hover **2504** that can be detected by the sensor panel. FIG. **25***c* illustrates both hands **2500** making a "V shape gesture" over sensor panel **2502** according to embodiments of this invention. FIG. **25***d* shows the images of actual touch **2506** or hover **2512** that can be detected by the sensor panel. FIG. **25***e* illustrates both hands **2500** making an "inverted V shape gesture" over sensor panel **2502** according to embodiments of this invention. FIG. **25***f* shows the images of actual touch **2508** or hover **2516** that can be detected by the sensor panel. FIG. **25***g* illustrates both hands **2500** making an "wing shape gesture" over sensor panel **2502** according to embodiments of this invention. FIG. **25***h* shows the images of actual touch **2510** or hover **2514** that can be detected by the sensor panel.

[0150] In any of these examples, the images can be converted to features, which can then be classified, grouped and interpreted as a particular gesture. Each gesture described above can then cause a particular operation to be performed with regard to UI elements appearing with a certain relationship to the gesture (e.g., UI elements within the triangle formed by the "triangle shape gesture" can be selected, zoomed, and the like). In another example, if multiple touch images taken over time indicate that the "V shape gesture" is being shifted upwards, UI elements within the "V" of the "V shape gesture" could be grouped and translated (moved) upward in accordance with the motion of the "V shape gesture." A similar concept could apply to the "inverted V shape gesture." The "wing shape gesture" could, for example, trigger the desktop faxing or sending of a UI element under the gesture (e.g. a document) or trigger the e-mailing of a document over the Internet.

[0151] FIGS. **26***a*-**26***d* illustrate exemplary "identification gestures" according to embodiments of this invention. An "identification gesture" formed by either or both hands on or over a touch or hover sensitive device can be detected and interpreted to perform operations requiring an identification action, such determining whether the user is to get access, or continue to have access, to a restricted account, file or other item.

[0152] To detect an "identification gesture," either a touch sensor panel with some hover detecting capability or a touch sensor panel co-located with a proximity sensor panel can be employed. FIG. **26***a* illustrates a right hand **2600** beginning an exemplary "identification gesture" over a UI text box element **2608** indicating "Please enter graphical/gestural password" appearing on sensor panel **2602** according to embodiments of this invention. In FIG. **26***a*, right hand **2600** can have only index finger extended and touching the sensor panel, although it should be understood that any one finger or multiple fingers, or even both hands can be used. Over time, the index finger can trace a graphical password **2604**. FIG. **26***b* shows a series of captured images of touch corresponding to FIG. **26***a*, including fingerprint images **2606** changing over time. In some embodiments, image processing logic can receive one or more inputs that cause the image processing logic to enter a certain mode and begin to convert the received images into features, and classify, group, and interpret images **2606** as the start of a possible "identification gesture" as soon as images start to appear. In other embodiments, images **2606** can be stored until further information is received that identifies the images as an "identification gesture." For example, if the complete "identification gesture" is the shape shown in FIG. **26***b*, the composite shape can be recognized as an "identification gesture" only after all images **2606** are fully captured. Note that although the example of FIGS. **26***a* and **26***b* only shows a single stroke by a single hand, it should be understood that one or more strokes, by either or both hands, in series or in parallel, can be used to create an "identification gesture" unique to the user. The gesture need not look like a signature, but can be any symbolic representation of choice.

[0153] A time component can optionally be attached to an "identification gesture." For example, the entire "identification gesture" can be required to be completed within a certain period of time (e.g. a few seconds), otherwise the gesture will be rejected.

[0154] In another embodiment illustrated in FIG. **26***c*, one or more hands **2600** can be used to form an "identification gesture" that need not touch the sensor panel, or may only partially touch the sensor panel. In the example of FIG. **26***c*, the user's right hand can contact the sensor panel, resulting in one or more vertical images of touch **2610** as shown in FIG. **26***d*. In addition, the user's left hand can only hover over the sensor panel **2602**, resulting in an image of hover **2612** with a characteristic hole **2614** in it. In some embodiments, image processing logic can receive one or more inputs that cause the image processing logic to enter a certain mode and begin to convert the received images into features, and classify, group, and interpret images **2610** and **2612** as the start of a possible "identification gesture" as soon as images start to appear. In other embodiments, images **2610** and **2612** can be stored until further information is received that identifies the images as an "identification gesture." For example, if the complete "identification gesture" is the images shown in FIG. **26***d*, the composite shape can be recognized as an "identification gesture" only after all images **2610** and **2612** are fully captured. It should be understood that FIGS. **26***a*-**26***d* are only exemplary in nature, and that a virtually unlimited number of gestures could be used as identification gestures.

[0155] In another embodiment illustrated in FIG. **26***e*, the thumb and another finger of hands **2600** can be placed together near a center of the touch sensor panel, resulting in the image of touch **2616** as shown in FIG. **26***f*, and then spread towards the four corners of the touch sensor panel, generating intermediate images **2618**. Recognition of this "unlock gesture" can unlock and object on application. Alternatively, as shown in FIG. **26***g*, the thumb and another finger of hands **2600** can be placed towards the four corners of the touch sensor panel, resulting in the image of touch **2620** as shown in FIG. **26***h*, and then moved towards the center of the touch sensor panel, generating intermediate images **2622**. Recognition of this "lock gesture" can lock and object on application.

[0156] FIGS. **27***a*-**27***k* illustrate an exemplary "hand edge gesture" according to embodiments of this invention. A "hand edge gesture" can be formed by initially placing the edge of either hand (palm edge plus pinky finger edge) over a touch or hover sensitive device, with the thumb pointing upwards away from the sensor panel or alongside the index finger. With the thumb pointing toward the ceiling (or along surface normal vector), the wrist can advantageously have a much wider range of motion for rotation/orientation than in any other hand arrangement (including rotation with five fingertips, or a hand flat on surface). The hand edge gesture, optionally along with various sweeping motions, can be detected and interpreted to perform operations such as quickly orienting an application or control along the elongated axis defined by the detected hand edge, changing to another desktop, sweeping away applications, icons, files, performing undo or redo operations, and the like.