with a programmable memory, it is possible to program one or more shortcut keys to represent an entire telephone number. When a user desires to dial the represented number, the user need only press the shortcut keys and the number is dialed. However, on a traditional rotary dial pad, there is no practical method for incorporating shortcut keys or speed dial solutions.

Another disadvantage of a traditional rotary dial pad configuration is that there is no method for dialing special characters. In a typical rotary dial pad, only digits may be dialed. There is no method for dialing other symbols such as a pound "#" or star "*" key.

Yet a further problem of a traditional rotary dial pad configuration is that, in order for a digit to be dialed, it is imperative that a user rotate the rotary dial pad all the way to a stopping bar for each digit. If a user fails to rotate the dial pad the entire distance, the rotary dial pad may dial incorrect digits, or may not dial a digit at all.

An additional concern of traditional rotary dial pads is that use of these pads is slow. It takes time to rotate and then await counter-rotation of the dial pad for each digit dialed.

The virtual rotary dial pad configurations **410**A and **410**B can solve each of these concerns of traditional rotary dial pads.

Additional symbols can be displayed and dialed using the virtual rotary dial pad configurations **410**A and **410**B. As a default, configurations **410**A and **410**B display digits 0-9, with each digit corresponding to a dialing button/finger hole **414** that may be touched and dragged/rotated to the stopping point **415**. However, additional symbols may be made available for dialing by touching or physically clicking the center **430** of the dial pad **410**A/**410**B. By touching or clicking the center **430**, a second virtual rotary dial pad **410**C is made available with additional symbols for dialing, as is illustrated in FIG. **4**C. The additional symbols may include a pound key "#," a star key "*," a pause key <pause>, a wait key <wait>, and an add key "+," among others. Touching or clicking the center **430** of configuration **410**C will return the dialpad area **340** to configurations **410**A or **410**B.

Speed dial functionality can also be incorporated into the virtual rotary dial pad configurations **410**A, **410**B and **410**C. Each digit or symbol **413** displayed in configurations **410**A, **410**B and **410**C can be programmed as a shortcut or speed dial button for a respective telephone number. Programming can occur through menus and data pages displayed on the display **214**. Once programmed, the speed dial functionality is activated by dialing a single digit or symbol **413** representing a respective phone number. The shortcut digit or symbol **413** is dragged or rotated to the stopping point **415**. Instead of releasing the dragged digit, however, as a user would normally do when dialing a telephone number, the user holds the dialed digit near the stopping point **415** for an additional period of time (for example, for an extra one or two seconds). This "hovering" of the dialed digit or symbol **413** near the stopping point **415** is interpreted by the processor **802** as an instruction to implement speed dialing for the represented telephone number. The represented telephone number is dialed in full by the device **210** with the user having only dialed a single digit or symbol—something today's rotary dial telephones (traditional or virtual) simply cannot do.

In order to help a user know whether the user has dragged or rotated a selected digit or symbol **413** far enough (e.g., all the way to the stopping point **415**), the device **210** can be configured to vibrate once a digit or symbol has been recognized as being dialed. Other sensory feedback mechanisms may also be used. For example, audible sounds may be triggered when a digit or symbol **413** has been dragged to the stopping point **415**. Alternatively, a visual indicator could be shown on the display **214** once a digit or symbol has been dragged to the stopping point **415**.

In order to facilitate faster dialing using the virtual rotary dial pad configurations **410**A, **410**B and **410**C, the device **210** allows a user to click the display **214** in addition to touching and dragging a digit or symbol. By clicking a selected digit or symbol **413** (i.e., by physically depressing the display **214**), the selected digit or symbol **413** is automatically rotated to the stopping point **415** and then counter-rotated back to its starting position. In this way, the user is not required to actually do the dragging. Because the rotation of the digit is automatic and is not subject to user dragging, the dialing or rotation speed can be faster than if it were dependent on user dragging. The automatic dialing or rotation speed can even be modified to last a predetermined duration of time. In an embodiment, the device **210** will output a dialing sound as the digits are being rotated. The dialing sound can be the traditional telephone dialing sound made by most rotary telephones. The sound can also be beeps, music or other sounds as selected by the devices' **210** user. Vibrations or a blinking display **214** could also be used during the rotation, if desired.

Configurations **410**A, **410**B and **410**C are each embedded in the dial pad module **895**. Additional configurations are possible and may be added by third party applications or APIs.

Although the embodiments and applications as described above relate to a portable electronic device with data and voice communication capacity, it should be understood that they may also be embodied in and applied with any portable electronic device with an ability to dial telephone numbers.

Specific embodiments and applications related to the above description include, but are not limited to, a portable electronic device that includes a touch screen display, a communication system, and a virtual rotary dial pad presented on the display. The virtual dial pad enables a user of the device to dial numeric and non-numeric symbols and to call a telephone number using the display and the communication system. The virtual rotary dial pad comprises a predetermined location on the display to which the numeric and non-numeric symbols are rotated upon dialing. The virtual rotary dial pad is enabled to perform speed dialing. Speed dialing occurs by rotating a selected numeric or non-numeric symbol to the predetermined location and by holding the selected symbol at the predetermined location for a predetermined duration of time. The virtual rotary dial pad also generates feedback when a selected symbol has been dialed. The feedback can be either tactile (in the form of a vibration), audio, or visual. The device touch screen is also physically depressible. Rapid symbol dialing can occur by both touching the symbol to be dialed and depressing the display.

An additional embodiment includes a method of dialing a telephone number using a virtual rotary dial pad on a portable electronic device. The method includes touching a symbol on a touch screen display of the portable electronic device, wherein the available symbols are both numeric and non-numeric. The method also includes dragging the touched symbol to a predetermined location on the display, thereby resulting in the symbol being dialed. Dragging a selected symbol to the predetermined location results in each selectable symbol of the virtual rotary dial pad being rotated. The method includes performing a speed dial function by holding the dragged symbol at the predetermined location for a predetermined duration of time. The method also includes generating feedback to a user when the touched symbol is dragged to the predetermined location. The generated feedback is a vibration, an audio signal or a visual signal. The