that determines whether an incoming text message is present. Typically, the incoming text message would be transmitted to the mobile communication device from another communication device. When the decision 602 determines that an incoming text message is not present, then the message presentation process 600 awaits such message. Once the decision 602 determines that an incoming text message has been received, a decision 604 determines whether an audio or text presentation is to be utilized. The decision 604 can be performed in a variety of different ways. For example, the determination of whether to utilize an audio or text presentation can be based on user input or can be automatically determined through a use of configuration or preference information or hardware components (e.g., display, speaker, head-set).

[00052] When the decision 604 determines that an audio presentation is to be utilized, the incoming text message is converted 606 to an audio message. For example, a text-to-speech conversion can be performed. In one embodiment, a user of the electronic device can be permitted to choose speech characteristics, such as a voice, tone, pace, accent, or mood, for the resulting speech. For example, a user could choose speech characteristics by preference settings. In another embodiment, the incoming text message can include or reference speech characteristics so that the initiator can control or influence speech characteristics. In still another embodiment, if the text to be converted contains condensed text (e.g., such as slang or chat language), the resulting speech can pertain to an uncondensed form of the text. The ability to convert from condensed text to resulting speech for uncondensed text can be facilitated by pattern matching. For example, in chat language "LOL" can be converted to an audio message for "lots of love." In one implementation, a table can store audio messages corresponding to chat terms or phrases. In another implementation, a first table would store uncompressed terms or phrases corresponding to chat terms or phrases, and a second table would store audio messages corresponding to the uncompressed terms or phrases.



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[00053] After the incoming text message is converted to the audio message, the audio message is played 608. Typically, the audio message is played 608 by the mobile communication device for the user. For example, the audio message can be output to a speaker of the mobile communication device or a headset used therewith. As a result, the user of the mobile wireless communication device receives an audio message even though the incoming message was a text message.

[00054] On the other hand, when the decision 604 determines that a text presentation is to be utilized, the incoming text message is displayed 610. Here, the incoming text message would be displayed 610 on a display associated with the mobile communication device. Following the blocks 608 and 610, the message presentation process 600 ends.

[00055] As discussed above, text-to-speech conversion can be invoked and performed on an electronic device, which may be a mobile communication device. In one embodiment, text-to-speech conversion can be off-loaded from the mobile device. For example, a remote server computer can be provided the text message and produce the resulting audio message, and then supply the audio message to the mobile device. The remote server computer can be a networked server coupled to a network to communicate with the mobile device. One example of a networked server is a gateway computer for a wireless electronic device, such as a mobile telephone.

[00056] FIG. 7 is a flow diagram of a reply message process 700 according to one embodiment of the invention. The reply message process 700 is performed by an electronic device, such as a mobile communication device.

[00057] The reply message process 700 begins with a decision 702 that determines whether a reply message is to be sent. Typically, the reply message process 700 follows the presentation of an incoming text message to a user of a mobile communication device. Hence, the reply message to be sent is a reply to the incoming text message. However, in other embodiments, the reply message



to be sent can be merely an initial message as opposed to a response to an earlier message.

[00058] In any case, when the decision 702 determines that a reply message is not to be sent, then the reply message process 700 ends or simply awaits the need to send a reply message. On the other hand, when the decision 702 determines that a reply message is to be sent, then a decision 704 determines whether an audio or text message is to be formed. The decision 704 can be performed in a variety of different ways. For example, the determination of whether to send an audio or text message can be based on user input or can be automatically determined through a use of configuration or preference information or hardware components (e.g., display, speaker, head-set).

[00059] When the decision 704 determines that an audio message is to be formed, then the reply message process 700 prompts 706 for an audio message. Here, the prompt 706 can be directed to the user of the mobile communication device. The prompt can be an audio or textual indication. Next, a decision 708 determines whether an audio message has been recorded. When the decision 708 determines that the audio message has not been recorded, then the reply message process 700 awaits the audio message. Once the decision 708 determines that the audio message has been recorded, then the audio message is converted 710 to a text message. In one embodiment, if the audio message recorded is greater than a maximum text message size (e.g., 150 or 160 characters), then the audio message can be shortened so that the resulting text message does not exceed the maximum text message size. One way to shorten the text message is to use abbreviations. For example, the words "For example" can be changed to "e.g.". Such conversion can be again be performed by matching entries in tables. Another way to shorten is to remove non-essential text. Still another way to shorten is to clip off or truncate the text message at the maximum text message size. In another embodiment, the resulting text message might provide an indication that it was converted from an audio message. Following the block 710, the text message is transmitted 712 over a wireless network.



[00060] Alternatively, when the decision 704 determines that a text message is to be formed, then a text entry screen is displayed 714. Next, a decision 716 determines whether a text message has been entered. When the decision 716 determines that a text message has not yet been entered, then the reply message process 700 awaits entry of the text message. Once the text message has been entered, the text message is transmitted 712 over the wireless network. Following the block 712, the reply message process 700 ends.

[00061] Although the reply message process 700 provides for the user to enter a custom text or audio message, it should be understood that the reply message can alternatively be formed through use of semi-custom or predetermined reply messages from which the user of the mobile communication device can choose. The use of semi-custom or predetermined reply messages can be achieved as noted in a number of embodiments in U.S. Patent Application 11/006,343 (incorporated by reference into this application), and can serve to simplify the conversion process.

[00062] An exemplary scenario of how message presentation and reply message processes could work according to one implementation of the second aspect is as follows:

[00063] 1. From his mobile phone, Bill prepares and sends a text message to Tom's mobile phone.

[00064] 2. Tom is alerted by his mobile phone of an incoming text message, such as by displaying at least a portion of the text message and/or otherwise notifying Tom of the text message.

[00065] 3. Tom's mobile phone can decide whether to present the text message on a display screen of Tom's mobile phone, or to first convert the text message to an audio message and then present the audio message to Tom (e.g., play the audio message). Of course, Tom can interact with Tom's mobile phone to assist in making the determination on how to present the message.



[00066] 4. Thereafter, if desired, Tom can prepare and send a reply message back to Bill. This reply message can be prepared initially as a text message or an audio message. Tom's mobile phone and/or Tom can determine whether the reply message is initially prepared as a text message or as an audio message. If an audio message is initially created, such audio message must be converted to a text message prior to transmission. Eventually, the reply message is sent to Bill as a text message. Tom's mobile phone can assist with the creation of the reply message through use of custom, semi-custom or predetermined reply message from which Tom and/or Tom's mobile phone can choose.

[00067] 5. If Tom is using a head-set with his mobile phone, then an audio message may be more convenient, assuming that Tom wants to provide a particular (i.e., customized) message to Bill. The head-set allows Tom to easily record a brief audio message. Less conveniently, the head-set can be used to present a list of predetermined audio messages and allow Tom's selection therefrom by a button or voice-command.

[00068] 6. If Tom is not using a head-set, then a text message response might be more suitable. This would typically require that Tom's mobile phone have a display and a keypad. Even so, without a head-set, Tom could still record an audio message, though such would likely be less convenient.

[00069] 7. Tom can also not provide a reply message and simply not respond to the incoming text message. Alternatively, Tom can configure his mobile phone to automatically produce and send a reply message based on user settings or preferences, position, configuration, status, etc.

[00070] In this aspect of the invention, the calling party and the called party often use mobile communication devices, such as mobile phones. However, the parties can alternatively use other electronic devices, such as a PDA, a computer, etc.

[00071] The advantages of the invention exemplified by FIGs. 6-7 are numerous. Different embodiments or implementations may yield different advantages. One advantage is that communications for users of electronic



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