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(54) CALL COMPLETION

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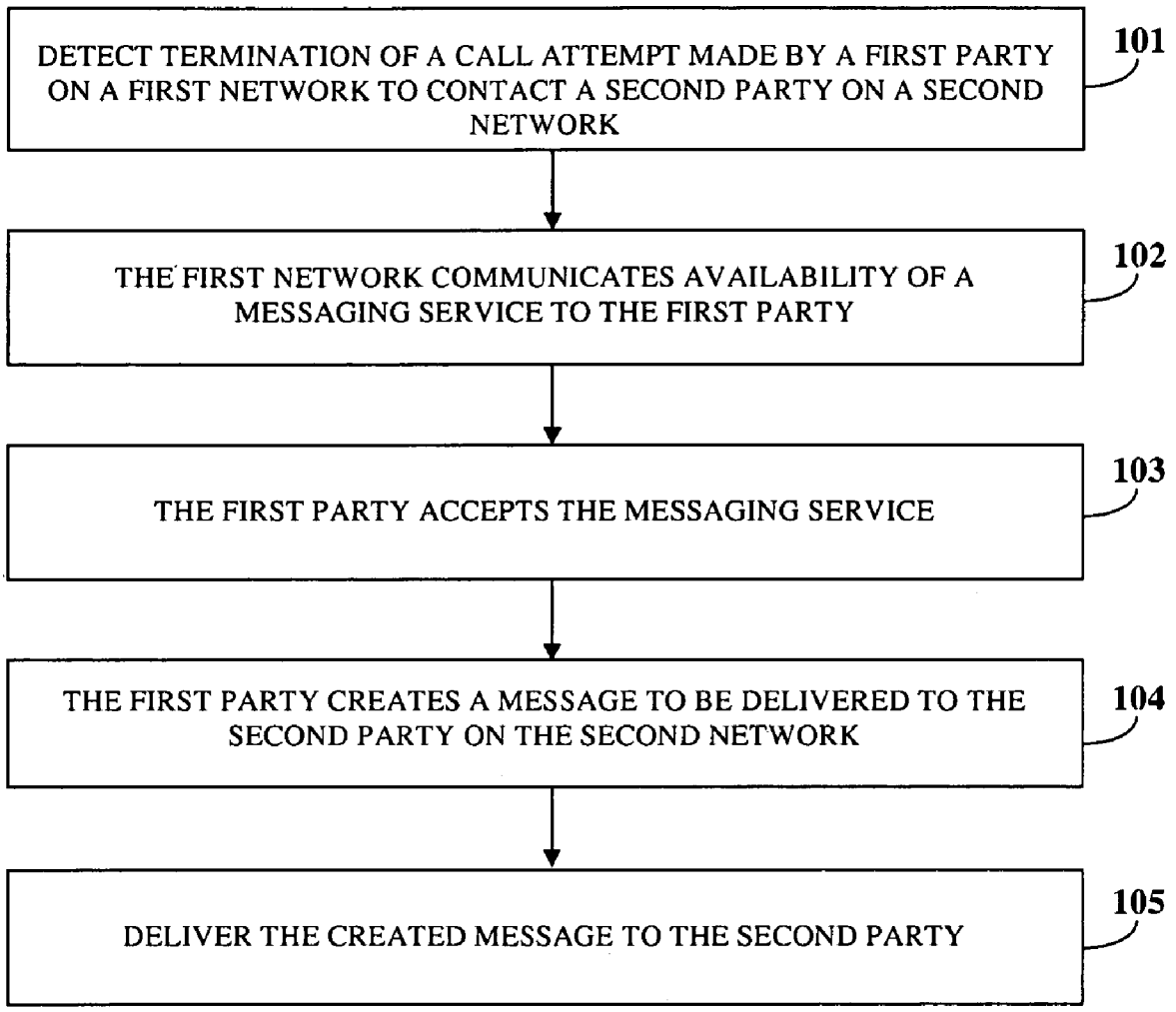
(57) **ABSTRACT**

Disclosed herein is a method and system for completing a call attempt made by a first party on a first network to a second party on a second network. The second network may be the first network or one of multiple networks excluding the first network. The first network detects termination of the call attempt. The first network communicates availability of a messaging service to the first party. The messaging service may be a short messaging service (SMS), a voice SMS, a multimedia messaging service, and a multimodal messaging service. The first network does not bill the first party for the communication of the availability of the messaging service. On acceptance of the messaging service by the first party, the first party creates a message to be delivered to the second party on the second network. The first network delivers the message to the second party on the second network.



