

ing the image zoomed out in the zooming-out step S650 on the touchscreen [S660]. In the zooming-out step S650, the mobile terminal 100 is able to perform a zoom-out action with reference to a specific point of the part corresponding to the set area on the image displayed on the touchscreen. In this case, the area and the part corresponding to the set area are similar to those mentioned in the foregoing description, of which details are omitted in the following description.

[0091] In one embodiment, the mobile terminal 100 is able to perform the zoom-out action with reference to a random point within the image part corresponding to the set area, and preferably, with reference to a center thereof. In detail, FIGS. 11 to 14 show that the reference point of the image zoom-out is the center of the set area. The mobile terminal 100 is able to zoom out the image displayed on the touchscreen into the part corresponding to the set area.

[0092] A process for zooming out an image to correspond to an area setting action for the touchscreen is explained with reference to FIG. 11 in aspect of an image configuration as follows. In FIG. 11, assume that a map, on which a moving route of the mobile terminal 100 is marked, is displayed as a result of driving the position-location module 115.

[0093] Referring to FIG. 11, a user draws a circle 1111 formed counterclockwise on the touchscreen using a pointer 1115[a]. In this case, the mobile terminal 100 may set an area of the present invention to an inner area of the circle drawn by the user. The mobile terminal 100 is then able to recognize a first rectangle 1112, which is inscribed in the circle 1111 to have a diameter of the circle 1111 as a diagonal length, and a second rectangle 1113 which is circumscribed to the circle 1111 to have a diameter of the circle 1111 as a side length.

[0094] The mobile terminal 100 is able to zoom out a whole image displayed in the state (a) to be displayed within the first rectangle 1112. In this case, the mobile terminal 100 performs a zoom-out action with reference to a center 1111-1 of the circle 1111. Therefore, the mobile terminal 100 zooms out the whole image displayed in the state (a) to become a specific part of another whole picture.

[0095] The mobile terminal 100 is able to zoom out a whole image displayed to be displayed within the second rectangle 1113. In this case, the mobile terminal 100 performs a zoom-out action with reference to a center 1111-1 of the circle 1111. And, the mobile terminal 100 may zoom out the whole image displayed in the state (a) to become a specific part of another whole picture.

[0096] Occasionally, the zoom-out action and the displaying action according to the zoom-out action can be performed on a partial area of the touchscreen. In this case, a presence or non-presence of setting the partial area and a size of the partial area can be set by a user or the mobile terminal 100. The mobile terminal 100 is able to zoom out a specific part of an image displayed on the touchscreen to a zoom-out extent in proportion to a continuous repetition count of the area setting action.

[0097] For this, a process for zooming out an image to correspond to an area setting action for the touchscreen is explained with reference to FIG. 12 in aspect of an image configuration as follows. In FIG. 12, assume that a map, on which a moving route of the mobile terminal 100 is marked, is displayed as a result of driving the position-location module 115. Referring to FIG. 12, a user draws a circle 1211 formed counterclockwise on the touchscreen using a pointer

1213. In this case, the mobile terminal 100 recognizes a center 1211-1 of the circle 1211 and a count of setting actions for the circle 1211.

[0098] In case that the circle 1211 is drawn 'one time', the mobile terminal 100 zooms out an image displayed centering on the center 1211-1 to a zoom-out extent corresponding to an area setting action 'one time' and then displays a whole image including the zoomed-out image as a part thereof. In this case, the zoom-out extent can include a zoom-out scale using a reduced scale of map. For instance, in case that a reduced scale is changed into 1:100,000 from 1:50,000, the zoom-out scale becomes a half.

[0099] In case that the circle 1211 is continuously drawn 'twice' along a same trace, the mobile terminal 100 zooms out the image displayed centering on the center 1211-1 of the circle 1211 to a zoom-out extent corresponding to 'two times' of the area setting action and displays a whole image including the zoomed-out image. In this case, the zoom-out extent per the area setting action count can be previously stored in the memory 160. And, the zoom-out extent per the area setting action count can be set by a user or the mobile terminal 100.

[0100] The zoom-out extent per the area setting action count can be set proportional to a continuous repetition count of the area setting actions. For instance, a zoom-out extent corresponding to an area setting action 'one time' can be $\frac{1}{2}$ time. And, a zoom-out extent corresponding to area setting actions 'two times' can be $\frac{1}{4}$ time. Thus, as the continuous repetition count of the area setting actions gets incremented, it is able to set a greater zoom-out extent. On the contrary, it is understood that the zoom-out extent per the area setting action count can be set inverse proportional to a continuous repetition count of the area setting actions.

[0101] The mobile terminal 100 is able to zoom out a specific part of an image displayed on the touchscreen to a zoom-out extent inversely proportional to a size of the set area. For this, a process for zooming out an image to correspond to an area setting action for the touchscreen is explained with reference to FIG. 13A and FIG. 13B in aspect of an image configuration as follows. In FIG. 13A and FIG. 13B, assume that a map, on which a moving route of the mobile terminal 100 is marked, is displayed as a result of driving the position-location module 115.

[0102] Referring to FIG. 13A, a user draws a circle 1311 formed counterclockwise on the touchscreen using a pointer 1313. In this case, the mobile terminal 100 recognizes a center 1311-1 of the circle 1311 and a size of the circle 1311. Subsequently, the mobile terminal 100 zooms out an image displayed centering on the center 1311-1 to a zoom-out extent corresponding to the size of the circle 1311 and then displays a whole image including the zoomed-out image as a part thereof.

[0103] Referring to FIG. 13B, a user draws a circle 1312 formed counterclockwise on the touchscreen using a pointer 1313. In this case, the mobile terminal 100 recognizes a center 1312-1 of the circle 1312 and a size of the circle 1312. And, assume that the size of the circle 1312 shown in FIG. 13B is twice larger than that of the former circle 1311 shown in FIG. 13A. Subsequently, the mobile terminal 100 zooms out an image displayed in the state (a) centering on the center 1312-1 to a zoom-out extent corresponding to the size of the circle 1312 and then displays a whole image including the zoomed-out image as a part thereof. In this case, a zoom-out extent per