device on the basis of the location indicator, the force indicator (the x- and y-directions), and the other force indicator (the z-direction).

[0066] A user interface according to an embodiment of the invention comprises: (i) means for producing a location indicator that indicates a location of a spot of a sensor surface that is closest to an external object, (ii) means for producing a force indicator that indicates a temporal change of a first force component directed to the sensor surface and a temporal change of a second force component directed to the sensor surface, the first force component and the second force component being parallel with the sensor surface, and (iii) means for controlling an electronic device on the basis of the location indicator and the force indicator.

[0067] FIG. **5** is a flow chart of a method according to an embodiment of the invention for controlling an electronic device. Phase **501** comprises producing a location indicator that indicates a location of a spot of a sensor surface that is closest to an external object. Phase **502** comprises producing a force indicator that indicates a temporal change of a first force component directed to the sensor surface and a temporal change of a second force component directed to the sensor surface, the first force component and the second force component being parallel with the sensor surface. Phase **503** comprises controlling the electronic device on the basis of the location indicator and the force indicator. The external object can be e.g. a finger of a user of the electronic device.

[0068] In a method according to an embodiment of the invention, the first force component and the second force component are detected in mutually intersecting directions.

[0069] In a method according to an embodiment of the invention, the first force component and the second force component are detected in directions substantially perpendicular with respect to each other.

[0070] In a method according to an embodiment of the invention, the location indicator indicates locations of two or more spots of the sensor surface which are simultaneously touched by two or more external objects.

[0071] In a method according to an embodiment of the invention, the first force component is detected at a first point of a sensor element that comprises the sensor surface and the second force component is detected at a second point of the sensor element.

[0072] In a method according to an embodiment of the invention, the electronic device is controlled to execute a pre-determined function as a response to a situation in which a pre-determined change is detected in one of the following: strength of the first force component and strength of the second force component.

[0073] In a method according to an embodiment of the invention, the electronic device is controlled to execute a pre-determined function as a response to a situation in which a pre-determined change is detected in a direction of a resultant of the first force component and the second force component; e.g. when the resultant is being rotated.

[0074] In a method according to an embodiment of the invention, the electronic device is controlled to execute a pre-determined function as a response to a situation in which a pre-determined change is detected in torque directed to the sensor surface by combined effect of the first force component and the second force component.

[0075] A method according to an embodiment of the invention comprises producing another force indicator that indicates a temporal change of a third force component directed to the sensor surface, the third force component being substantially perpendicular to the sensor surface and the electronic device being controlled on the basis of the location indicator, the force indicator, and the other force indicator.

[0076] In a method according to an embodiment of the invention, the sensor surface is a touch sensitive sensor surface arranged to produce the location indicator as a response to a situation in which the external object is touching the sensor surface.

[0077] In a method according to an embodiment of the invention, the sensor surface is a capacitive sensor surface arranged to produce the location indicator as a response to a situation in which a distance between the sensor surface and the external object is less than a pre-determined limit value.

[0078] In a method according to an embodiment of the invention, the force indicator is produced with force detectors connected to edges of the sensor element (e.g. FIG. **1***a*, **1***b*, or **1***c*) and arranged to detect the first force component and the second force component.

[0079] In a method according to an embodiment of the invention, the force indicator is produced with a ring-sensor arranged to detect the first force component and the second force component (e.g. FIGS. **1***f*, **1***g*, and **1***h*), the ring-sensor being located around a rod attached to a sensor element comprising the sensor surface.

[0080] In a method according to an embodiment of the invention, the force indicator is produced with a torsional sensor arranged to detect torque caused by common effect of the first force component and the second force component (e.g. FIGS. **1***d* and **1***e*).

[0081] In a method according to an embodiment of the invention, at least a part of the sensor surface is capable of operating as a display screen and visual information is displayed on the sensor surface.

[0082] In a method according to an embodiment of the invention, colors displayed on a display screen are changed according (a) temporal change(s) in at least one of the following: a) direction of a resultant of the first, second, and third force components, b) torque caused by combined effect of the first and second force components, and c) strength of the resultant of the first, second, and third force components.

[0083] In a method according to an embodiment of the invention, items displayed on the display screen are scrolled according to (a) temporal change(s) in at least one of the following: a) direction of a resultant of the first, second, and third force components, b) torque caused by combined effect of the first and second force components, and c) strength of the resultant of the first, second, and third force components. For example, scrolling direction (forward/backward) can depend on the direction of the resultant and scrolling speed can depend on the strength of the resultant.

[0084] In a method according to an embodiment of the invention, items displayed on the display screen are zoomed according to (a) temporal change(s) in at least one of the following: a) direction of a resultant of the first, second, and third force components, b) torque caused by combined effect of the first and second force components, and c) strength of the resultant of the first, second, and third force components. For example, zooming direction (zoom in/zoom out) can depend on the direction of the resultant and zooming speed can depend on the strength of the resultant.

[0085] In a method according to an embodiment of the invention, items displayed on the display screen are rotated according to (a) temporal change(s) in at least one of the