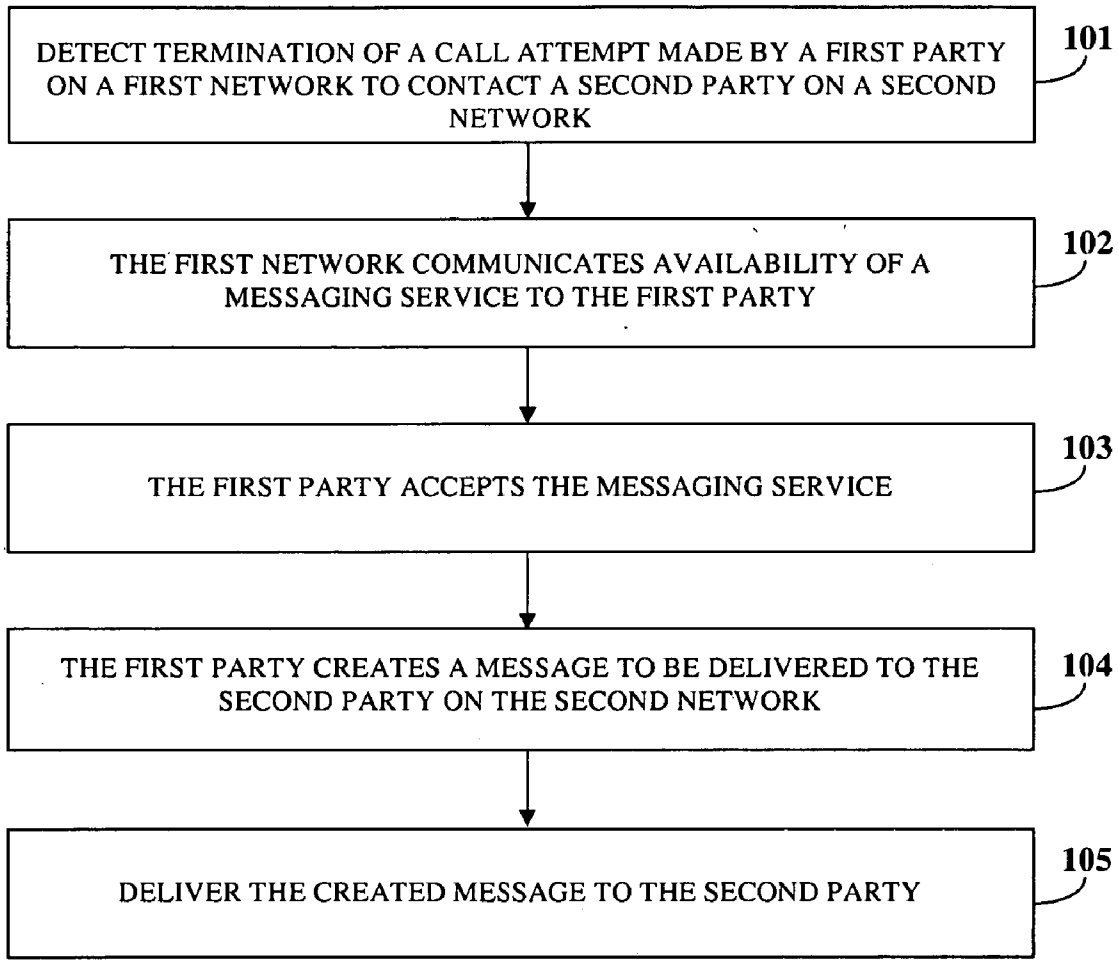

DETECT TERMINATION OF A CALL ATTEMPT MADE BY A FIRST PARTY ON A FIRST NETWORK TO CONTACT A SECOND PARTY ON A SECOND NETWORK
101
THE FIRST NETWORK COMMUNICATES AVAILABILITY OF A MESSAGING SERVICE TO THE FIRST PARTY
102
THE FIRST PARTY ACCEPTS THE MESSAGING SERVICE
103
THE FIRST PARTY CREATES A MESSAGE TO BE DELIVERED TO THE SECOND PARTY ON THE SECOND NETWORK
104
DELIVER THE CREATED MESSAGE TO THE SECOND PARTY
105

