

16. The user interface of claim 14, wherein the displacement device is configured to induce an electrical field across a portion of the cavity, and wherein the free piston is configured to move within cavity in the presence of the electrical field to transition the tactile layer between settings.

17. The user interface of claim 14, wherein the displacement device is configured to induce a magnetic field across a portion of the cavity, and wherein the free piston is configured to move within cavity in the presence of the magnetic field to transition the tactile layer between settings.

18. The user interface of claim 11, wherein a portion of the fluid substantially fills the cavity in both the retracted and expanded settings.

19. The user interface of claim 11, wherein the substrate further defines a fluid channel connected to the cavity and to the displacement device, wherein the displacement device is a pump configured to displace a portion of the volume of fluid through the fluid channel to transition the deformable region from the retracted setting to the expanded setting.

20. The user interface of claim 11, wherein a portion of the fluid fills the cavity to transmit light from the substrate through the tactile layer in both the retracted and the expanded settings.

21. The user interface of claim 11, wherein the displacement device is configured to modify a mechanical property of the tactile layer at the deformable region to transition the deformable region between settings.

22. The user interface of claim 21, wherein the displacement device is configured to generate a voltage potential across a portion of the tactile surface to modify the elasticity of the deformable region.

23. The user interface of claim 11, wherein the displacement device is configured to generate a voltage potential across a portion of the cavity to displace fluid within the cavity to transition the deformable region between settings.

24. The user interface of claim 11, further comprising a display coupled to the substrate and configured to visually output an image of an input key substantially aligned with the deformable region.

25. The user interface of claim 24, wherein a portion of the volume of fluid, the substrate, the tactile layer, and the support member are configured to visually transmit the image from the display through the tactile surface.

26. The user interface of claim 11, wherein in the retracted setting, the deformable region is in contact with the support member, and wherein in the expanded setting, the deformable region is lifted off of the support member.

27. The user interface of claim 11, wherein the deformable and undeformable regions are continuous, and wherein in the retracted setting, the tactile surface of the deformable region is substantially in plane with the tactile surface of the undeformable region.

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