displaying apparatus **100** includes a display panel **110**, a bend member **120***a*, and a bend member **120***b* and both the bend member **120***a* and the bend member **120***b* have elasticity. The bend member **120***a* and the bend member **120***b* are referred to bend member **120** hereinafter. Each of the bend member **120***a* and the bend member **120***b* is provided at an edge of the surface of the frame **100***a*. In addition, it is preferable that both the bend member **120***a* and the bend member **120***b* are located separately so that the user can operates the bend member **120***a* and the bend member **120***b* by each of his hands.

When reading a book, a reader turns pages as bending the book. In this embodiment, the displaying apparatus **100** updates the display in the display panel **110**, based on deformation volume of the bend member **120**. In other words, the user bends each of the bend member **120***a* and the bend member **120***b* when he wants to update the display of the display panel **110**. Therefore, the user can get the feeling of turning the pages of a book.

In addition, each of the surfaces of the bend member **120***a* and the bend member **120***b* especially extends in a direction (for example, perpendicular direction). The displaying apparatus **100** decides a contact position of the user on the surface of the bend member **120**, and sets the updating speed to update the display in the display panel **110** based on the decided contact position. Therefore, the user can change the updating speed for the display in the display panel **110** only by changing the contact position at the bend member **120**.

FIG. **2** is an A-A section view of the bend member **120***a* shown in FIG. **1**. The structure of the bend member **120***b* is the same as the bend member **120***a* except that the structures of bend members **120***a* and **120***b* are axisymmetrical. The bend member **120***a* has a deformation volume detector **122***a* on its bottom and a position detector **124***a* on its surface. The deformation volume detector **122***a* is a plurality of piezoelectric materials, each of which is located in certain interval along a longitudinal direction of the bend member **120***a*. In this case, the displaying apparatus **100** detects the deformation volume based on a voltage, which occurs according to the distortion in the piezoelectric material. For example, the position detector **124***a* is an electrostatic pad, and detects the contact position of the user in bend member **120***a*. In addition, the position detector **124***a* is overlapped with the deformation volume detector **122***a*. Accordingly, the displaying apparatus **100** can detect the contact position of the user in the bend member **120**, and the deformation volume at the contact position.

Moreover, a top surface **126** on the bend member **120***a* includes a plurality of vertical-stripe unevenness. The unevenness is formed so that the user can recognize the height of the unevenness when the user touches the unevenness. For example, the height is equal to or less than 1 mm. The user touches the unevenness when updating the display in the display panel **110**. Therefore, according to this embodiment, it is possible to get the feeling as if touching the edge part of the pages in a book.

FIG. **3** is a functional configuration showing the displaying apparatus **100**. The displaying apparatus **100** further includes a display data storing unit **130** and a display controller **140**, besides the display panel **110**, and the bend members **120***a* and **120***b*. The display data storing unit **130** stores a group of display data, which includes a plurality of display data, of which numerical order for displaying is predetermined. The group of display data is, for example, an electronic book or an electronic album. The display data is, for example, a page of the electronic book or the electronic photograph. The display controller **140** controls the display in the display panel **110**, based on the results, detected by both a deformation volume detector **122***a* included in the bend member **120***a* and a deformation volume detector **122***b* included in the bend member **120***b*. The details of the operation with respect to the display controller **140** will be described with reference to a following flowchart.

FIG. **4** is a flowchart showing the operation of the display controller **140**. The display controller **140** decides the contact position of the user at the bend member **120**, based on each of the results of the position detector **124***a* and the position detector **124***b* (S**20**). Next, the display controller **140** sets the display data to be displayed firstly based on the decided contact position (S**22**). For example, when the user moves the contact position to an upper part at the bend member **120** shown in FIG. **1**, the display controller **140** sets data of which display order is previous to the present display data, as the display data to be display firstly In this case, the display order is a numerical order with respect to the display data. When the user moves the contact position to a lower part in the bend member **120** shown in FIG. **1**, the display controller **140** sets data of which display order is next to the present display data, as the display data to be display firstly.

The display controller **140** decides which of the deformation volume detector **122***a* and the deformation volume detector **122***b* the user bends, based on which of the deformation volume detector **122***a* and the deformation volume detector **122***b* detects the deformation volume (S**24**). In this case, the display controller **140** decides that the user has bended either the bend member **120***a* or the bend member **120***b* on the condition that the detected deformation volume exceeds a predetermined volume.

Next the display controller **140** set the updating order for updating the display data, based on the results of the decision by the bend member **120** that is bended (S**26**). For example, the display controller **140** sets the updating order in the display order when the display controller **140** decides that the bend member **120***a* has been bended, while the display controller **140** sets the updating order in an inverse order of the display order when the display controller **140** decides that the bend member **120***b* has been bended. In this case, the displaying apparatus **100** may change each of the sensitivities of the deformation volume detector **122***a* and the deformation volume detector **122***b* in accordance with the contact position. For example, the sensitivity is set lower as the contact position is located at upper position at the bend member **120** in FIG. **1**. Thus, the possibility of updating the display data excessively despite of the intension of the user becomes low.

The display controller **140** decides the contact position of the user at the bend member **120**, based on the result of the detection by the position detector **124***a* or by the position detector **124***b* (S**28**), and sets the updating speed of the display data based on the contact position (S**30**). For example, when the user moves the contact position to an upper part at the bend member **120** shown in FIG. **1**, the display controller **140** speeds up the updating speed, while when the user moves the contact position to a lower part at the bend member **120** shown in FIG. **1**, the display controller **140** slows down the updating speed.

After displaying the display data to be displayed firstly, the display controller **140** updates the display data, based on both the updating order and the updating speed (S**32**).

When the user continues to bend the bend member **120**, the display controller **140** repeats the steps from S**24** to S**32** (S**34** YES). In the step of S**34**, if the user does not continue to bend the bend member **120** for a predetermined time, the display controller **140** decides that the user stop bending (S**34** NO), and stops updating the display data. Accordingly, the user can