

[0059] In some embodiments, for each finger contact, the determined digit corresponds to a highlighted digit (e.g., **404**) in image **402**. The digit may be highlighted in a wide variety of ways, such as by changing the brightness, color, and/or shading of the digit and/or the area around the digit (e.g., a circular area around the digit). FIGS. **4A-4C** illustrate three exemplary types of highlighting for the “7” digit icon. In some embodiments, the highlighted digit is located in a predetermined area **408** of the display (e.g., next to area marker **410**). In some embodiments, device **100** provides feedback when the highlighted digit in the predetermined area **408** of the display is changed. In some embodiments, the feedback is visual (e.g., the movement of a digit and the circular area around the digit displays a slight jerk as these features enter area **408** and/or the movement of these features out of area **408** is fractionally delayed). In some embodiments, the feedback is an audible signal (e.g., via speaker **111**) and/or a haptic signal (e.g., a vibration). In some embodiments, the audible signal is a click sound (e.g., as a new digit enters area **408**). The visual, auditory, and/or haptic feedback assists the user in selecting the desired digit for input.

[0060] In some embodiments, for each contact, the determined digit is based on the angular displacement of the finger contact (e.g., when lift-off of the finger contact is detected). In some embodiments, the angular displacement is clockwise or counterclockwise. Data entry using either clockwise or counterclockwise finger contacts allows users to enter data faster than with conventional rotary dialing, which only allows clockwise finger rotation to enter digits. In some embodiments, at least one of the determined digits is based on a counterclockwise angular displacement.

[0061] In some embodiments, display **112** displays the determined digits **406** in a predetermined area (e.g., **412**).

[0062] In some embodiments, contact/motion module **130**, in conjunction with click wheel controller **158**, detects an input that corresponds to a request to delete a determined digit (e.g., the last digit entered in determined digits **406**). In some embodiments, this input is the user clicking on the rewind symbol (\llcorner) on click wheel **114**. In response to this input, the determined digit is deleted. Repeating this process removes additional digits from the sequence of determined digits **406**.

[0063] Device **100** performs (**308**) a task or action using the determined digits. In some embodiments, performing (**308**) the task corresponds to device **100** dialing a telephone number. In some embodiments, performing the task corresponds to device **100** sending numeric input (e.g., the determined digits) to a remote computer.

[0064] In some embodiments, contact/motion module **130**, in conjunction with click wheel controller **158**, detects an input (e.g., the user activating click wheel button **210**) that corresponds to a request to transmit a signal corresponding to the determined digits **406**. The signal may be used to provide numeric input to a remote computer. For example, the signal may provide numbers to an interactive voice response unit, such as numbers to navigate a voice menu or to provide a credit card number, social security number or other numeric data.

[0065] In some embodiments, contact/motion module **130**, in conjunction with click wheel controller **158**, detects an input (e.g., the user activating click wheel button **210**) that corresponds to a request to dial the determined digits. In response, telephone module **138** dials the determined digits.

In some embodiments, the input that corresponds to the request to dial the determined digits is a click on a click wheel button **210**.

[0066] The foregoing description, for purpose of explanation, has been described with reference to specific embodiments. However, the illustrative discussions above are not intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated.

What is claimed is:

1. A computer-implemented method, comprising: at a portable communications device with a click wheel and a display, detecting a plurality of finger contacts with the click wheel, wherein each finger contact includes:
 - an initial location of the finger contact on the click wheel,
 - a final location of the finger contact on the click wheel, and
 - an angular displacement of the finger contact on the click wheel between the initial location and the final location of the finger contact on the click wheel;
 displaying a image that includes digits arranged in a circle, wherein the image rotates by an amount determined in accordance with the angular displacement of the finger contact;
 - for each finger contact, determining a digit that corresponds to a highlighted digit in the image, wherein the determined digit is independent of the initial location of the finger contact on the click wheel and the highlighted digit is located in a first predetermined area of the display;
 - displaying the determined digits in a second predetermined area of the display;
 - detecting an input that corresponds to a request to perform an action with the determined digits; and
 - performing the requested action.
2. A computer-implemented method, comprising: at a portable communications device with a click wheel and a display, detecting a plurality of finger contacts with the click wheel, wherein each finger contact includes an angular displacement of the finger contact on the click wheel between an initial location and a final location of the finger contact on the click wheel;
 - displaying an image that includes digits arranged in a circle, wherein the image rotates in response to each finger contact by an amount determined in accordance with the angular displacement of the finger contact;
 - for each finger contact, determining a digit, wherein the determined digit is independent of the initial location of the finger contact on the click wheel; and
 - performing a task using the determined digits.
3. The method of claim 2, wherein each digit in the image is circled.
4. The method of claim 2, wherein, for each finger contact, the determined digit corresponds to a highlighted digit in the image.
5. The method of claim 4, wherein the highlighted digit is located in a predetermined area of the display.