

Claims

- [Claim 1] A flexible apparatus, comprising:
a sensor which senses a bending that deforms a shape of the flexible apparatus; and
a controller which performs a controlling operation corresponding to the bending, when a previously set bending is sensed,
wherein the controller adds and provides a bending interaction guide regarding a bending set with respect to each of objects that are displayed on screen.
- [Claim 2] The flexible apparatus of claim 1, further comprising:
an interface which connects to a display apparatus,
wherein the controller transmits information regarding the objects and the bending interaction guide added to the objects, and transmits controlling signals instructing a controlling operation corresponding to the bending to the display apparatus, when the bending is sensed.
- [Claim 3] The flexible apparatus of claim 1, further comprising:
a graphic processor which constitutes a screen comprising at least one of the objects respectively added with the bending interaction guide;
and
a display which displays the screen.
- [Claim 4] The flexible apparatus of claim 3, wherein the bending interaction guide visually expresses bending uniquely set with respect to each object.
- [Claim 5] The flexible apparatus of claim 3, wherein the bending interaction guide visually expresses bending differently set according to a displayed position of each object on the screen.
- [Claim 6] The flexible apparatus of claim 3, wherein, when the screen is converted, the controller equally sets the bending, which is previously set with respect to each displayed position of each object on the screen, to each of new objects which are newly displayed after converting according to displayed position thereof, and
adds and displays the bending interaction guide regarding bending set with respect to the new objects to the new objects.
- [Claim 7] The flexible apparatus of claim 3, wherein the objects are application icons, and the controller implements an application corresponding to the objects, when bending set with respect to the objects is sensed.
- [Claim 8] The flexible apparatus of claim 3, wherein the screen comprises an

input area to input characters or symbols,
the objects are those that express select buttons to input the characters
and the symbols, and
the controller displays characters or symbols corresponding to the
object on the input area, when bending set with respect to the object is
sensed.

- [Claim 9] The flexible apparatus of claim 3, wherein the bending interaction guide comprises a line image guide in which at least one of a line width, a line number, a line shape, a line direction, a line position, a line angle, a line color, a line size, and a line length is adjusted according to characteristic of the bending.
- [Claim 10] The flexible apparatus of claim 9, wherein the bending interaction guide further comprises at least one of a character guide and a symbol guide which are displayed with the line image guide.
- [Claim 11] A control method of a flexible apparatus, comprising:
providing a screen which comprises an object added with a bending interaction guide regarding a bending;
sensing a bending which deforms a shape of the flexible apparatus; and
performing an operation corresponding to the object, when a bending set with respect to the object displayed on the screen is sensed.
- [Claim 12] The control method of claim 11, wherein the providing screen comprises transmitting information regarding the object and the bending interaction guide added to the object to a display apparatus which is connected to the flexible apparatus, and displaying the screen through the display apparatus.
- [Claim 13] The control method of claim 11, wherein the providing the screen further comprises:
constituting a screen which comprises one or more objects respectively added with the bending interaction guide; and
displaying the screen through a display mounted on the flexible apparatus.
- [Claim 14] The control method of claim 13, wherein the bending interaction guide visually expresses bending uniquely set with respect to each object.
- [Claim 15] The control method of claim 13, wherein the bending interaction guide visually expresses bending differently set according to marking position of each object on the screen.

CLAIMS

1. A flexible apparatus, comprising:
a flexible display;
a sensor configured to sense deformation of the flexible apparatus; and
a controller configured to:
control the flexible display to display a plurality of objects and a plurality of interaction guides corresponding to the plurality of objects,
in response to deformation corresponding to an interaction guide being sensed, perform an operation associated with an object corresponding to the sensed deformation,
wherein each of the plurality of objects is corresponding to each of the plurality of interaction guides;
wherein the each of the plurality of interaction guides is displayed in the corresponding object, and the plurality of interaction guides are different from one another.
2. The flexible apparatus of claim 1, further comprising:
an interface which connects to a display apparatus,
wherein the controller transmits information regarding the objects and the bending interaction guide added to the objects, and transmits controlling signals instructing a controlling operation corresponding to the bending to the display apparatus, when the bending is sensed.
3. The flexible apparatus of claim 1, further comprising:
a graphic processor which constitutes a screen comprising at least one of the objects respectively added with the bending interaction guide; and
a display which displays the screen.
4. The flexible apparatus of claim 3, wherein the bending interaction guide visually expresses bending uniquely set with respect to each object.
5. The flexible apparatus of claim 3, wherein the bending interaction guide visually expresses bending differently set according to a displayed position of each object on the screen.
6. The flexible apparatus of claim 3, wherein, when the screen is converted, the controller equally sets the bending, which is previously set with respect to each displayed position of each object on the screen, to each of new objects which are newly displayed after converting according to displayed position thereof, and
adds and displays the bending interaction guide regarding bending set with respect to the new objects to the new objects.

7. The flexible apparatus of claim 3, wherein the objects are application icons, and the controller implements an application corresponding to the objects, when bending set with respect to the objects is sensed.
8. The flexible apparatus of claim 3, wherein the screen comprises an input area to input characters or symbols, the objects are those that express select buttons to input the characters and the symbols, and the controller displays characters or symbols corresponding to the object on the input area, when bending set with respect to the object is sensed.
9. The flexible apparatus of claim 3, wherein the bending interaction guide comprises a line image guide in which at least one of a line width, a line number, a line shape, a line direction, a line position, a line angle, a line color, a line size, and a line length is adjusted according to characteristic of the bending.
10. The flexible apparatus of claim 9, wherein the bending interaction guide further comprises at least one of a character guide and a symbol guide which are displayed with the line image guide.
11. A control method of a flexible apparatus, comprising:
 - providing a flexible display;
 - providing a sensor configured to sense deformation of the flexible apparatus; and
 - providing a controller configured to:
 - control the flexible display to display a plurality of objects and a plurality of interaction guides corresponding to the plurality of objects,
 - in response to deformation corresponding to an interaction guide being sensed, perform an operation associated with an object corresponding to the sensed deformation,
 - wherein each of the plurality of objects is corresponding to each of the plurality of interaction guides,
 - wherein the each of the plurality of interaction guides is displayed in the corresponding object, and the plurality of interaction guides are different from one another.
12. The control method of claim 11, wherein the providing screen comprises transmitting information regarding the object and the bending interaction guide added to the object to a display apparatus which is connected to the flexible apparatus, and displaying the screen through the display apparatus.
13. The control method of claim 11, wherein the providing the screen further comprises:
 - constituting a screen which comprises one or more objects respectively added with the bending interaction guide; and

displaying the screen through a display mounted on the flexible apparatus.

14. The control method of claim 13, wherein the bending interaction guide visually expresses bending uniquely set with respect to each object.

15. The control method of claim 13, wherein the bending interaction guide visually expresses bending differently set according to marking position of each object on the screen.