

of time after inputting the above numbers repeatedly, the controller 50 can perform a dialing operation for all numbers that have so far been input.

[0056] In the above descriptions, the number keys 210 are touched and slid along the direction of the rotary casing 230. However, it is also possible that the number keys 210 be touched and slid into the inside area 250 of the rotary dial casing 230 to execute various functions. FIGS. 10A and 10B illustrate these features.

[0057] Note also that FIGS. 10A and 10B illustrate a method of executing a message editor rather than a dialing operation as in the other embodiments. In more detail, FIG. 10A, illustrates the user touching and sliding (or dragging) the soft key "5" into the inside area 250 of the rotary dial casing 230 to execute the message editor.

[0058] Then, as shown in FIG. 10B, the controller 50 displays an editor screen 510 on the touch screen 40 that allows the user to create and edit a message. For example, as shown in FIG. 10B, the controller 50 displays the information stored in the memory corresponding to the speed dial key "5". Thus, the user can edit or change the information as necessary. Thus, the user can easily invoke the message editor by touching and sliding a particular soft key. Alternatively, in another embodiment, the user can touch a particular soft key and slide the soft key to an area outside of the rotary dial casing 230 to display the editor screen 510.

[0059] Next, FIGS. 11A and 11B illustrate the user touching a particular soft key and sliding the soft key into or towards a menu icon displayed at the touch screen 40 to execute a specific function. That is, as shown in FIGS. 11A and 11B, the controller 50 displays a plurality of menus (e.g., Call menu 610, Message menu 620, Search menu 630 and Internet menu 640) on the touch screen 40. Then, as shown in FIG. 11A, the user touches the soft key "9" and slides the soft key "9" toward the Call menu 610.

[0060] When the user releases or drops the soft key "9" in the Call menu 610, the controller 50 initiates a call corresponding to a phone number associated with the speed dial number "9". Similarly, if the user drags and drops the soft key "9" onto the message menu 620, an editor screen may be displayed for editing the information corresponding to speed dial number "9".

[0061] Further, if the user drags and drops the soft key "9" onto the search menu 630, the controller 50 displays a search engine (such as GOOGLE) allowing the user to search for information on the Internet. The search function may also be a search window allowing the user to search files in a folder associated with the soft key "9". The user may also advantageously associated each number with a different searching function (e.g., the soft key "9" corresponds the GOOGLE search, the soft key "8" corresponds to a file search on the terminal, etc).

[0062] In addition, if the user drags and drops the touched number key "9" onto the Internet connection menu 640, the controller 50 displays a website that corresponds to the particular soft key "9". That is, the user may associate soft keys with favorite or particular web pages such that when the soft key is slid and dropped into the Internet menu 640, the appropriate web page is displayed on the touch screen 40. Further, the call menu 610, the message menu 620, the search menu 630, and the Internet menu 640 may be represented by specific icons to provide short cuts to execute the corresponding functions.

[0063] In the above-described embodiments, the stopper 240 is used as a reference point to determine whether or not to perform a dialing operation. However, in another embodiment, the reference point or threshold in which the dialing

operation is to be performed may be set according to how far a distance one of the soft keys is slid. For example, the controller 50 may initiate a dialing operation when a soft key is slid past a predetermined threshold (a particular distance).

[0064] Further, if the touch keys are slid less than the predetermined threshold (distance), the controller 50 merely receives an input number corresponding to the touched number key, but does not execute the dialing operation. Further, in this embodiment, the slid direction of the touch key does not have to follow the circle of the rotary dial casing 230, and the direction may vary. That is, the sliding direction may be any other direction such as inward direction or outward direction of the rotary dial casing 230.

[0065] In yet another embodiment, the threshold in which a function such as the dialing operation is to be performed may be set according to how long a time lapse after the last one of the soft keys is touched. If none of the soft keys is touched for a predetermined time period after the last one of the soft keys is touched, the controller 50 may receive an input instruction to perform a function corresponding to the touched soft keys.

[0066] In yet another embodiment, the amount of time a particular touch key is touched may be used to determine whether the controller 50 performs the dialing operation or merely receives the number corresponding to the touched soft key. That is, a predetermined time period may be set as the threshold to determine the operations of the controller 50. That is, when the touch key is pressed for a time period that is longer than the predetermined time period, the controller 50 executes the corresponding function related to the touched soft key. Similarly, when the soft key is touched for a time period that is less than the threshold, the controller 50 merely receives the number (or character) corresponding to the touched soft key.

[0067] As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described embodiments are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the metes and bounds of the claims, or equivalence of such metes and bounds are therefore intended to be embraced by the appended claims.

What is claimed is:

1. A method of executing a function through a touch input device, the method comprising:
 - displaying a plurality of soft keys on a screen of the touch input device; and
 - executing a function when one of the soft keys is touched and slid on the screen of the touch input device and an input instruction is entered to execute the assigned function.
2. The method of claim 1, wherein the input instruction corresponds to one of the touched and slid soft key being slid to a predetermined position on the screen of the touch input device, the touched and slid soft keys being slid past a predetermined reference distance, and none of the soft keys being touched for a predetermined period after the soft key is being touched and slid.
3. The method of claim 1, wherein the displaying step displays the soft keys in a circular pattern such that the touched and slid soft key is slid in an arc-shaped sliding direction.
4. The method of claim 2, wherein the displaying step further displays a rotary dial casing that includes the soft keys such that the soft keys are displayed in a circular shape on the