional and not personal. The user preference indicates which of a plurality of information tags associated with the service provider to include in the electronic card. A uniform resource locator (URL) can then be created and inserted in the URL, and the URL can be transmitted to the user device in a SMS message.

During interaction with the SMS application, a message notification may include a message "Add us to your address book by visiting http://url.com/myco.vcf", which would be given to the user. The URL may be a static URL or a shortened URL. It is important to note this URL example in the disclosure is for example purposes only and is in no way related to the content of this disclosure. When the user accesses link on their smartphone, the electronic card is delivered to their user device using a standard HTTP/HTTPS protocol. The phone will then take a user through a step or two to add that contact record to their address book on their phone. Also, a record of who we offered to download the electronic card may be kept so the messages are only sent and re-sent a set number of times so not to over-message a single account.

FIG. **6** is an electronic card message processing system **600** which may be a single device, multiple devices or a set of software and/or hardware modules configured to communicate with one another for the purpose of processing incoming messages, generating new messages and communicating with the user device to establish a contact list of information. The message reception module **610** may receive a confirmation or acceptance from the user device and retrieve user preferences from the messaging information memory **640** so a new message may be created via the processing module **620** and forwarded via the forwarding module **630** to the user device.

The operations of a method or algorithm described in connection with the embodiments disclosed herein may be embodied directly in hardware, in a computer program executed by a processor, or in a combination of the two. A computer program may be embodied on a computer readable medium, such as a storage medium. For example, a computer program may reside in random access memory ("RAM"), flash memory, read-only memory ("ROM"), erasable programmable read-only memory ("EPROM"), electrically erasable programmable read-only memory ("EEPROM"), registers, hard disk, a removable disk, a compact disk read-only memory ("CD-ROM"), or any other form of storage medium known in the art.

An exemplary storage medium may be coupled to the processor such that the processor may read information from, and write information to, the storage medium. In the alternative, the storage medium may be integral to the processor. The processor and the storage medium may reside in an application specific integrated circuit ("ASIC"). In the alternative, the processor and the storage medium may reside as discrete components. For example FIG. **7** illus-

trates an example network element **700**, which may represent any of the above-described network components of the other figures.

As illustrated in FIG. **7**, a memory **710** and a processor **720** may be discrete components of the network entity **700** that are used to execute an application or set of operations. The application may be coded in software in a computer language understood by the processor **720**, and stored in a computer readable medium, such as, the memory **710**. The computer readable medium may be a non-transitory computer readable medium that includes tangible hardware components in addition to software stored in memory. Furthermore, a software module **730** may be another discrete entity that is part of the network entity **700**, and which contains software instructions that may be executed by the processor **720**. In addition to the above noted components of the network entity **700**, the network entity **700** may also have a transmitter and receiver pair configured to receive and transmit communication signals (not shown).

Although an exemplary embodiment of the system, method, and computer readable medium of the present invention has been illustrated in the accompanied drawings and described in the foregoing detailed description, it will be understood that the invention is not limited to the embodiments disclosed, but is capable of numerous rearrangements, modifications, and substitutions without departing from the spirit or scope of the invention as set forth and defined by the following claims. For example, the capabilities of the system of FIG. **8** can be performed by one or more of the modules or components described herein or in a distributed architecture and may include a transmitter, receiver or pair of both. For example, all or part of the functionality performed by the individual modules, may be performed by one or more of these modules. Further, the functionality described herein may be performed at various times and in relation to various events, internal or external to the modules or components. Also, the information sent between various modules can be sent between the modules via at least one of: a data network, the Internet, a voice network, an Internet Protocol network, a wireless device, a wired device and/or via plurality of protocols. Also, the messages sent or received by any of the modules may be sent or received directly and/or via one or more of the other modules.

One skilled in the art will appreciate that a "system" could be embodied as a personal computer, a server, a console, a personal digital assistant (PDA), a cell phone, a tablet computing device, a smartphone or any other suitable computing device, or combination of devices. Presenting the above-described functions as being performed by a "system" is not intended to limit the scope of the present invention in any way, but is intended to provide one example of many embodiments of the present invention. Indeed, methods, systems and apparatuses disclosed herein may be implemented in localized and distributed forms consistent with computing technology.

It should be noted that some of the system features described in this specification have been presented as modules, in order to more particularly emphasize their implementation independence. For example, a module may be implemented as a hardware circuit comprising custom very large scale integration (VLSI) circuits or gate arrays, off-the-shelf semiconductors such as logic chips, transistors, or other discrete components. A module may also be implemented in programmable hardware devices such as field programmable gate arrays, programmable array logic, programmable logic devices, graphics processing units, or the like.

A module may also be at least partially implemented in software for execution by various types of processors. An identified unit of executable code may, for instance, comprise one or more physical or logical blocks of computer instructions that may, for instance, be organized as an object, procedure, or function. Nevertheless, the executables of an identified module need not be physically located together, but may comprise disparate instructions stored in different locations which, when joined logically together, comprise the module and achieve the stated purpose for the module. Further, modules may be stored on a computer-readable medium, which may be, for instance, a hard disk drive, flash device, random access memory (RAM), tape, or any other such medium used to store data.

Indeed, a module of executable code could be a single instruction, or many instructions, and may even be distributed over several different code segments, among different programs, and across several memory devices. Similarly, operational data may be identified and illustrated herein within modules, and may be embodied in any suitable form and organized within any suitable type of data structure. The operational data may be collected as a single data set, or may be distributed over different locations including over different storage devices, and may exist, at least partially, merely as electronic signals on a system or network.

