a copper foil or the like is provided at the center of the upper surface of a circuit board. The ground layer helps to prevent a signal generated in the lower part of the circuit board from disturbing X-electrodes and Y-electrodes.

[0025] Preferably, the controller comprises a reference signal storing unit for storing a reference signal, which is a detection signal obtained by scanning the electrodes of the first electrode layer and the second electrode layer while no operation is performed; and a correction value calculating unit for subtracting the reference signal from a detection signal while an operation is performed, thereby correcting the detection signal during the operation.

[0026] In the coordinate input device of the present invention, the electrodes are scanned when an indicating device such as a finger or a pen is not in contact with or is not approaching the coordinate detector (while no operation is performed), and an obtained detection signal is stored as a reference signal. Then, by subtracting the reference signal from a detection signal obtained by scanning the electrodes while the indicating device is put on the coordinate detector (during operation), variation in electrostatic capacitance generated by the indicating device is calculated so as to detect the coordinate position of the indicating device. Accordingly, variation in the electrostatic capacitance between the electrodes and the disturbance of noise from the control circuit can be removed from the detection result, and thus the coordinate input device which has a high detection accuracy and which operates stably can be achieved.

[0027] Each of the first insulating layer, the second insulating layer, and the third insulating layer may comprise a flexible resin substrate.

[0028] With this arrangement, the coordinate detector is flexible and thus the coordinate detector can be placed at a curved surface. Accordingly, the freedom of arrangement of the coordinate input device can be enhanced.

[0029] The light transmittance of the coordinate detector is preferably 90% or more.

[0030] With this arrangement, information displayed on the back side of the coordinate detector can be clearly seen. For example, by displaying the method for using the coordinate input device on the back side of the coordinate detector, a user can easily know the method, and thus the usability of the coordinate input device can be improved.

[0031] The coordinate detector and the controller of the coordinate input device may be connected to each other by a flexible wiring board, and the flexible wiring board may be placed on a side of the display device so that the controller is placed on the back side of the display device.

[0032] With this arrangement, the controller does not protrude outward from the coordinate detector in the coordinate input device, and thus the space for the coordinate input device can be reduced and the space in electronic equipment including the coordinate input device can be effectively used. Since the coordinate detector is transparent, it is not preferable to place the controller on the back side of the coordinate detector. However, by providing the display device on the back side of the coordinate detector and providing the controller on the back side of the display device, the controller can not be seen from the coordinate detector side.

[0033] The coordinate detector and the display device may be held on a casing and one or a plurality of push button switches may be provided on the upper surface of the casing. With this arrangement, operation buttons can be integrated into the coordinate input device. Accordingly, the coordinate input device can be easily integrated into electronic equipment and separate operation buttons are not required. Therefore, the manufacturing cost can be reduced.

BRIEF DESCRIPTION OF THE DRAWINGS

[0034] **FIG. 1** is a plan view of a coordinate input device according to an embodiment of the present invention;

[0035] **FIG. 2** is an exploded perspective view of the coordinate input device shown in **FIG. 1**;

[0036] **FIG. 3** is a plan view of a coordinate input element according to the embodiment of the present invention;

[0037] **FIG. 4** is a plan view of a coordinate detector of the coordinate input element shown in **FIG. 3**;

[0038] **FIG. 5** is a longitudinal sectional view of the coordinate detector of the coordinate input element shown in **FIG. 3**;

[0039] **FIG. 6** is a side view of a coordinate input device according to another embodiment of the present invention; and

[0040] **FIG. 7** is an exploded perspective view of a known coordinate input device.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0041] Hereinafter, embodiments of the present invention will be described with reference to the drawings.

[0042] **FIG. 1** is a plan view showing an example of a coordinate input device according to an embodiment of the present invention and **FIG. 2** is an exploded perspective view of the coordinate input device **1** shown in **FIG. 1**. The coordinate input device **1** shown in **FIGS. 1 and 2** includes a coordinate input element **10**, a liquid crystal display device (display device) **20** placed on the back side of the coordinate input element **10**, a casing **30** for holding the coordinate input element **10** and the liquid crystal display device **20**, and two push button switches **40** and **41** provided on the casing **30**.

[0043] The liquid crystal display device **20** is placed at the center on the upper side of the casing **30** so as to be sandwiched by the coordinate input element **10** and the casing **30**. The display area of the liquid crystal display device **20** faces the back side of a coordinate detector **11** of the coordinate input element **10**. The push button switches **40** and **41** are formed in an L-shape and a reverse L-shape, respectively, in plan view, first ends of the push button switches **40** and **41** are fixing portions **40**A and **41**A, and the other ends are operation buttons **40**B and **41**B operated by a user. The L-shaped push button switch **40** and the reverse L-shaped push button switch **41** are placed symmetrically, with the center being the opposing portions of the ends of the operation buttons **40**B and **41**B. These push button switches **40** and **41** are placed so as to surround part of the liquid crystal display device **20**. The fixing portions **40**A and **41**A