

TERMINAL HAVING ZOOM FEATURE FOR CONTENT DISPLAYED ON THE DISPLAY SCREEN

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of the Korean Patent Application No. 10-2007-0083490, filed on Aug. 20, 2007, which is hereby incorporated by reference as if fully set forth herein, pursuant to 35 U.S.C. §. 119(a).

FIELD OF THE INVENTION

[0002] The present disclosure relates generally to a mobile communication terminal, and more particularly, to a mobile communication terminal having feature to allow a user to zoom in or out of an area displayed on the terminal's screen.

BACKGROUND

[0003] A mobile terminal is a device which may be configured to perform various functions. Examples of such functions include data and voice communications, capturing images and video via a camera, recording audio, playing music files via a speaker system, and displaying images and video on a display. Some terminals include additional functionality which supports game playing, while other terminals are configured as multimedia players. Mobile terminals may be configured to receive broadcast and multicast signals which permit viewing of content such as videos and television programs.

[0004] Efforts are ongoing to support and increase the functionality of mobile terminals. Such efforts include software and hardware improvements, as well as changes and improvements in the structural components which form the mobile terminal.

[0005] For example, in a terminal provided with a navigation system, the terminal is able to provide information on a map, on which a route to a user-specific destination and a terminal position on the route are marked. However, in the case of a user attempting to zoom in or out on a display screen of the mobile terminal that shows a prescribed point on the route, it is inconvenient for a user to manipulate key buttons provided on the terminal several times. Additionally, it is also difficult to zoom in or out on a specific portion of the screen on which a photo, a text message or the like is displayed.

SUMMARY

[0006] A method of graphically resizing content displayed on a portion of a display screen of a mobile communication terminal is provided. The method comprises selecting a first area of an image graphically rendered on a display screen. Content displayed in the first area have a first set of dimensions and a first central point in a first relationship with boundaries of the first area. The content in the first area are rendered on the display screen such that the content in the first area is displayed on the display screen in a second area of the screen having a second set of dimensions and a second central point having proportionally the first relationship with boundaries of the second area.

[0007] The second area may be larger than the first area, in response to receiving a first command, and the second area may be smaller than the first area, in response to receiving a second command. The first command may be a command to

zoom-in on the first area, and the second command may be a command to zoom-out of the first area.

[0008] In one embodiment, selecting the first area comprises drawing a geometric shape around the first area, wherein the first command is associated with a first direction selected to draw the geometric shape, and the second command is associated with a second direction selected to draw the geometric shape. The second direction may be opposite to the first direction. The shape may be approximately an ellipse.

[0009] In one embodiment, the first direction is clockwise and the second direction is counter clockwise. Level of zoom-in and zoom-out may be controlled according to speed with which the geometric shape is drawn. Level of zooming and zoom-out may be controlled according to number of times the geometric shape is drawn. The level of zoom-in and zoom-out may be doubled, if speed of the speed with which the geometric shape is drawn is doubled. The level of zoom-in and zoom-out may be doubled if speed of the number of times the geometric shape is drawn is doubled, depending on the implementation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The accompanying drawings, which are included to provide a further understanding of the present disclosure and are incorporated in and constitute a part of this application, illustrate exemplary embodiments.

[0011] FIG. 1 is a block diagram of a mobile terminal in accordance with one embodiment.

[0012] FIG. 2 is a perspective view of a front side of a mobile terminal according to one embodiment.

[0013] FIG. 3 is a rear exemplary view of the mobile terminal shown in FIG. 2.

[0014] FIG. 4 is a front exemplary diagram of a terminal according to another embodiment.

[0015] FIG. 5 is a front diagram of a terminal according to another embodiment.

[0016] FIG. 6 is a flowchart for a method of controlling size of content displayed on a screen, according to one embodiment.

[0017] FIG. 7 is a diagram for a first screen configuration for zooming in an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0018] FIG. 8 is a diagram for a second screen configuration for zooming in an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0019] FIG. 9A and FIG. 9B are diagrams for a third screen configuration for zooming in an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0020] FIG. 10 is a diagram for a fourth screen configuration for zooming in an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0021] FIG. 11 is a diagram for a first screen configuration for zooming out an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0022] FIG. 12 is a diagram for a second screen configuration for zooming out an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0023] FIG. 13A and FIG. 13B are diagrams for a third screen configuration for zooming out an image to correspond to an area setting action for a touchscreen according to one embodiment.