high inertia characteristics, the acceleration of the GUI will be small for a given input. On the other hand, if the GUI has low inertia characteristics, the acceleration will be large for a given input.

[0126] The GUI operational method **650** generally begins at block **652** where a graphical image is displayed on a GUI. Following block **652**, the GUI operational method **650** proceeds to block **654** where a scrolling or panning stroke on a touch sensitive surface is detected. By way of example, the stroke may be a linear or rotational stroke. During a linear stroke, the direction of scrolling or panning typically follows the direction of the stroke. During a rotational stroke (see **FIG. 6**), the rotational stroke is typically converted to a linear input where clockwise motion may correspond to vertical up and counterclockwise motion may correspond to vertical down. Following block **654** the process flow proceeds to block **656** where the speed and direction of the scrolling or panning stroke is determined. Following block **656**, the GUI operational method **650** proceeds to block **658** where the image is moved in accordance with the speed and direction of the scrolling or panning stroke as well as the associated inertial characteristics. Following block **658**, the GUI operational method **650** proceeds to block **660** where the motion of the image continues even when the panning or scrolling stroke is no longer detected. For example, when the user picks up their finger from the touch sensitive surface, the scrolling or panning function continues as if the scrolling or panning stroke was still being made. In some cases, the motion of the image continues infinitely until some braking (stopping or slowing) control is performed. This particular methodology simulates zero gravity. In other cases, the motion of the image is slowed in accordance with the associated inertia GUI operational method **650**. Metaphorically speaking, the image may correspond to a piece of paper moving over a desktop. In order to move the piece of paper, the user exerts a force on the paper in the desired direction. When the user lifts their finger off the paper, the paper will continue to slid along the desktop in the desired direction for some period of time. The amount it slides after lifting the finger generally depends on, among other things, its mass, the force applied by the finger, the friction force found between the paper and the desktop, etc. As should be appreciated, traditionally when scrolling and panning are implemented, the scrolling or panning stops when the fingers are picked up. In contrast, using the above mentioned methodology, the scrolling or panning continues to move when the fingers are picked up.

[0127] The GUI operational method **650** may additionally include blocks A and B. In block A, an object such as a finger is detected on the touch sensitive surface when the image is moving without the assistance of the object (block **660**). In block B, the motion of the image is stopped when the object is detected, i.e., the new touch serves as a braking means. Using the metaphor above, while the piece of paper is sliding across the desktop, the user presses their finger on the paper thereby stopping its motion.

[0128] **FIGS. 23A-23D** illustrate an inertia sequence using the method described above. **FIG. 23A** illustrates a display presenting a GUI **678** including a window **679** having a list **680** of media items **681**. The window **679** and list **680** may for example correspond to a control window and music list found in iTunes® manufactured by Apple Computer, Inc of Cupertino, Calif. As shown in **FIG. 23B**, when the user slides their finger or fingers **576** over the touch screen **520**, vertical scrolling, which moves media items up or down through the window, is implemented. The direction of scrolling may follow the same direction as finger movement (as shown), or it may go in the reverse direction. In one particular embodiment, a single finger is used for selecting the media items from the list, and two fingers are used to scroll through the list.

[0129] Scrolling generally pertains to moving displayed data or images (e.g., media items **681**) across a viewing area on a display screen so that a new set of data (e.g., media items **681**) is brought into view in the viewing area. In most cases, once the viewing area is full, each new set of data appears at the edge of the viewing area and all other sets of data move over one position. That is, the new set of data appears for each set of data that moves out of the viewing area. In essence, these functions allow a user to view consecutive sets of data currently outside of the viewing area. In most cases, the user is able to accelerate their traversal through the data sets by moving his or her finger at greater speeds. Examples of scrolling through lists can be found in U.S. Patent Publication Nos.: 2003/0076303A1, 2003/0076301A1, 2003/0095096A1, which are herein incorporated by reference.

[0130] As shown in **FIG. 23C**, the displayed data continues to move even when the finger is removed from the touch screen. The continuous motion is based at least in part on the previous motion. For example the scrolling may be continued in the same direction and speed. In some cases, the scrolling slow down over time, i.e., the speed of the traversal through the media items gets slower and slower until the scrolling eventually stops thereby leaving a static list. By way of example, each new media item brought into the viewing area may incrementally decrease the speed. Alternatively or additionally, as shown in **FIG. 23D**, the displayed data stops moving when the finger **576** is placed back on the touch screen **520**. That is, the placement of the finger back on the touch screen can implement braking, which stops or slows down the continuous acting motion. Although this sequence is directed at vertical scrolling it should be noted that this is not a limitation and that horizontal scrolling as well as panning may be performed using the methods described above.

[0131] **FIG. 24** is a diagram of a GUI operational method **700**, in accordance with one embodiment of the present invention. The method **700** is configured for simulating a keyboard. The method generally begins at block **702** where a keyboard is presented on the display. Following block **702**, the process flow proceeds to block **704** where the presence of a first object over a first key and a second object over a second key at the same time is detected on a touch screen. The touch screen is positioned over or in front of the display. By way of example, the display may be an LCD and the touch screen may be a multipoint touch screen. Following block **704**, the process flow proceeds to block **706** where one or more simultaneous control signals are generated when the first object is detected over the first key and when the second object is detected over the second key at the same time.

[0132] In one embodiment, only a single control signal is generated when the first object is detected over the first key and when the second object is detected over the second key at the same time. By way of example, the first key may be