

4. The user interface system of claim 1, wherein the touch sensitive layer detects an input provided by a user that inwardly deforms the deformed particular region of the surface and inwardly deforms the first layer towards the second layer.

5. The user interface system of claim 4, wherein the touch sensitive layer detects a property of the inward deformation provided by the user input selected from the group consisting of: degree of inward deformation, speed of inward deformation, and direction of inward deformation.

6. The user interface of claim 4, wherein the inward deformation of the particular region comes into contact with the first layer.

7. The user interface of claim 4, wherein the inward deformation of the particular region indirectly deforms the first layer.

8. The user interface of claim 7, wherein the fluid is substantially static within the fluid vessel and is substantially incompressible, wherein the inward deformation of the particular region shifts the fluid within the fluid vessel to deform the first layer.

9. The user interface system of claim 1, further comprising a display arranged substantially underneath the sheet that outputs images to the user.

10. The user interface system of claim 9, wherein the display is arranged substantially underneath the touch sensitive layer and wherein the touch sensitive layer cooperates with the sheet to allow light to transmit an image through the sheet without substantial obstruction.

11. The user interface system of claim 1, wherein the first layer of the touch sensitive layer cooperates with the sheet to define the fluid vessel.

12. The user interface system of claim 11, wherein the first layer forms a bottom surface for the fluid vessel.

13. The user interface system of claim 1, wherein the first conductor includes an array of conductors.

14. The user interface system of claim 13, wherein the conductors of the array of conductors cooperate to detect a property of the user input selected from the group consisting of: degree of inward deformation, speed of inward deformation, and direction of inward deformation.

15. A user interface system for receiving a user input comprising:

a sheet that defines a surface and at least partially defines a fluid vessel arranged underneath the surface;

a volume of fluid within the fluid vessel;

a displacement device that influences the volume of the fluid within the fluid vessel to expand and retract at least a portion of the fluid vessel, thereby deforming a particular region of the surface; and

a sensor coupled to the sheet that receives an input provided by a user that inwardly deforms the surface of the sheet and that includes a first conductor and a second conductor that are electrically coupled to each other with an electrical property that changes as the distance between the first and second conductors changes.

16. The user interface system of claim 15, wherein the electrical property is the electrical resistance between the first and second conductors.

17. The user interface system of claim 15, further comprising a processor that detects the change in the electrical property between the first conductor and the second detector to detect an input provided by a user that inwardly deforms the surface.

18. The user interface of claim 15, wherein the first conductor is coupled to an upper portion of the sheet and the second conductor is coupled to a lower portion of the sheet, and wherein a user input provided by a user inwardly deforms the surface and moves the first conductor towards the second conductor by decreasing the distance between the upper portion of the sheet and the lower portion of the sheet.

19. The user interface of claim 18, wherein the sheet is substantially compressible and the user input compresses the sheet to decrease the distance between the upper portion and the lower portion of the sheet.

20. The user interface system of claim 18, wherein the first conductor is coupled to the particular region and wherein the sensor receives a user input provided by a user that inwardly deforms the particular region of the surface.

21. The user interface system of claim 20, wherein the first conductor is mounted to an upper surface of the fluid vessel and the second conductor is mounted to a bottom surface of the fluid vessel.

22. The user interface system of claim 20, wherein the second conductor is mounted to a side wall of the fluid vessel.

23. The user interface system of claim 20, wherein the sensor receives a first user input provided at a first portion of the particular region of the surface and a second user input provided at a second portion of the particular region of the surface that is distinct from the first user input.

24. The user interface system of claim 23, wherein the sensor is a resistive sensor and wherein the first conductor includes a first region arranged at the first portion of the particular region with a first resistance relative to the second conductor and a second region arranged at the second portion of the particular region with a second resistance relative to the second conductor.

25. The user interface of claim 15, further comprising a display arranged underneath the sheet that outputs images to the user.

26. The user interface of claim 25, wherein the sensor cooperates with the volume of fluid and the sheet to transmit an image through the sheet without substantial obstruction.

27. A touch sensitive user interface layer comprising:

a top layer that defines a surface and includes a first set of conductors;

a second layer arranged substantially underneath the first layer that includes a second set of conductors that is electrically coupled to the first set of conductors;

a plurality of spacers arranged between the first and second layers that substantially maintain a distance between the first layer and the second layer and allows the first conductor to move towards the second conductor to receive a user input;

a seal that cooperates with the first and second layers to at least partially define a fluid vessel between the first layer and the second layer that includes at least a portion of the first set and the second set of conductors;

a volume of fluid contained within the fluid vessel; and
a displacement device that influences the volume of the fluid within the fluid vessel to expand and contract at least a portion of the fluid vessel, thereby deforming a particular region of the surface.

28. The touch sensitive layer of claim 27, further comprising a processor that detects an electrical property between the first and second set of conductors and detects the presence of a user input based on the electrical property detected between the first and second set of conductors.