

**27.** The user interface of claim **26**, wherein the support surface resists deformation of the deformable region inward past flush with the undeformable region.

**28.** The user interface system of claim **1**, further comprising an attachment point joining a portion of the back surface of the tactile layer to the substrate and defining a border between the undeformable region and a deformable region, wherein the undeformable region and the deformable region of the tactile layer are adjacent and form a substantially continuous portion of the tactile surface.

**29.** An electronic device incorporating the user interface system of claim **1**, wherein the electronic device is selected from the group consisting of an automotive console, a desktop computer, a laptop computer, a tablet computer, a television, a radio, a desk phone, a mobile phone, a PDA, a personal navigation device, a personal media player, a camera, a gaming console and controller, a remote control, and a watch.

**30.** A method of determining an input location on a tactile surface of a tactile layer of a user interface system, the method comprising the steps of:

- displacing fluid through a fluid channel and a series of fluid ports to outwardly deform a plurality of deformable regions of a tactile layer;
- detecting a change in fluid pressure at a first location within the fluid channel due to an input force applied to the tactile surface at a particular deformable region;
- detecting a change in fluid pressure at a second location within the fluid channel due to the input force applied to the tactile surface;
- selecting the particular deformable region, from the plurality of deformable regions, as the location of the input

force based upon a comparison of the changes in fluid pressure detected at the first and second locations within the fluid channel.

**31.** The method of claim **30**, further comprising the steps of:

- characterizing the input force as a first type if the magnitude of a fluid pressure change is less than a threshold pressure; and
- characterizing the input force as a second type if the magnitude of the fluid pressure change is greater than the threshold pressure.

**32.** The method of claim **30**, further comprising the steps of:

- characterizing the input force as a first type if a fluid pressure change rate is less than a threshold change rate; and
- characterizing the input force as a second type if the fluid pressure change rate is greater than the threshold change rate.

**33.** The method of claim **30**, wherein the step of selecting the particular deformable region from the plurality of deformable regions includes comparing the fluid pressure change rates detected at the first and second locations within the fluid channel.

**34.** The method of claim **30**, further comprising the step of transmitting an image through the tactile layer to a user.

**35.** The method of claim **30**, further comprising the step of closing a valve to retain the fluid within the fluid channel and the fluid ports.

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