

[0146] For example, when portable electronic device 400 is disposed in horizontal orientation 810, it may be displaying a map on display device 406. However, in response to detecting that portable electronic device 400 is now disposed in vertical orientation 820, portable electronic device 400 may automatically display a picture of an object (e.g., a building, terrain feature, etc.) at which portable electronic device 400 is pointing. This is possible by using position determining component 420 to determine the present geographic position of portable electronic device 400, or by a combination of geographic position and vector data as described above with reference to FIG. 7. It is noted that the selection of the second instance of data to be displayed may be a user determined parameter, or may be dependant upon what first instance of data is currently being displayed.

[0147] In the embodiment of FIG. 6, navigation controller 750 receives azimuth data indicating a direction which portable electronic device 400 is pointed via azimuth signal receiver 770. Using this information, as well as the current geographic position of portable electronic device 400, object identification component 780 can determine an object (e.g., a manmade object, terrain feature, etc.) at which portable electronic device 400 is pointed. In one embodiment, object identification component 780 comprises a locally stored database (e.g., either locally stored in volatile memory 403, or data storage device 405) which facilitates determining an object at which portable electronic device 400 is pointed. After the object has been identified, data accessor 790 may access a second instance of data about that object. For example, if object identification component 780 determines that portable electronic device 400 is pointed at the Statue of Liberty, data accessor 790 may access a media file, (e.g., pictures, audio files, or multimedia files) with additional data about the Statue of Liberty.

[0148] In another embodiment, object identification component 489 may be a remotely located database which is accessed via wireless communications component 430. For example, portable electronic device 400 can send its current geographic position and azimuth to a remote computer system (not shown) which accesses the database that determines the object at which portable electronic device 400 is pointed, and sends an image file of that object back to portable electronic device 400 for displaying. In embodiments of the present invention, determination of which instance of data to display based upon the orientation of portable electronic device 400 is made by display controller 720 in response to a parameter stored, for example, in volatile memory 403, non-volatile memory 404, or data storage device 405. It is appreciated that the parameter which states the data to display depending upon the orientation of portable electronic device 400 may be a default setting, or a user determined parameter in embodiments of the present invention. It is appreciated that the second instance of data about an object may be remotely accessed as well using wireless communication component 430.

[0149] FIG. 9 is a flowchart of a method for displaying data on a portable electronic device in accordance with embodiments of the present invention. In step 910 of FIG. 9, a first portion of accessed data is displayed on an electronic device. With reference again to FIG. 6B, first portion 620a of data 620 is displayed. In embodiments of the present invention, first portion 620a is displayed due to constraints upon the viewable area which may be imposed by the screen size of the display device used by portable electronic device 400.

[0150] In step 920 of FIG. 9, a movement of the portable electronic device from a first portion to a second position is detected utilizing a motion detector responsive to motion in at least a single direction. As described above, embodiments of the present invention use a motion detecting component (e.g., 425) to detect a change in the motion of portable electronic device 400. In embodiments of the present invention, motion detecting component 425 is an accelerometer operable for determining motion of portable electronic device 400 in at least one plane of motion which are conventionally defined as an X, Y, and Z axis (e.g., 605a, 605b, and 605c of FIG. 6A). Thus, when portable electronic device 400 is moved from a first position (e.g., 601 of FIG. 6A) to a second position (e.g., 602 of FIG. 6A), motion detecting component 425 determines a vector between those two positions.

[0151] In step 930 of FIG. 9, a second portion of the accessed data is automatically displayed in response to detecting the movement. As described above with reference to FIG. 6B, in response to determining the vector described above (e.g., 605 of FIG. 6A), correlator 720 determines a vector (e.g., 330 of FIG. 6B) which originates at first portion 620a. The direction of vector 330 is representative of the vector (e.g., 605) that is created when portable electronic device 400 is moved from first position 601 to second position 602. The magnitude of vector 330 is scaled to be a fraction of the magnitude of vector 605. In so doing, when portable electronic device is moved to second position 602, display device 406 displays second portion 620b of data 620.

[0152] Embodiments of the present invention, an accelerometer based extended display, are thus described. While the present invention has been described in particular embodiments, it should be appreciated that the present invention should not be construed as limited by such embodiments, but rather construed according to the below claims.

What is claimed is:

1. A method for displaying data on a portable electronic device, said method comprising:
 - displaying a first portion of accessed data on said portable electronic device;
 - detecting a movement of said portable electronic device from a first position to a second position utilizing a motion detector responsive to motion in at least a single direction;
 - automatically displaying a second portion of the accessed data in response to detecting said movement.
2. The method as recited in claim 1 wherein said detecting further comprises:
 - utilizing a motion sensing device which is removably coupleable with said portable electronic device.
3. The method as recited in claim 1 wherein said utilizing comprises utilizing an accelerometer to detect said movement
4. The method as recited in claim 3 wherein said detecting further comprises:
 - determining a vector between said first position of said portable electronic device and said second position of said portable electronic device; and
 - determining said second portion of the accessed data based upon said determining of said vector.
5. The method as recited in claim 4 further comprising:
 - correlating said first position with said first portion of the accessed data; and
 - determining a second vector from said first portion of the accessed data which correlates said second position with said second portion of the accessed data.