FIG. 1

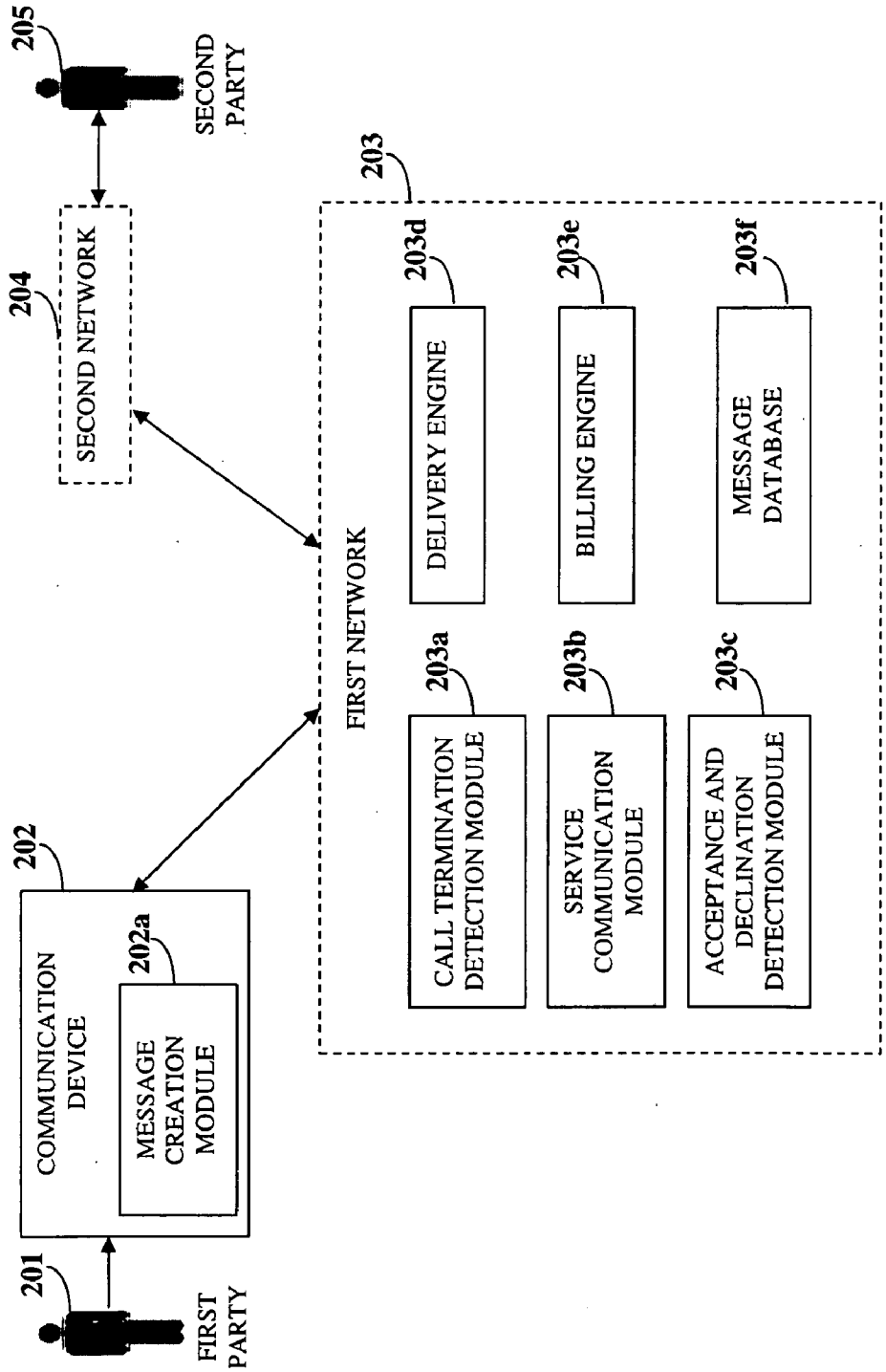

205
SECOND PARTY
204
SECOND NETWORK
203
FIRST NETWORK
203d
DELIVERY ENGINE
203e
BILLING ENGINE
203f
MESSAGE DATABASE
203a
CALL TERMINATION DETECTION MODULE
203b
SERVICE COMMUNICATION MODULE
203c
ACCEPTANCE AND DECLINATION DETECTION MODULE
202
COMMUNICATION DEVICE
202a
MESSAGE CREATION MODULE
201
FIRST PARTY

