[0049] FIG. **3** schematically shows a variation of the touch input display device according to a second embodiment of the present invention. Here there is, as in FIG. **2**, an information presentation layer **26**. However, the touch detecting unit is provided through a light source **28** and a detector **30**, where the light source **28** scans the surface of the information presentation layer **26**, the light of which is received by the detector **30**, which is connected to the control unit **16**. Upon touching or providing a touching member close to the information presentation layer **26** the ray of light generated by the light source is broken, where the position can be converted to a position and used for determining an area selected by a user. This technique also follows well known principles. However there does not have to be a touch of the display surface in order to indicate a selection of objects, it is sufficient that a touching member, like the finger of a user or another object like a pen, is brought close to the display surface.

[0050] FIG. **4** schematically shows a display according to a third and presently contemplated preferred embodiment of the present invention. As before there is an information presentation layer **26** showing visual information, which layer has been divided into a number of display elements. Above the information presentation layer **26** there is provided a sensing and control layer **32** of piezoelectric material. This layer is controlled by a piezoelectric driving unit **36**, which is also connected to the control unit **16**. Here there is also provided a layer of flexible material **34**, which the control unit **16** makes the sensing and control layer **32** to raise in selected areas that are to be presented as an object **38**. The information presentation layer **26** and the layer of flexible material **34** here form an information presentation unit, while the sensing and control layer **32** forms a touch detecting unit. Here a number of display elements are being raised by the piezoelectric material such that an object **38** like a key appears on the display. Additional information **40** relating to this object **38** is at the same time displayed in the information presentation layer **26**, which information is indicated by a hatched area. The object can be depressed. Upon depression of the object **38** the sensing and control layer **32** senses the pressure or force and converts it to an electric signal that can be processed by the control unit **16**. The processing of such a signal will be described in more detail shortly.

[0051] FIG. **5** schematically shows a key **38** that is provided on a display. As can be seen from the figure the key **38** is made up a number of display elements adjacent each other and here shown as a 6×6 square of these elements, indicated by a hatched area. In the figure there is also shown a centre area **44** made up of the four display elements in the middle of the square and a peripheral area **48** made up of the display elements in the key **38** that run along the perimeter or circumference of the square, where these areas will be described in more detail later. The centre area **44** and the peripheral are shown with diagonal hatches, while an area of the object in-between is shown with vertical hatches. It should here be realized that the size of the key is only shown as an example for describing the invention. The key is furthermore just an example of an object and may furthermore be such things as a an icon or some other type of object that the user can influence. The peripheral area might furthermore be wider and the centre area might be wider as well as smaller. In fact it can be as small as one display element in the middle of the object. Naturally the object need not be shaped as a square, but can have any other form that can be provided by the display elements.

[0052] FIG. **6**A-**6**C shows how an object is being depressed in the display device according to the third embodiment and how the object is being moved in dependence thereof. FIG. **7** shows a flow chart of a method of moving an object according the present invention.

[0053] The general way the invention according to the preferred embodiment of the present invention is working will now be described with reference being made to FIGS. **6** and **7**.

[0054] The control unit first makes the sensing and control layer **32** provide an object **38** on the display by raising a part of the flexible material layer **34** in the display element positions that are to represent the object. This raised part is a first position of the object, which is shown as a middle area in the layer **34** shown in FIG. **6**A. At the same time the control unit makes the information presentation layer **26** display information **40** below the object **38**. The object is here provided in the form of a key and the information displayed is information regarding the meaning of the key, like for instance the letter "k". The piezoelectric material of the sensing and control layer **32** is capable of detecting vertical forces as well as tangential forces, which tangential forces gave raise to shear forces within the material. The control unit thus awaits user inputs via the display. When the user then touches the key with his finger **46**, which is shown in FIG. **6**B, the touch is detected, step **56**, which detection is made using the piezoelectric material of the sensing and control layer **32**, which converts a force being applied to the flexible material layer **34** into electric signals. The touch is here made up of a vertical component and a horizontal component. As the object is being moved horizontally, at least one edge thereof, which edge is provided in the peripheral area of the object, is forced against the surrounding non-raised material of the layer **34**. This forcing against the surrounding non-raised material is an effect on the object caused by the touch of the finger **46**. This creates a shear force S within the flexible material that is sensed by the sensing and control layer **32**. Also a vertical force F is here detected. The forces are here provided in the area of the sensing and control layer **32** corresponding to the affected display elements, i.e., the display elements in the peripheral region. The two forces are then converted to at least one electrical signal that is transferred to the control unit. Thereafter the control unit compares the vertical force F with a threshold T1. If the vertical force is higher than the threshold T1, step **50**, the touch is interpreted as being a selection of the function of the key and not as a moving of the key, and therefore the control unit performs the action associated with the key, step **52**. If however the vertical force was below the threshold T1, step **50**, the control unit assumes that the user input was a selection to move the key. Based on the shear force part of the signal, the control unit then determines a distancing factor based on the shear S, step **54**. Thereafter the control unit orders the moving of the object by a distance and in a direction determined by the distancing factor, step **56**. The object is thus moved to a second position determined by the distancing factor. The control unit does this by making the sensing and control layer **32** lower the pushed region and raise another region in the direction that the object was pushed. In FIG. **6**C this is shown as being the neighboring area to the right of the middle area. At the same time the control unit makes the information presentation layer to show the same information **40** under the newly raised area.

[0055] In this way it is possible to move an object like a key by looking at the horizontal force applied.