

panel and the display device, shape change device **555-b** which can alter a portion of the media player to display scroll wheel **556**, for example, and other computing system blocks that can be utilized for changing topography of a user interface of the media player.

[0203] FIG. **56** illustrates an exemplary personal computer **560** that can include touch sensor panel (trackpad) **564**, shape change device **565**, display **563**, and other computing system blocks that can be utilized for changing topography of a user interface of the personal computer.

[0204] The mobile telephone, media player, and personal computer of FIGS. **54** through **56**, respectively, can improve the user experience by providing a user interface that can change topography according to embodiments of the invention.

[0205] Although embodiments of this invention have been fully described with reference to the accompanying drawings, it is to be noted that various changes and modifications will become apparent to those skilled in the art. Such changes and modifications are to be understood as being included within the scope of embodiments of this invention as defined by the appended claims.

What is claimed is:

1. A user interface comprising:
 - a shape changeable surface configured to selectively alter topography of the user interface according to an input so as to provide a variable tactile feel of the user interface.
2. The interface of claim **1**, wherein the input is at least one of a user interface state or a touch event.
3. The interface of claim **1**, wherein the shape changeable surface comprises individual nodes configured to alter according to the input.
4. The interface of claim **3**, wherein the individual nodes alter by raising above or lowering below the initial shape changeable surface.
5. The interface of claim **1**, wherein the shape changeable surface comprises a deformable material configured to alter according to the input.
6. The interface of claim **5**, wherein the deformable material alters by deforming portions of the material to discrete shapes above or below the initial shape changeable surface.
7. The interface of claim **1**, wherein the shape changeable surface comprises a shape changeable material configured to alter according to the input.
8. The interface of claim **7**, wherein the shape changeable material alters by changing portions of the material to discrete shapes above or below the initial shape changeable surface.
9. The interface of claim **1**, further comprising an input region associated with the shape changeable surface and configured to receive the input.
10. The interface of claim **1**, further comprising an output region associated with the shape changeable surface and configured to display at least one user interface element.
11. The interface of claim **1** incorporated into a touch sensitive device.
12. The interface of claim **11**, the touch sensitive device incorporated into a computing system.
13. The interface of claim **1** incorporated into a mobile telephone.
14. The interface of claim **1** incorporated into a digital media player.

15. The interface of claim **1** incorporated into a personal computer.

16. A device for changing topography of a user interface comprising:

a plurality of nodes proximate to a surface of a user interface, wherein each node is proximate to a particular region of the surface and configured to selectively alter according to an input so as to change topography of the user interface.

17. The device of claim **16**, wherein the nodes are electro-mechanical devices, each electromechanical device having an actuator configured to move according to the input so as to alter a proximate region of the surface.

18. The device of claim **16**, wherein the nodes are shape changeable nodes, each shape changeable node comprising shape changeable material configured to change shape according to the input so as to alter a proximate region of the surface.

19. The device of claim **16**, wherein the nodes are deformable nodes, each deformable node comprising deformable material configured to deform according to the input so as to alter a proximate region of the surface.

20. The device of claim **16**, wherein the nodes alter by at least one of raising, lowering, elongating, shortening, stretching, retracting, or rotating.

21. A method for changing a user interface topography, comprising:

determining a user interface state; and
configuring a user interface according to the determined user interface state.

22. The method of claim **21**, wherein configuring the user interface comprises:

selecting one or more changeable regions of a surface of the user interface; and
altering the selected regions to change topography of the user interface.

23. The method of claim **21**, wherein configuring the user interface comprises adjusting a shape of the user interface to match preferences of the determined user interface state.

24. The method of claim **21**, wherein configuring the user interface comprises configuring touch characteristics of the user interface according to the determined user interface state.

25. The method of claim **24**, wherein configuring the touch characteristics comprises setting active touch regions of the user interface configured to detect a touch and null touch regions of the user interface configured ignore a touch, the touch characteristics associated with topography of the user interface.

26. The method of claim **21**, wherein configuring the user interface comprises configuring display characteristics of the user interface according to the determined user interface state.

27. The method of claim **26**, wherein configuring the display characteristics comprises displaying user interface elements associated with topography of the user interface.

28. The method of claim **21**, further comprising receiving a input including at least one of the user interface state or a touch event.

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