FIG. 2

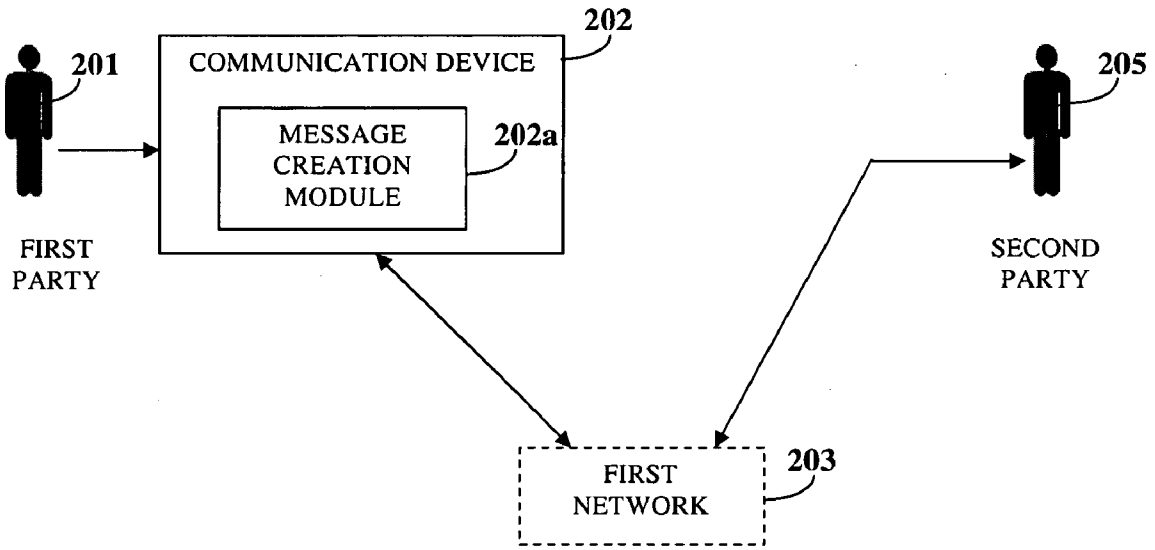

202
201
COMMUNICATION DEVICE
205
MESSAGE
CREATION
MODULE
202a
FIRST
PARTY
SECOND
PARTY
FIRST
NETWORK
203

FIG. 3

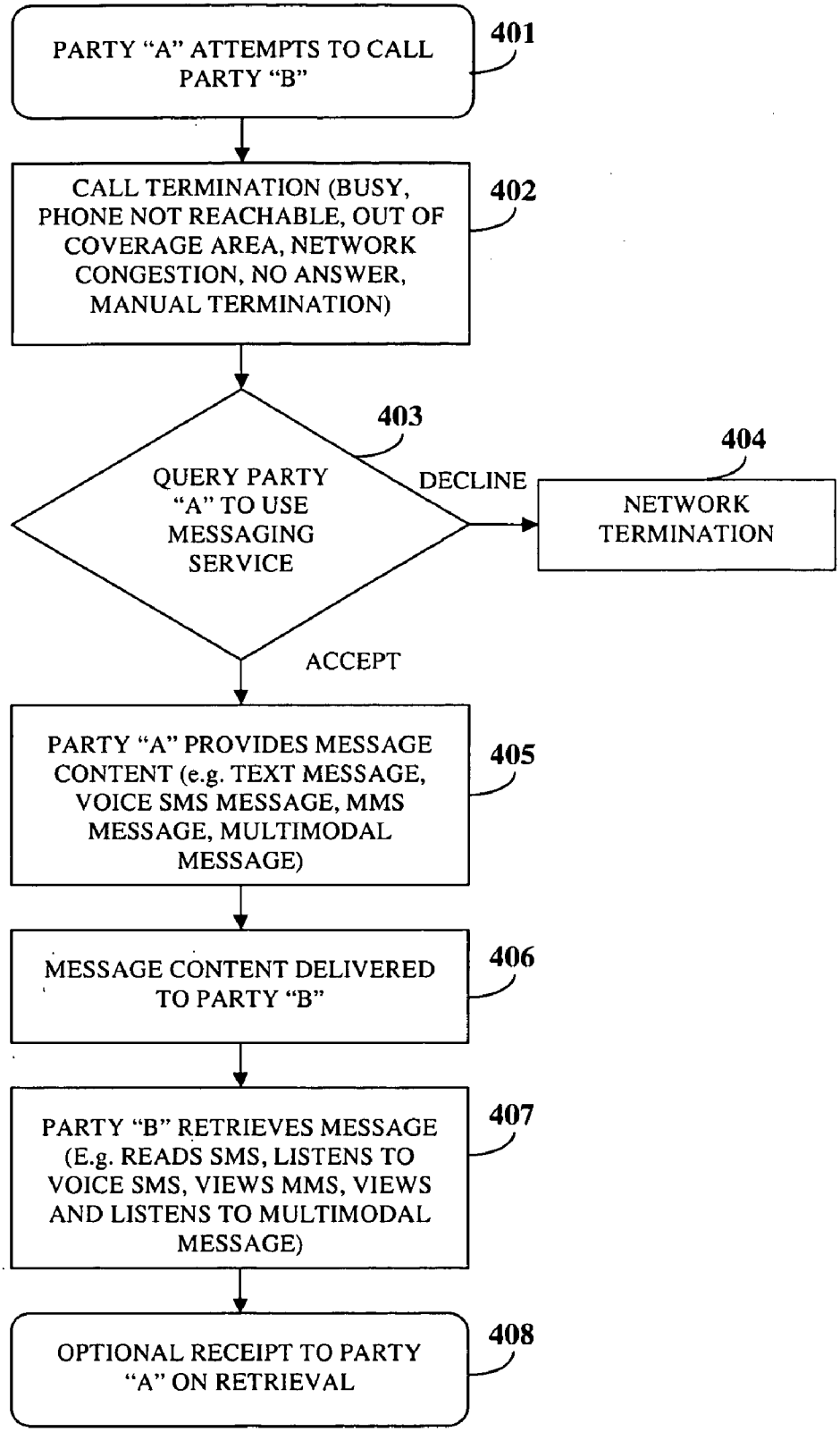

PARTY "A" ATTEMPTS TO CALL PARTY "B"
401
CALL TERMINATION (BUSY, PHONE NOT REACHABLE, OUT OF COVERAGE AREA, NETWORK CONGESTION, NO ANSWER, MANUAL TERMINATION)
402
QUERY PARTY "A" TO USE MESSAGING SERVICE
403
DECLINE
404
NETWORK TERMINATION
ACCEPT
PARTY "A" PROVIDES MESSAGE CONTENT (e.g. TEXT MESSAGE, VOICE SMS MESSAGE, MMS MESSAGE, MULTIMODAL MESSAGE)
405
MESSAGE CONTENT DELIVERED TO PARTY "B"
406
PARTY "B" RETRIEVES MESSAGE (E.g. READS SMS, LISTENS TO VOICE SMS, VIEWS MMS, VIEWS AND LISTENS TO MULTIMODAL MESSAGE)
407
OPTIONAL RECEIPT TO PARTY "A" ON RETRIEVAL
408

FIG. 4

CALL COMPLETION

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] The following patents are incorporated herein in their entirety:

[0002] 1. This application claims the benefit of provisional patent application No. U.S. 61/005,268 titled "Call Completion", filed on Dec. 4, 2007 in the United States Patent and Trademark Office.

[0003] 2. Non-provisional patent application number U.S. Pat. No. 10/589,325 titled "Methods for Identifying Messages and Communicating with Users of a Multimodal Message Service", filed on Aug. 14, 2006 in the United States Patent and Trademark Office.

[0004] 3. Patent application U.S. Pat. No. 7,184,786 titled "Techniques for combining voice with wireless text short message services" assigned to Kirusa, Inc. NJ, USA.

BACKGROUND

[0005] This invention, in general, relates to messaging services. More particularly, this invention relates to completing a call attempt made by a first party on a first network to a second party on a second network.

[0006] When a caller attempts to call a recipient on a network, multiple conditions may cause the call attempt to be terminated. For example, the call may be terminated due to a busy signal, an unanswered signal, an unreachable signal, manual termination by the caller, etc. The caller may thereafter wish to send a message to the recipient to complete the call attempt. There is a need for a messaging service to enable the caller to create and deliver messages including short messaging service (SMS) messages, voice SMS messages, multimedia messaging service (MMS) messages, and multimodal messages without making another call, or re-initiating the call to the recipient. Moreover, there is a need for a messaging service that enables the recipient to retrieve the message sent by the caller without difficulty.

[0007] The caller may manually terminate the call attempt on encountering the busy signal, the unanswered signal, the unreachable signal, etc. Even if a network provides some call attempt completion services, communicating availability of the call attempt completion services to the caller before the manual termination may not be possible. There is a need for communicating availability of call attempt completion services before and after manual termination of the call attempt by the caller.

[0008] Hence, there is an unmet need for completing a call attempt made by a first party on a first network to a second party on a second network by providing a messaging service, where availability of the messaging service for sending a message to the second party is communicated to the first party before or after manual termination of the call attempt by the first party.

SUMMARY OF THE INVENTION

[0009] This summary is provided to introduce a selection of concepts in a simplified form that are further described in the detailed description of the invention. This summary is not intended to identify key or essential inventive concepts of the claimed subject matter, nor is it intended for determining the scope of the claimed subject matter.

