ized thereby making it darkened in order to make the area more noticeable to the user. For this configuration, the image displayed on display device layer **202** is rendered to adjust for the darkened area.

FIG. **2***b* is a diagram of an elevated or texturized display device. Layer **218** lays in proximity to display device layer **220** with layer **219** providing separation. Although a single layer is shown, layers **218**, **219**, and **220** may be composed of a plurality of sublayers. Display device layer **220** is configured as a flexible display device, such as flexible OLED. Layer **218** may be comprised of the same composition or materials explained above for layer **204** such as EAPs, piezoelectric materials, or organic transistors.

In FIG. **2***b,* portions of surface **231** are selectively elevated or texturized with one or more substantially cubicle segment $\mathbf{222}_1$ controlling segment $\mathbf{222}_2$, dot or dimple segment $\mathbf{224}_1$ controlling segment $\mathbf{224}_2$, substantially cylindrical segment $\mathbf{226}_1$ controlling segment $\mathbf{226}_2$, or bulge segment $\mathbf{228}_1$ controlling segment $\mathbf{228}_2$. Segments $\mathbf{222}_2$, $\mathbf{224}_2$, $\mathbf{226}_2$, and $\mathbf{228}_2$ are controlled at least by displays controller **120** and/or controller **121** that adjust the height, orientation, direction, or gyration individually or collectively for each segment. Display(s) elevation, indenting, or texturizing controller **121** may comprise of analog or digital driving circuits (not shown) for driving the segments. Since layer **218** is oriented below or behind display device layer **220**, there is little interference with the resolution or clarity of images to be displayed on display device layer **220**. Also, in certain applications images may not be displayed on surface **231** in an area that is elevated, indented, or texturized thereby making it darkened in order to make the area more noticeable to the user. For this configuration, the image displayed on display device layer **220** is rendered to adjust for the darkened area.

FIG. **2***c* is a diagram of an elevated, indented, or texturized display device. Display pixels $\mathbf{232}_1$ to $\mathbf{232}_n$ lay adjacent, on the same level, or on the same layer to elevation, indenting, or texturizing cells $\mathbf{234}_1$ to $\mathbf{234}_n$. The display array or matrix **233** also comprises of display pixels $\mathbf{236}_1$ to $\mathbf{236}_n$ adjacent to elevation, indenting, or texturizing cells $\mathbf{238}_1$ to $\mathbf{238}_n$ that are adjacent to display pixels $\mathbf{240}_1$ to $\mathbf{240}_n$. The elevation, indenting, or texturizing cells may be comprised of the same composition or materials explained above for layer **204** or **218** such as EAPs, piezoelectric material, or organic transistors. Cells $\mathbf{234}_1$ to $\mathbf{234}_n$ and $\mathbf{238}_1$ to $\mathbf{238}_n$ are controlled at least by displays controller **120** and/or controller **121** that adjust the height, orientation, direction, or gyration individually or collectively for each cell. Display(s) elevation, indenting, or texturizing controller **121** may comprise of analog or digital driving circuits (not shown) for driving the cells. In this embodiment, cells $\mathbf{234}_1$ to $\mathbf{234}_n$ and $\mathbf{238}_1$ to $\mathbf{238}_n$ may be illuminated based on the configuration of surrounding pixels to blend in with any images being displayed.

FIG. **2***d* shows an embodiment of a display device array or matrix **235** from a top view where elevation, indenting, or texturizing cells **239** are placed selectively within a small area footprint so that the surface of display device array or matrix **235** is mostly comprised of display pixels **237**. Having texturizing cells **239** sparsely placed in display device array or matrix **235** ensures minimal interference with a displayed image. In this embodiment the elevation, indented, or texturized cells may be unnoticeable to the human eye but detectable by touch or feeling of display device array or matrix **235**.

FIG. **2***e* is a diagram of an elevated, indented, or texturized display device. In FIG. **2***e,* display pixels **242** are in the same layer or level but separate from elevation, indenting, or texturizing cells and display pixels areas **244** and **246**. FIG. **2***e* provides a hybrid layout with display pixels **242** operating with selectively placed elevation, indenting, or texturizing cells and display pixels **244** and **246**. In FIG. **2***e,* area **244** can provide scrolling functions while area **246** can be configured as a keyboard, dialpad, keypad, or any other interface.

FIG. **3** is a diagram of an elevated or texturized display device. A matrix of pockets or cells $\mathbf{304}_1$ to $\mathbf{304}_x$ lays on top of a display device **302**. Matrix of pockets or cells $\mathbf{304}_1$ to $\mathbf{304}_x$ may be full of compressed air or low heat activated gel that becomes elevated or texturized by heating elements **127** as a result of thermal expansion, as understood by one of ordinary skill in the art. Matrix of pockets or cells $\mathbf{304}_1$ to $\mathbf{304}_x$ can be tapered but flat and seamless when unexpanded. Moreover, heating elements **127** can be used to provide different tactile sensations in combination with pockets or cells $\mathbf{304}_1$ to $\mathbf{304}_x$ so that a user is provided varying temperatures, such as hot or cold information, relating to a displayed image.

FIG. **4** is a diagram illustrating processes for an electronic device having a display device **402** with elevated, indented, or texturized display portions. Display device **402** can be assembled with at least some of the components described in device **100**. For elevated, indented, or texturized applications, display device **402** may be configured with the devices described in FIG. **2***a,* **2***c,* or **2***d,* as desired. For elevated or certain texturized applications, display device **402** may be configured with the devices described in FIG. **2***b* or **3**, as desired. For illustrative purposes, in FIG. **4** a darkened or black portion represents an indented portion, a white portion represents an elevated portion, and a checkered pattern represents a texturized portion.

For inputting data or triggering a request action, a "click here" displayed link is provided with a combination of an indented portion $\mathbf{404}_1$ and elevated portion $\mathbf{404}_2$. Moreover, part of a virtual or simulated keyboard displayed on display device **402** provides the letter "E" key with a partially displayed portion **406**, an elevated circular portion **414** and an elevated square portion **408**. Although part of a virtual or simulated keyboard is shown, display device **402** can be configured to show a whole QWERTY keyboard, a numbered keypad for dialing, or a combination of a whole QWERTY keyboard and a numbered keypad, as desired. The letter "S" key is provided by a partially displayed portion and an elevated circular portion **410**. The letter "Q" key is completely elevated by portion **412**. The virtual or simulated keyboard can also be programmed to replicate Braille lettering, as desired.

In addition to key inputs, portions **414**, **408**, **410**, or **412** can detect different pressure forces when pushed down, pushed sideways, or pulled sideways providing another metric or advantage for the man machine interface. For instance, a pull in one direction may indicate a capital letter input while a push in another direction may indicate subscripting of the letter. These different pressure forces are detected by pressure sensors **123** in combination with touch detectors **124** and/or display(s) elevation, indenting, or texturizing controller **121** by measuring gradient, force, or potential difference values. Moreover, in response to a detected force by pressure sensors **123** and touch detectors **124**, haptic feedback, force feedback or tactile feedback in the form of a played sound, gyration, or vibration can be provided via I/O controller **116**.

Still referring to the virtual or simulated keyboard on display device **402**, instructions in software **108** can be used