determined characteristic and the received contextual information; and (4) a fourth executable portion for causing an indicator associated with at least one of the identified operations to be displayed, wherein the indicator illustrates a gesture associated with the identified operation.

[0010] In accordance with another aspect, an apparatus is provided for providing an input gesture indicator. In one embodiment, the apparatus may include: (1) means for determining a characteristic associated with one or more tactile inputs detected; (2) means for receiving contextual information associated with a current state of the apparatus; (3) means for identifying one or more operations likely to be requested based at least in part on the determined characteristic and the received contextual information; and (4) means for causing an indicator associated with at least one of the identified operations to be displayed, wherein the indicator illustrates a gesture associated with the identified operation.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[0011] Having thus described embodiments of the invention in general terms, reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

[0012] FIG. **1** is a schematic block diagram of an electronic device having a multi-touch user interface in accordance with embodiments of the present invention;

[0013] FIG. **2** is a schematic block diagram of a mobile station capable of operating in accordance with an embodiment of the present invention;

[0014] FIG. **3** is a flow chart illustrating the process of providing an input gesture indicator in accordance with embodiments of the present invention; and

[0015] FIGS. **4**A-**5**B provide examples of input gesture indicators displayed in accordance with embodiments of the present invention.

DETAILED DESCRIPTION

[0016] Embodiments of the present invention now will be described more fully hereinafter with reference to the accompanying drawings, in which some, but not all embodiments of the inventions are shown. Indeed, embodiments of the invention may be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will satisfy applicable legal requirements. Like numbers refer to like elements throughout.

Electronic Device:

[0017] Referring to FIG. **1**, a block diagram of an electronic device (e.g., cellular telephone, personal digital assistant (PDA), laptop, etc.) having a multi-touch user interface in accordance with embodiments of the present invention is shown. The electronic device includes various means for performing one or more functions in accordance with embodiments of the present invention, including those more particularly shown and described herein. It should be understood, however, that one or more of the electronic devices may include alternative means for performing one or more like functions, without departing from the spirit and scope of the present invention. As shown, the electronic device can generally include means, such as a processor **110** for performing or controlling the various functions of the electronic device.

[0018] In particular, the processor **110**, or similar means, may be configured to perform the processes discussed in more detail below with regard to FIG. **3**. For example, according to one embodiment, the processor **110** may be configured to determine a characteristic associated with one or more tactile inputs detected by the electronic device including, for example, the number of tactile inputs, a force associated with respective tactile inputs, a hand pose associated with the tactile inputs, and/or the identity of the fingers associated with the tactile inputs (e.g., thumb, index, middle, etc.). The processor **110** may be further configured to receive contextual information associated with the current state of the electronic device. This may include, for example, the identity of the application(s) currently operating on the electronic device, one or more previous operations preformed by the user, and/or the like.

[0019] The processor **110** may be configured to then identify one or more operations likely to be requested by the user based at least in part on the determined characteristic(s) and the received contextual data. For example, if an image browsing application is currently operating on the device (e.g., as indicated by the contextual information) and it is determined that the user touched the touchscreen of the device with two fingers, or other selection device(s) (e.g., stylus, pencil, pen, etc.) (i.e., the characteristic is the number of tactile inputs), the predicted operation likely to be requested by the user may be to scale and/or warp the image currently being viewed. Finally, the processor **110** may be configured to then cause an indicator associated with the identified operation to be displayed, wherein the indicator illustrates a gesture associated with the identified operation. In other words, the indicator shows the user which gesture he or she needs to perform in order to request performance of the corresponding operation.

[0020] In one embodiment, the processor may be in communication with or include memory **120**, such as volatile and/or non-volatile memory that stores content, data or the like. For example, the memory **120** typically stores content transmitted from, and/or received by, the electronic device. Also for example, the memory **120** typically stores software applications, instructions or the like for the processor to perform steps associated with operation of the electronic device in accordance with embodiments of the present invention. In particular, the memory **120** may store software applications, instructions or the like for the processor to perform the operations described above and below with regard to FIG. **3** for providing an input gesture indicator.

[0021] In addition to the memory **120**, the processor **110** can also be connected to at least one interface or other means for displaying, transmitting and/or receiving data, content or the like. In this regard, the interface(s) can include at least one communication interface **130** or other means for transmitting and/or receiving data, content or the like, as well as at least one user interface that can include a display **140** and/or a user input interface **150**. The user input interface, in turn, can comprise any of a number of devices allowing the electronic device to receive data from a user, such as a keypad, a touchscreen or touch display, a joystick or other input device.

[0022] Reference is now made to FIG. **2**, which illustrates one specific type of electronic device that would benefit from embodiments of the present invention. As shown, the electronic device may be a mobile station **10**, and, in particular, a