

CDMA communication system, but such teachings apply equally to other types of systems.

[0121] Referring to FIG. 4, a CDMA wireless communication system may include a plurality of mobile terminals 100, a plurality of base stations (BSs) 270, base station controllers (BSCs) 275, and a mobile switching center (MSC) 280. The MSC 280 is configured to interface with a public switch telephone network (PSTN) 290. The MSC 280 is also configured to interface with the BSCs 275, which may be coupled to the base stations 270 via backhaul lines. The backhaul lines may be configured in accordance with any of several known interfaces including, for example, E1/T1, ATM, IP, PPP, Frame Relay, HDSL, ADSL, or xDSL. It is to be understood that the system as shown in FIG. 4 may include a plurality of BSCs 275.

[0122] Each BS 270 may serve one or more sectors (or regions), each sector covered by an omni-directional antenna or an antenna pointed in a particular direction radially away from the BS 270. Alternatively, each sector may be covered by two or more antennas for diversity reception. Each BS 270 may be configured to support a plurality of frequency assignments, and each frequency assignment has a particular spectrum (e.g., 1.25 MHz, 5 MHz, etc).

[0123] The intersection of a sector and frequency assignment may be referred to as a CDMA channel. The BS 270 may also be referred to as base station transceiver subsystems (BTSs) or other equivalent terms. In such case, the term "base station" may be used to collectively refer to a single BSC 275 and at least one BS 270. The base station may also be referred to as a "cell site". Alternatively, individual sectors of a particular BS 270 may be referred to as a plurality of cell sites.

[0124] As shown in FIG. 4, a broadcasting transmitter (BT) 295 transmits a broadcast signal to the mobile terminals 100 operating within the system. The broadcast receiving module 111 as shown in FIG. 1 is provided at the terminal 100 to receive broadcast signals transmitted by the BT 295.

[0125] In FIG. 4, several global positioning systems (GPS) satellites 300 are shown. The satellites 300 help locate at least one of a plurality of terminals 100.

[0126] In FIG. 4, two satellites 300 are depicted, but it is understood that useful positioning information may be obtained with any number of satellites. The GPS module 115 as shown in FIG. 1 is typically configured to cooperate with the satellites 300 to obtain desired positioning information.

[0127] Instead of or in addition to GPS tracking techniques, other technologies that may track the location of the mobile terminals may be used. In addition, at least one of the GPS satellites 300 may selectively or additionally handle satellite DMB transmissions.

[0128] As one typical operation of the wireless communication system, the BSs 270 receive reverse-link signals from various mobile terminals 100. The mobile terminals 100 typically engaging in calls, messaging, and other types of communications. Each reverse-link signal received by a particular base station 270 is processed within the particular BS 270.

[0129] The resulting data is forwarded to an associated BSC 275. The BSC provides call resource allocation and mobility management functionality including the coordination of soft handoff procedures between BSs 270. The BSCs 275 also route the received data to the MSC 280, which provides additional routing services for interfacing with the PSTN 290. Similarly, the PSTN 290 interfaces with the MSC 280, the MSC interfaces with the BSCs 275, and the BSCs

275 in turn control the BSs 270 to transmit forward-link signals to the mobile terminals 100.

[0130] FIG. 5 is a view of a screen display or explaining how a flicking is performed on the touch screen of the mobile terminal.

[0131] As shown in FIG. 5, a flicking, which is a user operation discriminated from dragging, means a user's touching on the touch screen in a flicking manner to quickly move a displayed menu list (or a selection bar) or a cursor. Because the displayed menu list can be moved up and down through flicking, the user can conveniently search for a desired menu item (e.g., content item 7). Thus, the flicking may be called a fast scrolling operation.

[0132] An acceleration mechanism (or acceleration movement technique) is applied for the movement of the displayed menu list by the flicking. The acceleration movement technique refers to an animation (or a motion graphic image) technique in which the law of physical motion acceleration and deceleration is applied to the depiction of a movement of a particular object to provide a realistic imagery in implementing a GUI.

[0133] The depicted acceleration movement of the displayed menu list (or selection bar) or the cursor is proportional to the force and speed of the user manipulation applied to the corresponding displayed menu list. Namely, when the user performs flicking, the movement speed of the displayed menu list is determined in consideration of a sensed distance, pressure, speed, etc., of the flicking.

[0134] Typically, the user moves to a desired position of the displayed menu list by a slight touch or drag, and if there are tens of or hundreds of content items in the menu list and the user wants to quickly move to a desired position of the menu list, the user may flick at the displayed menu list with an appropriate force and speed to quickly move to the desired position.

[0135] In this respect, however, although the user may believe that he has flicked the menu list with an appropriate force and speed, he may not reach the last item of displayed the menu list, or he may reach the last item of the menu list with such a strong acceleration movement as to pass beyond a lower end of the screen display because of an excessive force or speed.

[0136] FIG. 6 shows an example of a visual feedback method with respect to reaching the end of the displayed menu list in performing flicking according to the present invention.

[0137] As shown in FIG. 6, in accordance with the present invention, when the user reaches the last item of the flicked menu list (or contents list), certain blank spaces are provided at both ends of the list. Namely, a certain blank space is provided between the last content item of the menu list and the lower end of the screen to allow the user to recognize that the last content item of the list is displayed.

[0138] Alternatively, a picture or a discriminated color region may be displayed at both ends of the list.

[0139] FIG. 7 shows another example of a visual feedback method with respect to the reaching of the end of the displayed menu list in a flicking operation according to the present invention.

[0140] In the present invention, a border of a certain color is displayed at a certain boundary contiguous with edge of, i.e., beyond, the last item of the menu list, namely, contiguous with the selection list, so that when the user reaches the last content item of the flicked menu list (or contents list) through