[0027] **FIG. 4** is a cross-sectional view illustrating a resistive type touch panel according to the related art.

[0028] **FIG. 5** is a cross-sectional view illustrating a capacitive type touch panel integrated with an LCD device according to the related art.

[0029] **FIG. 6** is a cross-sectional view illustrating a touch panel integrated with an LCD device according to a first embodiment of the present invention.

[0030] **FIG. 7** is an exploded view illustrating a touch panel integrated with an LCD device according to the first embodiment of the present invention.

[0031] **FIG. 8** is a cross-sectional view illustrating a resistive type touch panel taken along line I-I' of **FIG. 7** according to the first embodiment of the present invention.

[0032] **FIG. 9** is a cross-sectional view illustrating a touch panel integrated with an LCD device according to the second embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0033] Reference will now be made in detail to the preferred embodiments of the present invention, examples of which are illustrated in the accompanying drawings. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

[0034] A touch panel for a display device according to embodiments the present invention will be described with reference to **FIGS. 6 through 9**. More particularly, **FIG. 6** is a cross-sectional view illustrating a touch panel integrated with an LCD device according to a first embodiment of the present invention. **FIG. 7** is an exploded view illustrating a touch panel integrated with an LCD device according to the first embodiment of the present invention. FIG. **8** is a cross-sectional view illustrating a resistive type touch panel taken along line I-I' of **FIG. 7** according to the first embodiment of the present invention. **FIG. 9** is a cross-sectional view illustrating a capacitive type touch panel integrated with an LCD device according to the second embodiment of the present invention.

[0035] As shown in **FIG. 6, a** touch panel integrated with the LCD device according to embodiments of the present invention includes an LCD panel **21**, upper and lower polarizing plates **22** and **23**, a backlight **24**, a resistive type touch panel **25**, a conductive pattern **32**, and a case top **29**. Upper and lower substrates (not shown) are bonded to each other with a fixed gap therebetween. A liquid crystal (not shown) is injected between the upper and lower substrates, thereby forming the LCD panel **21**. The LCD panel **21** displays a picture image according to external driving and picture signals. An upper polarizing plate **22** is formed above the LCD panel **21** and a lower polarizing plate **23** is formed under the LCD panel **21**. A backlight **24** uniformly irradiates light upon the rear of the LCD panel **21**. The resistive type touch panel **25** is formed on the LCD panel **21** for detecting a touched point by outputting a voltage value corresponding to the touched point. A case top **29** supports the backlight **24**, the LCD panel **21** and the resistive type touch panel **25**. A conductive pattern **32** is formed on the circumference of an upper surface of the resistive type touch panel **25**, and the case top **29** is connected to the conductive pattern **32**.

[0036] As shown in **FIG. 8, a** resistive type touch panel **25** according embodiments of the present invention is provided with transparent upper and lower substrates **27** and **26** including PolyEthylene Terephthalate (PET) film, and spacers **28** between the upper and lower substrates for maintaining a fixed interval between the upper and lower substrates. As shown in **FIG. 7, a** transparent electrode (ITO, not shown in the drawings) having a constant resistance value is formed on a surface (surface opposing the lower substrate) of-the upper substrate **27** of the PET film, and a metal electrode **27***a* is formed on the transparent electrode corresponding to upper and lower side dead space regions to provide a power along Y-axis direction. Also, the transparent electrode (ITO, not shown in the drawings) having the constant resistance value is formed on a surface of the lower substrate **26**, and a metal electrode **26***a* is formed on the transparent electrode corresponding to left and right side dead space regions to provide the power along X-axis direction. The conductive pattern **32** is formed at a periphery of the surface that does not have the transparent electrode or the metal electrode **27***a*.

[0037] If static electricity discharges from a finger when the finger is touched at a point of the touch panel **25**, the conductive pattern **32** discharges the static electricity to the case top **29**. Accordingly, it is preferable to form the conductive pattern **32** only in the dummy space region when the conductive material is opaque. In the case of the conductive pattern **32** being formed of a transparent metal material, it is not necessary to form the conductive pattern **32** in the dummy space region. Signal lines **30***a* and **30***b* are connected for applying the power to the respective metal electrodes **26***a* and **27***a,* and reading a voltage of a contact point.

[0038] Spacers **28** are dispersed on the lower substrate **26**, and then the upper and lower substrates **27** and **26** are bonded to each other in the dead space region by an adhesive tape **31**. More particularly, the upper and lower substrates **27** and **26** are bonded to each other at connection portions between the signal lines **30***a* and **30***b* and the metal electrodes **26***a* and **27***a* by a conducting adhesive. Generally, the signal lines **30***a* and **30***b* are formed of Flexible Printed Cable (FPC).

[0039] Although not shown, when a glass type substrate is used for the resistive type touch panel **25**, the conductive pattern **32** is formed in the periphery of the display surface of the touch panel **25**, and the conductive pattern **32** is connected to a system case instead of the case top. At this time, the case top or system case is formed of a conductive material.

[0040] An operation of the touch panel integrated with the LCD device according to the first embodiment of the present invention will be described as follows. A power supply voltage Vcc and a ground voltage GND are applied to upper and lower sides of the transparent electrode printed on the upper substrate **27** via the two signal lines **30***a* connected to the upper substrate and the metal electrodes **27***a*. The power supply voltage Vcc and the ground voltage GND are also applied to the left and right sides of the transparent electrode printed on the lower substrate **26** via the two signal lines **30***b* connected to the lower substrate and the metal electrodes **26***a*. If the surface of the upper substrate **27** is touched at the predetermined point with a pen or finger, the transparent electrodes (not shown) of the upper and lower substrates