[0010] The method and system disclosed herein addresses the need for completing a call attempt made by a first party on a first network to a second party on a second network by providing a messaging service, where availability of messaging service for sending a message to the second party is communicated to the first party before or after manual termination of the call attempt. The second network may be the same as the first network, or one of any other networks excluding the first network. The first network detects termination of the call attempt made by the first party on the first network to contact the second party on the second network. The call attempt may, for example, be terminated due to occurrence of a busy signal, an out of coverage signal, an unreachable signal, congestion of one or more of the first network and the second network, an unanswered signal from the second party, or manual call termination by the first party.

[0011] The first network communicates availability of a messaging service to the first party on detection of termination of the call attempt. The messaging service may, for example, be a short messaging service (SMS), a voice SMS service, a multimedia messaging service, and a multimodal messaging service. The first network may communicate the availability of the messaging service to the first party via, for example, a voice call, an SMS message, or an alert based on unstructured supplementary service data. The first network may communicate the availability of the messaging service to the first party prior to manual call termination by the first party or after the manual call termination by the first party. The first network may communicate the availability of the messaging service to the first party after manual call termination by the first party via a voice call. The first party is not billed for the communication of the availability of the messaging service.

[0012] Acceptance and declination of the messaging service by the first party may, for example, be detected by an explicit dual tone multi frequency input, an implicit predefined timeout, or a subscription of the first party to the messaging service. On acceptance of the messaging service by the first party, the first party creates a message to be delivered to the second party on the second network. Creating the message by the first party may, for example, comprise recording one or more of a text SMS message, a voice SMS message, a multimedia messaging service message, and a multimodal message on a communication device of the first party.

[0013] The first network delivers the created message to the second party on the second network. The text SMS message, the voice SMS message, the multimedia service message, and the multimodal message are delivered to the second party in a text short messaging service message format, a voice SMS message format, a multimedia messaging service message format, and a multimodal message format respectively. The first party is billed for the delivery of the created message. On declination of the messaging service by the first party, the first network sends a missed call notification to the second party. The first network may send a missed call notification to the second party on declination of the messaging service by the first party.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The foregoing summary, as well as the following detailed description of the invention, is better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, exemplary construc-

tions of the invention are shown in the drawings. However, the invention is not limited to the specific methods and instrumentalities disclosed herein.

[0015] FIG. **1** illustrates a method of completing a call attempt made by a first party on a first network to a second party on a second network.

[0016] FIG. **2** illustrates a system for completing a call attempt made by a first party on a first network to a second party on a second network.

[0017] FIG. **3** exemplarily illustrates a system for completing a call attempt made by the first party to the second party within the first network.

[0018] FIG. **4** exemplarily illustrates a flowchart of the steps for completing a call attempt made by the first party to the second party within the first network.

DETAILED DESCRIPTION OF THE INVENTION

[0019] FIG. **1** illustrates a method of completing a call attempt made by a first party **201** on a first network **203** to a second party **205** on a second network **204**. The first party **201**, the first network **203**, the second party **205**, and the second network **204** are illustrated in FIG. **2**. The second network **204** may be the first network **203**, or one of multiple networks excluding the first network **203**. The call may be initiated on a wireless telephony network or a wired telephony network. The first network **203** detects **101** termination of the call attempt. The call attempt may, for example, be terminated due to occurrence of a busy signal, an out of coverage signal, an unreachable signal, congestion of one or more of the first network **203** and the second network **204**, an unanswered signal from the second party **205**, and manual call termination by the first party **201**.

[0020] On detection of the termination of the call attempt, the first network **203** communicates **102** availability of a messaging service to the first party **201**. The messaging service may, for example, be a short messaging service (SMS), a voice SMS service, a multimedia messaging service, and a multimodal messaging service. As used herein, the term "multimodal messaging" refers to a mode of communication that seamlessly combines graphics, text, and audio output with speech, text, and touch input to provide an enhanced user interface.

[0021] The multimodal messaging service combines voice data and other modalities, for example, image, video, etc. with a text SMS message. The multimodal messaging service enables use of multiple modalities of communication based on requirements of the first party **201** and the usage environment. As used herein, modalities refer to any human mode of interaction on the input side of an application, for example, the first party's **201** voice, any visual mode, or combination of voice and any visual mode, etc., that allows the first party **201** to speak, hear, type, touch or see in that application, and one or more human interaction modes on the output side of the application such as the second party's **205** ability to hear, visually see, or simultaneously hear and visually see the output. Multimodal interactions thereby extend web or other application user interface to allow multiple modes of interaction, offering the first party **201**, for example, the choice of using their voice, or an input device such as a key pad, keyboard, mouse or stylus. For output, the second party **205** will, for example, be able to listen to spoken prompts and audio, to view information on graphical displays, and to simultaneously listen to and view an output.

[0022] Multimodal messaging enables users to send and receive voice messages associated directly with text SMS messages. To send a multimodal message, the first party **201** composes a message to be sent using SMS technology using a text input device, for example, a keypad of a mobile phone. The composed text message is associated and combined with a voice message recorded by the first party **201**. The combined message is sent to the second party **205** via a multimodal messaging platform. The multimodal messaging platform synchronizes and processes input voice and text information and transfers the synchronized and processed information to a mobile phone of the second party **205**. The multimodal platform enables wireless carriers and service providers to offer applications with integrated voice and visual interfaces.

