

FIGS. 35B and 35C indicate a transparent film member for surface protection and a transparent film member for insulating between layers.

#### Embodiment 7

[0322] FIG. 36 shows a configuration of an input device 700 as a seventh embodiment. In this embodiment, the input device 700 in which the embodiments of the touch-sensitive sheet members 150 and 160A are combined. There is provided the input device 700 that is possible to execute the operation panel building mode in which seventeen element muscle portions G1 to G17 forming a first group and/or eight element muscle portions G18 to G25 forming a second group can be selected for every group.

[0323] Also in this embodiment, the CPU 32 for controlling the touch-sensitive sheet member 170 for presenting a sense of touch executes the driving control so as to supply the driving voltage to the element muscle portions G1 to G25 of the touch-sensitive sheet member 170 corresponding to the image contents displayed on the display unit 29, so that the element muscle portions G1 to G25 are available at the electrode-forming positions corresponding to the image contents.

[0324] To the input device 700 shown in FIG. 36, the structure of the element muscle portions G1 to G25 of the touch-sensitive sheet member 150 shown in the fifth embodiment and the structure of the electrodes 51, 52 of the touch-sensitive sheet member 160 relating to the sixth embodiment are applied. In the input device 700, any information is inputted by the slide and/or press operation depending on the finger or the like of the operator 30 (operation body). The input device 700 includes the display unit 29, the input detection unit 45 and the touch-sensitive sheet member 170.

[0325] The display unit 29, similarly as the fifth embodiment, at a time of the input operation, displays the icon images of a key K1 of numeral "1" to a key K10 of numeral "0", a key K11 of symbol "\*", a key K12 of a symbol "#", or the like, a key K13 of determination "O" of a cross key, a left facing arrow key K14 thereof, an upward facing arrow key K15 thereof, a right facing arrow key K16 thereof, a downward facing arrow key K17 thereof, a key K18 of "etc", a key K19 of "REW", a left facing arrow stop key K20, a right facing arrow stop key K21, a left facing fast-forward key K22, a fast-forward key K23, a reproduction key K24 and a stop key K25 or the like. As the display unit 29, a color organic EL display device or a liquid crystal display device (LCD device) is used.

[0326] The input detection unit 45 which constitutes the detection unit is provided on the upper portion of the display unit 29. The input detection unit 45 includes the operation surface. The input detection unit 45 is provided on the upper portion of the display unit 29 and operates so as to detect the slide position of the operator's finger or the like. As the input detection unit 45, for example, a capacitive touch panel is used. With respect to the input detection unit 45, anything is available only if the cursoring and the selection function can be distinguished. For example, other than the capacitive input device, it also may be a resistive touch panel, an input device of a surface acoustic wave system (SAW) or an optical system, a tact switch of a multi stage system or the like. Preferably, it may be enough if the input device has a constitution by which position detection information and press detection information can be applied to a control system.

[0327] The transparent touch-sensitive variable sheet unit 170 constituting the touch-sensitive sheet member is pro-

vided on the upper portion of the input detection unit 45. The touch-sensitive variable sheet unit 170 is provided so as to cover the whole of the input detection unit 45 and is slid and/or pressed down along the operation surface of the display unit 29. It is needless to say that the touch-sensitive variable sheet unit 170 may have a configuration covering a portion of the input detection unit 45. The touch-sensitive variable sheet unit 170 is provided with the individual insertion structure of the element muscle portions G1 to G25 of the touch-sensitive sheet member 150 shown in the fifth embodiment and the electrode parallel arrangement structure of the touch-sensitive sheet member 160A relating to the sixth embodiment.

[0328] In this embodiment, the touch-sensitive sheet member 170 includes an insulated and transparent electrode film portion 511 on the upper portion of the input detection unit 45. The electrode film portion 511 is composed of a polyethylene terephthalate (PET) based transparent material having the thickness of around 0.1 [mm] and an ITO film. A plurality of positive/negative electrode patterns 51a, 52a corresponding to the respective operation key elements for first group and a plurality of positive/negative electrode patterns 51b, 52b corresponding to the respective operation key elements for second group are electrically divided and arranged in parallel in the electrode film portion 511. These plural electrode patterns 51a, 52a are connected in parallel and at the same time, the plural electrode patterns 51b, 52b corresponding to the respective operation key elements for second group are connected in parallel. Wiring patterns which are connected in parallel respectively and arranged in the positive/negative manner are gathered at a pull-out terminal 512.

[0329] In the touch-sensitive sheet member 170, there is provided a transparent base frame portion 53 as explained in the fifth embodiment. The base frame portion 53 has predetermined hardness and also has twenty five elliptical apertures r1 to r25. As the base frame portion 53, a polycarbonate (PC), an acrylic resin (PMMA) or the like having thickness of around 0.01 to 0.5 [mm] is used. Also in this embodiment, the element muscle portions G1 to G25 are arranged in the inside of the elliptical concave shaped portions constituted by the base frame portion 53 and the electrode film portion 511. For example, each of the element muscle portions G1 to G25 has predetermined volume and the element muscle portions G1 to G25 are arranged by inserting them into the corresponding apertures r1 to r25 in the base frame portion 53 one by one.

[0330] For example, the element muscle portion G1 is inserted into the aperture r1 of the base frame portion 53 or is integrally molded to the base frame portion 53. Similarly, the element muscle portion G2, the element muscle portion G3, the element muscle portion G4, the element muscle portion G5, the element muscle portion G6, the element muscle portion G7 and the element muscle portion G8 are inserted into the aperture r2, the aperture r3, the aperture r4, the aperture r5, the aperture r6, the aperture r7 and the aperture r8, respectively or each is integrally molded to the base frame portion 53. Further, the element muscle portion G9, the element muscle portion G10, the element muscle portion G11, the element muscle portion G12, the element muscle portion G13, the element muscle portion G14, the element muscle portion G15, the element muscle portion G16 and the element muscle portion G17 are inserted into the aperture r9, the aperture r10, the aperture r11, the aperture r12, the aperture