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consideration to properly elevate, indent, or texturize the display devices described above. If an image of an object is to be simulated or replicated, it is rendered by one or more processors 102 and checked to determine if it can be properly displayed (step 610). The cells in the display device are elevated, indented, or texturized (step 612).

Although features and elements are described above in particular combinations, each feature or element can be used alone without the other features and elements or in various combinations with or without other features and elements. The methods, processes, or flow charts provided herein may be implemented in a computer program, software, or firmware incorporated in a computer-readable storage medium for execution by a general purpose computer or a processor. Examples of computer-readable storage mediums include a read only memory (ROM), a random access memory (RAM), a register, cache memory, semiconductor memory devices, magnetic media such as internal hard disks and removable disks, magneto-optical media, and optical media such as CD-ROM disks, digital versatile disks (DVDs), and BluRay discs.

Suitable processors include, by way of example, a general purpose processor, a special purpose processor, a conventional processor, a digital signal processor (DSP), a plurality of microprocessors, one or more microprocessors in association with a DSP core, a controller, a microcontroller, Application Specific Integrated Circuits (ASICs), Field Programmable Gate Arrays (FPGAs) circuits, any other type of integrated circuit (IC), and/or a state machine.

A processor in association with software may be used to implement a radio frequency transceiver for use in a computer, wireless transmit receive unit (WTRU), user equipment (UE), terminal, base station, radio network controller (RNC), or any host computer. The WTRU may be used in conjunction with modules, implemented in hardware and/or software, such as a camera, a video camera module, a videophone, a speakerphone, a vibration device, a speaker, a microphone, a television transceiver, a hands free headset, a keyboard, a Bluetooth® module, a frequency modulated (FM) radio unit, a liquid crystal display (LCD) display unit, an organic light-emitting diode (OLED) display unit, a digital music player, a media player, a video game player module, an Internet browser, and/or any wireless local area network (WLAN) or Ultra Wide Band (UWB) module.

What is claimed is:

1. A mobile electronic device comprising:
 - a controller component configured to substantially individually control tactile areas on a multi-touch display;
 - a processor is configured to associate an image displayed on the multi-touch display with a first tactile area, wherein the first tactile area has a substantially individually programmable tactile vibration pattern;
 - wherein the image is automatically associated with a second tactile area in association with a sensor detected rotation of the mobile electronic device; and
 - wherein, subsequent to the rotation, the image is automatically associated with the substantially individually programmable tactile vibration pattern.
2. The mobile electronic device of claim 1, wherein the substantially individually programmable tactile vibration pattern is any one of a texturization, gyration, a texturized gyration, or a texturized gyration pattern.
3. The mobile electronic device of claim 1 further comprising:

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the processor is configured to provide a different programmable vibration pattern for the image in response to a zoom operation.

4. The mobile electronic device of claim 1, wherein the individually programmable tactile vibration pattern is changed responsive to motion of the mobile electronic device detected by the sensor or another sensor.

5. The mobile electronic device of claim 1 further comprising at least one piezoelectric device or electro-active polymer (EAP) device in communication with the controller component, wherein the at least one piezoelectric device or electro-active polymer (EAP) device is configured to provide the substantially individually programmable tactile vibration pattern.

6. The mobile electronic device of claim 1, wherein the substantially individually programmable tactile vibration pattern is responsive to at least one of a scrolling or drag and drop input detected by the mobile electronic device.

7. The mobile electronic device of claim 1 further comprising:

circuitry is configured to raise, by the mobile electronic device, each tactile area to a height above a surface of the multi-touch display.

8. A method performed by a mobile electronic device, the method comprising:

controlling, substantially individually by a controller component of the mobile electronic device, tactile areas on a multi-touch display;

associating, by a processor of the mobile electronic device, an image displayed on the multi-touch display with a first tactile area, wherein the first tactile area has a substantially individually programmable tactile vibration pattern;

wherein the image is automatically associated with a second tactile area in association with a sensor detected rotation of the mobile electronic device; and

wherein, subsequent to the rotation, the image is automatically associated with the substantially individually programmable tactile vibration pattern.

9. The method of claim 8, wherein the substantially individually programmable tactile vibration pattern is any one of a texturization, gyration, a texturized gyration, or a texturized gyration pattern.

10. The method of claim 8 further comprising:

providing, by the processor, a different programmable vibration pattern for the image in response to a zoom operation.

11. The method of claim 8, wherein the individually programmable tactile vibration pattern is changed responsive to motion of the mobile electronic device detected by the sensor or another sensor.

12. The method of claim 8 further comprising at least one piezoelectric device or electro-active polymer (EAP) device in communication with the controller component, wherein the at least one piezoelectric device or electro-active polymer (EAP) device provides the substantially individually programmable tactile vibration pattern.

13. The method of claim 8, wherein the substantially individually programmable tactile vibration pattern is responsive to at least one of a scrolling or drag and drop input detected by the mobile electronic device.

14. The method of claim 8 further comprising:

raising, by the mobile electronic device, each tactile area to a height above a surface of the multi-touch display.