[0023] The second party **205** may then read the received text message and retrieve the associated voice message via a link provided in the received text message or in a separate text message by the multimodal platform. A speech recognition engine may be used for control of the playback and recording of voice messages as well as control of other messaging functions. Multimodal messaging may be implemented using wireless telephone devices capable of sending and receiving SMS text messages and may also be extended to different device types and network technologies.

[0024] The first network **203** may communicate the availability of the messaging service to the first party **201** by, for example, a voice call, an SMS message, or an alert based on unstructured supplementary service data (USSD). The first network **203** may communicate the availability of the messaging service to the first party **201** prior to manual call termination by the first party **201** or after the manual call termination by the first party **201**. For example, if the first party **201** attempts to call the second party **205** and encounters a busy signal, the availability of the messaging service may be communicated to the first party **201** before the first party **201** manually terminates the call by pressing an "END" key on the first party's **201** communication device **202**. However, if the first party **201** manually terminates the call by pressing the "END" key before the communication of the availability of the messaging service, the first network **203** may communicate the availability of the messaging service after the manual call termination by placing a voice call to the first party **201**. The first party **201** is not billed for the communication of the availability of the messaging service.

[0025] The first party **201** accepts **103** the messaging service. The first network **203** detects the acceptance or declination of the messaging service by the first party **201** by an explicit dual tone multi frequency (DTMF) input, for example, by the first party **201** pressing a "#" key on the communication device **202**, an implicit predefined timeout, for example, by the first party **201** waiting on the line for a predefined period of time, or a subscription of the first party **201** to the messaging service. If the first party **201** declines the messaging service, the first network **203** sends a missed call notification to the second party **205**. When the first party **201** accepts the messaging service, the first party **201** creates **104** a message to be sent to the second party **205** on the second network **204**. The first party **201** may create the message, for example, by typing a text SMS message, recording a voice SMS message, and by composing an MMS message or a multimodal message on the first party's **201** communication device **202**. The first network **203** then delivers **105** the created message to the second party **205** on the second network

204. The call attempt made by the first party **201** on the first network **203** to the second party **205** on the second network **204** is thereby completed.

[0026] The first network **203** delivers the created message by transmitting the created message to the second party **205** in a suitable format. The created text SMS message is delivered in a text SMS format. The recorded voice SMS message is delivered in a voice SMS message format. The recorded MMS message is delivered in an MMS message format. The recorded multimodal message is delivered in a multimodal message format. The first network **203** may bill the first party **201** for the delivery of the created message.

[0027] FIG. **2** illustrates a system for completing a call attempt made by a first party **201** on a first network **203** to a second party **205** on a second network **204**. The second network **204** may be the first network **203**, or one of multiple networks excluding the first network **203**. A system for completing a call attempt made by the first party **201** to the second party **205** within the first network **203** is exemplarily illustrated in FIG. **3**. The system disclosed herein comprises a call termination detection module **203***a*, a service communication module **203***b*, an acceptance and declination detection module **203***c*, a delivery engine **203***d*, a billing engine **203***e*, a message database **203***f*, and a message creation module **202***a*. The call termination detection module **203***a*, the service communication module **203***b*, the acceptance and declination detection module **203***c*, the delivery engine **203***d*, the billing engine **203***e*, and the message database **203***f* may be part of the first network **203**. The message creation module **202***a* may be provided on a communication device **202** of the first party **201**.

[0028] The call termination detection module **203***a* detects termination of a call attempt made by the first party **201** to contact the second party **205**. The call termination detection module **203***a* may, for example, detect the termination of the call attempt due to occurrence of a busy signal, an out of coverage signal, an unreachable signal, congestion of one or more of the first network **203** and the second network **204**, an unanswered signal from the second party **205**, and a manual call termination by the first party **201**. On detection of the termination of the call attempt, the service communication module **203***b* communicates availability of a messaging service to the first party **201**. The service communication module **203***b* may, for example, communicate availability of the messaging service by a voice call, a short message service message, or an alert based on unstructured supplementary service data. The messaging service may, for example, be one or more of a short messaging service (SMS), a voice short messaging service, a multimedia messaging service (MMS), and a multimodal messaging service. The service communication module **203***b* may communicate the availability of the messaging service prior to manual call termination by the first party **201** or after the manual call termination by the first party **201**.

[0029] The first party **201** may accept or decline use of the messaging service. The acceptance and declination detection module **203***c* may, for example, detect the acceptance or the declination of the messaging service by the first party **201** by an explicit dual tone multi frequency (DTMF) input, an implicit predefined timeout, or a subscription of the first party **201** to the messaging service. On acceptance of the messaging service, the first party **201** may create a message to be sent to the second party **205** on the second network **204** using the message creation module **202***a*. The message creation module **202***a* may, for example, enable the first party **201** to create a text SMS message, and record a voice SMS message, an MMS message, or a multimodal message on the communication device **202**.

[0030] The message database **203***f* may store the created message. The delivery engine **203***d* then delivers the created message to the second party **205** on the second network **204**. The delivery engine **203***d* delivers the created message by transmitting the created message to the second party **205** in a suitable format. The delivery engine **203***d* delivers the text SMS message in a text SMS format, the recorded voice SMS message in a voice SMS message format, the composed MMS message in an MMS message format, and the composed multimodal message in a multimodal message format. The delivery engine **203***d* may also deliver a missed call notification to the second party **205** if the first party **201** declines use of the messaging service.

[0031] The billing engine **203***e* bills the first party **201** for the delivery of the created message. The billing engine **203***e* determines the bill amount to be paid by the first party **201** for the delivery of the created message. The billing engine **203***e* does not bill the first party **201** for the communication of the availability of the messaging service. The message database **203***f* stores communication information of the messaging service, missed call notifications sent to the second party **205**, and billing information of the first party **201**.

