r13, the aperture r14, the aperture r15, the aperture r16 and the aperture r17, respectively or each is integrally molded to the base frame portion 53.

[0331] Also, the element muscle portion G18, the element muscle portion G19, the element muscle portion G20, the element muscle portion G21, the element muscle portion G22, the element muscle portion G23, the element muscle portion G24 and the element muscle portion G25 are inserted into the aperture r18, the aperture r19, the aperture r20, the aperture r21, the aperture r22, the aperture r23, the aperture r24 and the aperture r25, respectively or each is integrally molded to the base frame portion 53. In a case in which the above-mentioned insertion method is employed, the respective element muscle portions G1 to G25 is bonded to the electrode patterns 52*a*, 52*b* through ring shaped double-sided tapes 56. The element muscle portions G1 to G25 constitute the sense-of-touch-representing unit. Each of the element muscle portions G1 to G25 has, for example, an elliptical cylinder shape and thickness of around 0.01 to 0.5 [mm].

[0332] A film portion 5 constituting a function of a lid portion is provided on the upper portion of the base frame portion 53. As the film portion 5, there is used a transparent material having transmissivity and a refractive index which are approximately equal to transmissivity and a refractive index of the base frame portion 53. There is used, for example, a zeonor (trademark) having the film thickness of around 25 [μm]. The hardness thereof is around 20° to 40°.

[0333] In the above-mentioned base frame portion 53, the apertures r1 to r12 for the keys of numerals "0" to "9", the key of symbol "*", the key of symbol "#" or the like and the apertures r13 to r17 for the cross key, which correspond to the icon images for the input operation, respectively have elliptical shapes. The above-mentioned element muscle portions G1 to G25 are arranged corresponding to the keys K1 to K25 of various kinds of functions.

[0334] The element muscle portion G1 is arranged, similarly as the fifth embodiment, on the key K1 of numeral "1" of the icon image displayed on the display unit 29. The element muscle portion G2 is arranged on the key K2 of numeral "2" of the icon image displayed on the display unit 29. The element muscle portion G3 is arranged on the key K3 of numeral "3" of the icon image displayed on the display unit 29. The element muscle portion G4 is arranged on the key K4 of numeral "4" of the icon image displayed on the display unit 29. The element muscle portion G5 is arranged on the key K5 of numeral "5" of the icon image displayed on the display unit 29. The element muscle portion G6 is arranged on the key K6 of numeral "6" of the icon image displayed on the display unit 29. The element muscle portion G7 is arranged on the key K7 of numeral "7" of the icon image displayed on the display unit 29. The element muscle portion G8 is arranged on the key K8 of numeral "8" of the icon image displayed on the display unit 29. The element muscle portion G9 is arranged on the key K9 of numeral "9" of the icon image displayed on the display unit 29. The element muscle portion G10 is arranged on the key K10 of numeral "0" of the icon image displayed on the display unit 29.

[0335] Also, the element muscle portion G11 is arranged on the key K11 of symbol "*" of the icon image displayed on the display unit 29. The element muscle portion G12 is arranged on the key K12 of symbol "#" of the icon image displayed on the display unit 29. The element muscle portion G13 is arranged on the key of determination "O" of the cross key of the icon image displayed on the display unit 29. The element muscle portion G14 is arranged on the left facing arrow key of the icon image displayed on the display unit 29. The element muscle portion G15 is arranged on the upward facing arrow key of the icon image displayed on the display unit 29. The element muscle portion G16 is arranged on the right facing arrow key of the icon image displayed on the display unit 29. The element muscle portion G17 is arranged on the downward facing arrow key of the icon image displayed on the display unit 29.

[0336] Further, the element muscle portion G18 is arranged on the key of "etc" of the icon image displayed on the display unit 29. The element muscle portion G19 is arranged on the key of "REW" of the icon image displayed on the display unit 29. The element muscle portion G20 is arranged on the left facing arrow stop key of the icon image displayed on the display unit 29. The element muscle portion G21 is arranged on the right facing arrow stop key of the icon image displayed on the display unit 29. The element muscle portion G22 is arranged on the left facing fast-forward key of the icon image displayed on the display unit 29. The element muscle portion G23 is arranged on the fast-forward key of the icon image displayed on the display unit 29. The element muscle portion G24 is arranged on the reproduction key of the icon image displayed on the display unit 29. The element muscle portion G25 is arranged on the stop key of the icon image displayed on the display unit 29.

[0337] As the electrode film portion 511 which holds these element muscle portions G1 to G25, there is used a transparent thin film material having transmissivity and a refractive index which are approximately equal to transmissivity and a refractive index of the base frame portion 53. For the electrode patterns 51*a*, 51*b*, 52*a*, 52*b*, there is used, for example, an ITO film having the film thickness of around 0.1 to 0.125 [mm]. The hardness thereof is around 20° to 40°.

[0338] The plurality of electrode patterns 51*a*, 51*b* and the plurality of electrode patterns 52*a*, 52*b* which are arranged in the positive/negative manner in the electrode film portion 511 are connected with the driving power supply 55A, not shown in FIG. 36, which applies the driving voltage to the twenty five element muscle portions G1 to G25 for presenting a sense of touch which are sandwiched between the film portion 5 and the electrode film portion 511 for every group. For the driving power supply 55A, there is used a power supply unit having the direct-current power supply and the electrode selection function as explained in FIG. 29.

[0339] The configuration and the information processing example of the mobile phone mounted with the input device 700 are approximately similar as the configuration of the mobile phone 600 shown in FIG. 20 and the information processing example shown in FIG. 23, so that the explanation thereof will be omitted. It should be noted that with respect to mobile phone mounted with the input device 700, the block diagram can be applied by reading the input device 300 with the input device 700 and further, by reading the touch-sensitive variable sheet unit 103 with the touch-sensitive sheet member 170 in the block diagram shown in FIG. 20. Also, the flowchart can be applied by reading the element bag portions with the element muscle portions and by reading air-circulation unit 3A with the driving power supply 55A in the description on the flowchart shown in FIG. 23.

[0340] In this manner, according to the input device 700 as the seventh embodiment, the driving power supply 55A applies the DC driving voltage to the element muscle portions G1 to G17 or the element muscle portions G18 to G25 for