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FIG. 5 illustrated the operating flow 500 of the relevant aspects of operating logic 300 in support of this first aspect of the present invention, in accordance with one embodiment. As illustrated, upon receipt of an user input, operating logic 300 determines if the input is a dialing request, block 502. If not, operating logic 300 determines if the input is an append indicator, block 504. If not, the entered digit is accumulated as part of a dialing prefix being formed, block 506.

Eventually, as earlier described, the user enters an append indicator. At such time, the result of the determination at block 504 is affirmative. If so, operating logic 300 notes the entry of the append indicator, block 508. Similarly, eventually the user enters a dial request. At such time, the result of the determination at block 502 is affirmative. If so, operating logic 300 further determines if the append indicator was previously entered, block 510. If so, operating logic 300 causes a call to be placed to a callee using the last dialed phone number, preceded by the entered dialing prefix, block 512, as described earlier for the first aspect of the method of the present invention. If not, operating logic 300 causes a call to be placed to a callee using the accumulated numbers without augmenting the accumulated numbers, block 514.

In alternate embodiments, operating logic 300 may additionally support an extended version of append, allowing append of any previously dialed number. The support may be implemented for example by supporting append indicators having different append meanings, e.g. "*" for appending the last dial, and "#" for appending any previously dialed number. For these embodiments, at block 404, an additional operation of facilitating the user in selecting a previously dialed number as the dial number to append will be performed. Operationally, at block 504, instead of merely noting an append request has been entered, operating logic 300 further determines if the append indicator is for appending the last dialed number or any previous dialed number. If it is the former, the re-dialing process continues as earlier described. On the other hand, if it is the later, operating logic 300 displays the contents of the dialed number logs, and facilitate the user in selecting one of the previously dialed number, before continuing with the re-dialing process as described.

Referring now to FIG. 6, wherein a block diagram illustrating the operating flow 600 of a second aspect of the method of the present invention, in accordance with one embodiment, is shown. For the illustrated embodiment, it is assumed that operating logic 300 includes voice recognition logic that recognizes at least a number of pre-determined audio error messages. As illustrated, in accordance with the second aspect of the method of the present invention, a user enters or selects a save phone number, and places a call, block 602. Phone 100/200 places the call accordingly, block 604. Thereafter, operating logic 300 equipped with voice recognition logic, monitors for a "call successful" status, block 606. More specifically, operating logic 300 monitors the audio signal to determine if placement of the call has resulted in one of the recognizable error conditions. That is, whether placement of the call, e.g. as a result of the failure to include the requisite dialing prefix has resulted in the receipt of a recognizable audio error response. If placement of the call was successful, e.g. as denoted by the absence of any of the recognizable audio error responses (for a predetermined monitor period) or origination of audio signal (i.e. the user starts to speak), phone 100/200 facilitates the successfully established call, block 608. On the other hand, if the call is unsuccessful, and the error, as discerned from the recognizable audio error responses, is correctable, operating logic 300 terminates the incorrect call, formulates the correct dialing (e.g. by including the appropriate dialing prefix per the rec-

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ognized audio error response) and places the call again, block 610. Thereafter, the process continues back at block 606. In one embodiment, the formulation may include prompting the user for an appropriate country and/or area code. In one embodiment, the correction and re-placement of the call are made automatically, whereas, in another embodiment, the correction and re-placement of the call are made upon prompting the user for approval. Preferably, the manner of corrective response may be user selectable through configuration options (as other conventional operation options). If the call is unsuccessful, and the error, being undiscernable from the recognizable audio error responses, is uncorrectable, operating logic 300 terminates the incorrect call, and disposes the error condition in any one of a number of application dependent manners, block 612. Accordingly, a user may be provided with automatic assistance when the user makes an error and places a call in an incorrect dialing format, e.g. by failing to include the proper dialing prefix.

FIG. 7 illustrates an operational flow 700 of the relevant aspects of operating logic 300 in support of the third aspect of the method of the present invention, in accordance with one embodiment. As illustrated, upon detecting a call is being placed 702, i.e. dialing in progress, operating logic 300 monitors for audio error response, block 704, and determined if a recognizable audio error response has been received, block 706. The process is repeated continuously, until a predetermined monitoring period has elapsed, block 708 (and no recognizable audio error response has been received).

Back at block 706, if a recognizable error response is detected, operating logic 300 further determines if the error is limited to the absence of a required long distance dialing prefix, block 710. If so, assuming the "auto re-dial" configuration has been pre-selected, operating logic 300 terminates the incorrect call, formulates the correct dialing format, and re-replaces the call, block 712. On the other hand, if the error includes the absence of a required area code, block 714, operating logic 300 terminates the incorrect call, prompts the user for the required area code, formulates the correct dialing format, and re-replaces the call, block 716. Otherwise, the incorrect call is disposed of in any one of a number of application dependent manners, block 718.

Thus, a method and apparatus enabling a telephone user to quickly dial or re-dial a call in an alternate dialing format has been described. As suggested earlier, while the present invention has been described in terms of the above-illustrated embodiments, those skilled in the art will recognize that the invention is not limited to the embodiments described. The present invention can be practiced with modification and alteration within the spirit and scope of the appended claims. In particular, the present invention, with minor modifications that are well within the ability of those ordinarily skilled in the art, may be practiced on wired or cordless telephone handsets. Likewise, the present invention may be practiced on personal digital assistants incorporated with telephony modules or computing devices, such as laptop or desktop computers, incorporated with telephony facilities. Thus, the description is to be regarded as illustrative instead of restrictive on the present invention.

What is claimed is:

1. A method comprising:

placing, by a mobile device, a first call to a phone number; receiving, by the mobile device, in return audio error signals resulting from placing the first call;

determining, by the mobile device, if the first call has failed for missing a required dialing prefix by analyzing the received audio error signals;