[0032] FIG. **4** exemplarily illustrates a flowchart of the steps for completing a call attempt made by a first party **201** to a second party **205** within a first network **203**. Consider party "A" who attempts **401** to call party "B". Due to conditions such as occurrence of a busy signal, an out of coverage signal, an unreachable signal, congestion of the first network **203**, an unanswered signal from the party "B", or manual termination by the party "A", the call attempt may be terminated. The first network **203** detects the termination **402** of the call attempt. The first network **203** then queries **403** party "A" to use the messaging service. If party "A" declines the use of the messaging service, the first network **203** terminates **404** the call. If party "A" accepts the messaging service, party "A" provides **405** message content by typing a text SMS message, recording a voice SMS message, an MMS message, or a multimodal message on party "A"'s communication device **202**. The first network **203** then delivers **406** the message content created by party "A" to party "B". Party "B" then retrieves **407** the message content from the first network **203**. Party "B" may, for example, read the SMS, listen to the voice SMS, view the MMS, or view and listen to the multimodal message. On retrieval of the created message, party "A" may be notified of the receipt **408** by the party "B".

[0033] Consider an example of a first party **201** John attempting to call a second party **205** Jane using a mobile phone as a communication device **202**. John is a subscriber of a first network **203** Network**1** and Jane is a subscriber of a second network **204** Network**2**. Alternatively, both John and Jane may be subscribers of Network**1**. When John attempts to call Jane, Jane may be out of reach of Network**2** and the call may be terminated. Network**1** detects the termination of the call attempt by John and informs John about the availability of the messaging service. Network**1** may inform John about the availability of the messaging service before he manually terminates the call by pressing the "END" key on his mobile phone. If John manually terminates the call before Network**1** informs him about the availability of the messaging service, Network**1** may send John an SMS message or may contact John via a voice call to inform him about the availability of the

messaging service. John is not billed for the information about the availability of the messaging service.

[0034] Network**1** may provide John the option to send a message to Jane by pressing the "#" key on his mobile phone. If John does not want to send a message to Jane, Network**1** will send a missed call notification to Jane. Jane receives the missed call notification when she comes back into the reach of Network**2**. If John decides to send a message to Jane, he creates the message on his mobile phone. Network**1** delivers the created message to Jane and bills John for the delivery of the message.

[0035] It will be readily apparent that the various methods and algorithms described herein may be implemented in a computer readable medium appropriately programmed for general purpose computers and computing devices. Typically a processor, for e.g., one or more microprocessors will receive instructions from a memory or like device, and execute those instructions, thereby performing one or more processes defined by those instructions. Further, programs that implement such methods and algorithms may be stored and transmitted using a variety of media, for e.g., computer readable media in a number of manners. In one embodiment, hardwired circuitry or custom hardware may be used in place of, or in combination with, software instructions for implementation of the processes of various embodiments. Thus, embodiments are not limited to any specific combination of hardware and software. A "processor" means any one or more microprocessors, Central Processing Unit (CPU) devices, computing devices, microcontrollers, digital signal processors or like devices. The term "computer-readable medium" refers to any medium that participates in providing data, for example instructions that may be read by a computer, a processor or a like device. Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media include, for example, optical or magnetic disks and other persistent memory volatile media include Dynamic Random Access Memory (DRAM), which typically constitutes the main memory. Transmission media include coaxial cables, copper wire and fiber optics, including the wires that comprise a system bus coupled to the processor. Transmission media may include or convey acoustic waves, light waves and electromagnetic emissions, such as those generated during Radio Frequency (RF) and Infrared (IR) data communications. Common forms of computer-readable media include, for example, a floppy disk, a flexible disk, hard disk, magnetic tape, any other magnetic medium, a Compact Disc-Read Only Memory (CD-ROM), Digital Versatile Disc (DVD), any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, a Random Access Memory (RAM), a Programmable Read Only Memory (PROM), an Erasable Programmable Read Only Memory (EPROM), an Electrically Erasable Programmable Read Only Memory (EEPROM), a flash memory, any other memory chip or cartridge, a carrier wave as described hereinafter, or any other medium from which a computer can read. In general, the computer-readable programs may be implemented in any programming language. Some examples of languages that can be used include C, C++, C#, NET or JAVA. The software programs may be stored on or in one or more mediums as an object code. A computer program product comprising computer executable instructions embodied in a computer-readable medium comprises computer parsable codes for the implementation of the processes of various embodiments.

[0036] Where databases are described such as the message database **203***f*, it will be understood by one of ordinary skill in the art that (i) alternative database structures to those described may be readily employed, and (ii) other memory structures besides databases may be readily employed. Any illustrations or descriptions of any sample databases presented herein are illustrative arrangements for stored representations of information. Any number of other arrangements may be employed besides those suggested by, e.g., tables illustrated in drawings or elsewhere. Similarly, any illustrated entries of the databases represent exemplary information only; one of ordinary skill in the art will understand that the number and content of the entries can be different from those described herein. Further, despite any depiction of the databases as tables, other formats including relational databases, object-based models and/or distributed databases could be used to store and manipulate the data types described herein. Likewise, object methods or behaviors of a database can be used to implement various processes, such as the described herein. In addition, the databases may, in a known manner, be stored locally or remotely from a device that accesses data in such a database.

[0037] The present invention can be implemented using standard wireless telephone devices capable of sending and receiving text SMS messages, voice SMS messages, MMS messages, multimodal messages and may be extended to other device types, and network technologies. Further, the present invention is not limited to wireless phones but will also work with wired line phones with SMS and MMS capabilities and services over such wired line devices.

