of an apparatus in which the display element **200** is to be used, as will be further elucidated below. The rigid protective layer **202** will protect display layers **204** from being damaged during use. The display layers **204** can comprise, in the case of a liquid crystal display, a polarizing layer **206**, an electrode layer **207**, a layer comprising crystal polymer **208**, a further electrode layer **209**, a further polarizing layer **210**, a backlighting layer **211**, which can be a light guide or a electroluminescent element, and a reflecting layer **212**. Layers **206** to **212** are an example of layers that can be used for the electro-optical modulation of light for providing graphical content, and other configurations for providing electro-optical modulation of light for providing graphical content which are used in the art of display technology can be equally suitable. For provision of patterned light, a light emitting layer, e.g. an organic light emitting diode layer, can be provided as display layers **204**. In this case, each picture element is provided by an addressable and illuminating part of the light emitting layer. This part can thus be controlled whether to provide light and preferably how much light that is to be provided. The principle of slight deformation upon application of a force without breaking the layers, as elucidated with reference to FIG. **1** above also applies here. This small local deformation will, as will be elucidated below with reference to FIGS. **5***a* and **5***b*, and FIGS. **9***a* and **9***b*, enable detection of the applied force, which detection will be detected on the "backside" of the display element, i.e. at the display layer side of the display element.

[0022] For the understanding of the function of the principle, the display element will be illustrated in its functional context before describing its function in detail. FIGS. **3***a* and **3***b* schematically illustrates an apparatus **300**, where FIG. **3***a* is a front view of the apparatus **300**. The apparatus **300** has a display arrangement **302** according to an embodiment of the invention. FIG. **3***b* is a section view along line A-A of FIG. **3***a*. Not to obscure the elements, FIG. **3***b* is made schematic and no crosshatchings are drawn. The display arrangement **302** comprises a rigid protective layer **303**, which is arranged to form a part of the outer surface of the apparatus **300**, and which is the display area which a user of the apparatus is experiencing, as illustrated in FIG. **3***a*. The protective layer **303** can be a glass layer, or a layer of transparent and rigid polymer, such as polycarbonate or polymethyl methacrylate. The display arrangement further comprises one or more display layers **304**, as has been elucidated with reference to FIGS. **1** and **2**. Attached to at least a part of the backside of the display arrangement **302**, there is a force sensitive layer **306**, e.g. made of polyvinylidene fluoride which has piezoelectric properties, from which deformation of any part can be converted into an electrical signal, e.g. by collecting signals from different parts of the force sensitive layer, or scanning a grid of electrodes applied to the force sensitive layer, such that the position where the force is applied can be derived by a processing means, preferably arranged in a circuitry part **308** of the apparatus **300**. The force sensitive layer **306** preferably comprises one or more separate patches of such material where e.g. each patch is mapped to a recognisable position for detection.

[0023] The different elements of the apparatus **300** is supported and kept in place by a supporting structure **310**. The apparatus can also comprise a battery **312** arranged to power supply the apparatus **300**, and an antenna arrangement **314** arranged to receive and/or transmit data, e.g. for wireless communication, receiving broadcasted signals, or signals for determining position from a navigation satellite system. Further elements can be present, such as image acquiring means, wired interface, memory card interface, etc., depending on the type of apparatus. The circuitry part **308**, which can be one or more elements although it here is depicted as a single element for the sake of easier understanding, can comprise processing means, memory circuits and/or devices, power circuitry, possible radio circuitry, interface circuitry, etc. which may be arranged on and interconnected by one or more printed circuit boards and their conductive traces, respectively.

[0024] The rigid protective layer **303**, as well as the display layers **304**, will upon application of a force allow small local deformation without breaking. This small local deformation will, as will be elucidated below with reference to FIGS. **5***a* and **5***b*, enable detection of the applied force, which detection will be detected by the force sensitive layer **306** on the backside of the display element **302**. The force and deformation will propagate to the force sensitive layer **306**, which will be squeezed between the display element **302** and the supporting structure **310** at a position corresponding to the part of the display element **302** where a user applies the force by touching or tapping the display surface, i.e. the rigid protective layer **303**. Alternatively, the force sensitive layer is arranged to detect the deformation by being stretched together with the backside of the display element due to the curve implied by the deformation. This is particularly suitable for designs where a supporting structure **310** is not feasible or wanted for at least a part of the area to be detected. In the case of a polyvinylidene fluoride, this deformation will give rise to a piezoelectric effect, i.e. an electric charge, which can be collected by an electrode and be decoded by the processing means.

[0025] FIG. **4** schematically illustrates an alternative embodiment of an apparatus **400** from a similar view as FIG. **3***b*, where a sensor layer **402** covers the entire area of a display element **404**. In other senses, the same features and options as those demonstrated with reference to FIG. **3***b* are applicable.

[0026] FIGS. **5***a* and **5***b* illustrate a part of a display arrangement **500** comprising a display element **502** according to any of the embodiments of display elements described above, comprising a rigid protective layer **503** and one or more display layers **504** and a force sensitive layer **506** arranged alongside the display element **502**. A surface **507** of a supporting structure **508** is also illustrated.

[0027] In FIG. **5***a*, the display arrangement **500** is not yet touched or tapped by a user **510**. In FIG. **5***b*, the user **510** applies a force on the rigid protective layer **503** by touching or tapping it, e.g. by a finger. The rigid protective layer **503**, as well as the display layers **504**, will upon application of the force allow small local deformation without breaking.

[0028] In FIG. **5***b*, the illustration of the deformation is for providing understanding of the principle and may be exaggerated for illustrative purposes. This small local deformation will, by deformation Δ of the force sensitive layer **506** at a position corresponding to the position where the user **510** touches or taps the display element **502**, enable detection of the applied force and the position, which detection can be provided as an electrical signal to be decoded by a processing means. The force sensitive layer **506** can comprise pads of polyvinylidene fluoride film, or other force sensitive elements. These can be arranged at spots to be defined positions to be detected.