It will be readily understood that the components of the invention, as generally described and illustrated in the figures herein, may be arranged and designed in a wide variety of different configurations. Thus, the detailed description of the embodiments is not intended to limit the scope of the invention as claimed, but is merely representative of selected embodiments of the invention.

One having ordinary skill in the art will readily understand that the invention as discussed above may be practiced with steps in a different order, and/or with hardware elements in configurations that are different than those which are disclosed. Therefore, although the invention has been described based upon these preferred embodiments, it would be apparent to those of skill in the art that certain modifications, variations, and alternative constructions would be apparent, while remaining within the spirit and scope of the invention. In order to determine the metes and bounds of the invention, therefore, reference should be made to the appended claims.

While preferred embodiments of the present application have been described, it is to be understood that the embodiments described are illustrative only and the scope of the application is to be defined solely by the appended claims when considered with a full range of equivalents and modifications (e.g., protocols, hardware devices, software platforms etc.) thereto.

What is claimed is:

1. A method, comprising:

a transmitter transmitting an initiation message from a service provider device to a user device to initiate a communication session between the service provider device and the user device, wherein the service provider device is an unknown device to the user device;

the transmitter transmitting a request message from the service provider device to the user device to accept contact information associated with the service provider;

a receiver receiving a confirmation message from the user device responsive to the request message; and

a processor, responsive to receiving the confirmation message, performing;

creating a uniform resource locator (URL);

inserting electronic card information of the service provider in a memory at a location specified by the URL; and

causing the transmitter to transmit the URL to the user device in a SMS message.

2. The method of claim **1**, further comprising the processor:

identifying a device type associated with the user device; and

creating an electronic card representing the service provider based on the identified device type.

3. The method of claim **1**, wherein the contact information comprises an electronic card with a plurality of information tags associated with the service provider.

4. The method of claim **3**, wherein the plurality of information tags comprise at least two of a service provider telephone number, a service provider name, a service provider image logo, and a service provider social networking identifier.

5. The method of claim **1**, further comprising the processor:

waiting a predetermined amount of time prior to the transmitting the request message to the user device; and

automatically applying a user preference to an electronic card creation procedure responsive to the receiving the confirmation message.

6. The method of claim **5**, wherein the user preference indicates which of a plurality of information tags associated with the service provider to include in the electronic card.

7. The method of claim **1**, wherein the transmitting the contact information of the service provider from the service provider device to the user device automatically initiates a contact information update directly from the service provider device to the user device.

8. An apparatus, comprising:

a transmitter configured to transmit an initiation message from a service provider device to a user device to initiate a communication session between the service provider device and the user device, wherein the service provider device is an unknown device to the user device, and transmit a request message to the user device to accept contact information associated with the service provider;

a receiver configured to receive a confirmation message from the user device responsive to the request message,

wherein the transmitter is further configured to transmit the contact information of the service provider from the service provider device to the user device responsive to receiving the confirmation message; and

a processor configured to:

create a uniform resource locator (URL),

insert electronic card information of the service provider in memory at a location specified by the URL, and

cause the transmitter to push the URL to the user device in a SMS message.

9. The apparatus of claim **8**, wherein the processor is configured to identify a device type associated with the user device and create an electronic card of the service provider based on the identified device type.

10. The apparatus of claim **8**, wherein the contact information comprises an electronic card with a plurality of information tags associated with the service provider.

11. The apparatus of claim **10**, wherein the plurality of information tags comprise at least two of a service provider telephone number, a service provider name, a service provider image logo, and a service provider social networking identifier.

12. The apparatus of claim **8**, wherein the processor is configured to cause the transmitter to wait a predetermined amount of time prior to transmitting the request message to the user device and automatically apply a user preference to an electronic card creation procedure responsive to receiving the confirmation message.

13. The apparatus of claim **12**, wherein the user preference indicates which of a plurality of information tags associated with the service provider to include in the electronic card.

14. The apparatus of claim **8**, wherein the contact information of the service provider transmitted from the service provider device to the user device automatically initiates a contact information update directly from the service provider device to the user device.

15. A non-transitory computer readable storage medium configured to store instructions that when executed by a processor to cause:

a transmitter to transmit an initiation message from a service provider device to a user device to initiate a communication session between the service provider device and the user device, wherein the service provider device is an unknown device to the user device;

the transmitter to transmit a request message from the service provider device to the user device to accept contact information associated with the service provider;

a receiver to receive a confirmation message from the user device responsive to the request message; and

the processor, responsive to receiving the confirmation message, performing;

creating a uniform resource locator (URL);

inserting electronic card information of the service provider in memory at a location specified by the URL; and

causing the transmitter to transmit the URL to the user device in a SMS message.

16. The non-transitory computer readable storage medium of claim **15**, wherein the processor is further configured to perform:

identifying a device type associated with the user device; and

creating an electronic card of the service provider based on the identified device type.

17. The non-transitory computer readable storage medium of claim **15**, wherein the contact information comprises an electronic card with a plurality of information tags associated with the service provider.

18. The non-transitory computer readable storage medium of claim **17**, wherein the plurality of information tags comprise at least two of a service provider telephone number, a service provider name, a service provider image logo, and a service provider social networking identifier.

19. The non-transitory computer readable storage medium of claim **15**, wherein the processor is further configured to perform:

waiting a predetermined amount of time prior to transmitting the request message to the user device; and

automatically applying a user preference to an electronic card creation procedure responsive to receiving the confirmation message.

20. The non-transitory computer readable storage medium of claim **19**, wherein the user preference indicates which of a plurality of information tags associated with the service provider to include in the electronic card.

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