[0038] The present invention may be configured to work in a network environment including a computer that is in communication, via a communications network, with one or more devices. The computer may communicate with the devices directly or indirectly, via a wired or wireless medium such as the Internet, Local Area Network (LAN), Wide Area Network (WAN) or Ethernet, Token Ring, or via any appropriate communications means or combination of communications means. Each of the devices may comprise computers, such as those based on the Intel® processors, AMD® processors, UltraSPARC® processors, etc. that are adapted to communicate with the computer. Any number and type of machines may be in communication with the computer.

[0039] The foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present method and system disclosed herein. While the invention has been described with reference to various embodiments, it is understood that the words, which have been used herein, are words of description and illustration, rather than words of limitation. Further, although the invention has been described herein with reference to particular means, materials and embodiments, the invention is not intended to be limited to the particulars disclosed herein; rather, the invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended claims. Those skilled in the art, having the benefit of the teachings of this specification, may effect numerous modifications thereto and changes may be made without departing from the scope and spirit of the invention in its aspects.

We claim:

1. A method of completing a call attempt made by a first party to a second party, comprising the steps of:

detecting termination of said call attempt made by said first party on a first network to contact said second party on a second network, wherein said second network is one of said first network and one of a plurality of networks excluding the first network;

enabling the first party to contact the second party for completing the call attempt, comprising the steps of:

communicating availability of a messaging service to the first party by the first network;

accepting said messaging service by the first party;

creating a message by the first party to be delivered to the second party on the second network; and

delivering said created message to the second party on the second network;

whereby the call attempt made by the first party to the second party is completed.

2. The method of claim 1, wherein the messaging service is one or more of a short messaging service, a voice short messaging service, a multimedia messaging service, and a multimodal messaging service.

3. The method of claim 1, wherein the call attempt is terminated due to occurrence of one of a busy signal, an out of coverage signal, an unreachable signal, congestion of one or more of the first network and the second network, an unanswered signal from the second party, and manual call termination by the first party.

4. The method of claim 1, wherein said availability of the messaging service is communicated by one of a voice call, a short message service message, and an alert based on unstructured supplementary service data.

5. The method of claim 1, further comprising a step of sending a missed call notification to the second party on declination of the messaging service by the first party.

6. The method of claim 1, wherein said acceptance and declination of the messaging service by the first party are detected by one of an explicit dual tone multi frequency input, an implicit predefined timeout, and a subscription of the first party to the messaging service.

7. The method of claim 1, wherein to the first party is not billed for said communication of said availability of the messaging service.

8. The method of claim 1, further comprising a step of billing the first party for said delivery of the created message.

9. The method of claim 1, wherein said availability of the messaging service is communicated to the first party prior to manual call termination by the first party.

10. The method of claim 1, wherein said availability of the messaging service is communicated to the first party after manual call termination by the first party via a voice call.

11. The method of claim 1, wherein said step of creating the message by the first party comprises recording one or more of a text short messaging service message, a voice short messaging service message, a multimedia messaging service message, and a multimodal message on a communication device of the first party.

12. The method of claim 11, wherein said text short message service message, said voice short messaging service message, said multimedia service message, and said multimodal message are delivered to the second party in a text short messaging service message format, a voice short messaging service message format, a multimedia messaging service message format, and a multimodal message format respectively.

13. A system for completing a call attempt made by a first party to a second party, comprising:

a call termination detection module for detecting termination of said call attempt made by said first party on a first network to contact said second party on a second network, wherein said second network is one of said first network and one of a plurality of networks excluding the first network;

a service communication module for communicating availability of a messaging service to the first party by the first network;

a message creation module for enabling the first party to create a message to be delivered to the second party on the second network on acceptance of said messaging service; and

a delivery engine for delivering said created message to the second party on the second network.

14. The system of claim 13, wherein said call termination detection module detects termination of the call attempt due to occurrence of one of a busy signal, an out of coverage signal, an unreachable signal, congestion of one or more of the first network and the second network, an unanswered signal from the second party, and manual call termination by the first party.

15. The system of claim 13, further comprising an acceptance and declination detection module for detecting acceptance and declination of the messaging service by the first party by one of an explicit dual tone multi frequency input, an implicit predefined timeout, and a subscription of the first party to the messaging service.

16. The system of claim 13, wherein said message creation module enables the first party to create one or more of a text short messaging service message, a voice short messaging service message, a multimedia messaging service message, and a multimodal message on a communication device of the first party.

17. The system of claim 13, wherein said service communication module communicates said availability of the messaging service by one of a voice call, a short message service message, and an alert based on unstructured supplementary service data.

18. The system of claim 13, wherein said service communication module communicates said availability of the messaging service prior to manual call termination by the first party.

19. The system of claim 13, wherein said service communication module communicates said availability of the messaging service after manual call termination by the first party.

20. The system of claim 13, wherein said delivery engine delivers a missed call notification to the second party on declination of the messaging service by the first party.

21. The system of claim 13, further comprising a billing engine for billing the first party for said delivery of the created message.

22. The system of claim 21, wherein said billing engine does not bill the first party for the communication of the availability of the messaging service.

23. The system of claim **13**, further comprising a message database for storing messages created by the first party, communication information of the messaging service, missed call notifications sent to the second party, and information on billing the first party for said delivery of the created message.

24. A computer program product comprising computer executable instructions embodied in a computer readable medium, wherein said computer program product comprises:

a first computer parsable program code for detecting termination of a call attempt made by a first party on a first network to contact a second party on a second network;

a second computer parsable program code for communicating availability of a messaging service to said first party;

a third computer parsable program code for enabling the first party to create a message to be delivered to the second party on said second network; and

a fourth computer parsable program code for delivering said created message to the second party.

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