ment, the same code numbers are given to shared components, and detailed description thereof is omitted.

FIG. **7** is a sectional view showing the schematic configuration of a liquid crystal display device **100** pertaining to the present embodiment.

As shown in FIG. **7**, the touch panel substrate **14** is arranged on the outer face **2***a* side of the color filter substrate **2** of the liquid crystal display panel **30** (the face of the color filter substrate **2** which is opposite the liquid crystal layer **4** side).

Transmitters **54** (**51**) that transmit surface acoustic waves and receivers **53** (**52**) that receive the transmitted surface acoustic waves are provided on the inner face **14***a* of the touch panel substrate **14**. The surface acoustic waves are generated on the inner face **14***a* of the touch panel substrate **14**.

The resin film **26** is provided on the outer face **2***a* side of the color filter substrate **2** with the opening of a fixed interstice relative to the touch panel substrate **14** via the spacers **12**. The resin film **26** is formed with approximately the same planar rectangular external dimensions as the touch panel substrate **14**, and is arranged opposite the touch panel substrate **14**. In the present embodiment, the attenuation factor of the resin film **26** is higher than the reception strength attenuation factor of surface acoustic waves due to noise, and the Young's modulus of the resin film **26** is lower than that of the below-mentioned upper polarization plate **15**. As the resin film **26**, one may use, for example, polyethylene.

The upper polarization plate **15** of the liquid crystal display panel **30** is arranged on the outer face **26***a* side of the resin film **26** (the face which is opposite the touch panel substrate **14** of the resin film **26**). The upper polarization plate **15** may be disposed so as to closely adhere to the resin film **26**, or it may be disposed with the opening of a fixed interstice relative to the resin film **26**.

In the present embodiment, as the resin film **26** is provided inside the touch panel **50**, it is possible to obtain the same effects as the aforementioned first embodiment.

In the present embodiment, the input part pressed by the user is configured from the resin film **26** and the upper polarization plate **15**, and a glass substrate is not used. As the elastic modulus of the input part pressed by the user is lower than in the case where a glass substrate is used, the area of the contact portion of the resin film **26** bent by pressing and the touch panel **14** is expanded. Accordingly, the surface acoustic waves that are propagated over the inner face **14***a* side of the touch panel substrate **14** can be reliably attenuated at the position that is pressed. By this means, malfunctioning of the liquid crystal display device **100** can be prevented.

Electronic Equipment

Next, a description is given regarding one example of electronic equipment of the present invention.

FIG. **8** is an oblique view showing a cell phone (electronic equipment) provided with a liquid crystal display device **100** having the aforementioned touch panel functions.

As shown in FIG. **8**, a cell phone **600** is provided with a first body **106***a* and a second body **106***b* which are foldable around a hinge **122**. The first body **106***a* is provided with a liquid crystal device **601**, multiple control buttons **127**, an earpiece **124**, and antenna **126**. The second body **106***b* is provided with a mouthpiece **128**.

According to the electronic equipment pertaining to the present embodiment, as it is provided with the liquid crystal display device **100** that prevents malfunctions, and that prevents shattering of the glass of the touch panel (the touch panel substrate or first touch panel substrate), it is possible to offer a cell phone **600** with high performance and high reliability.

The liquid crystal display device **100** with the aforementioned touch panel functions can be applied to a variety of electronic equipment apart from the aforementioned cell phone. For example, it is possible to apply it to such electronic equipment as liquid crystal projectors, multimedia-compatible personal computers (PCs) and engineering workstations (EWS), pagers, word processors, televisions, video tape recorders of the viewfinder type or monitor direct-view type, electronic notepads, electronic desktop calculators, car navigation devices, POS terminals, and touch panels.

The technical scope of the present invention is not limited to the aforementioned embodiments, and include various modifications that can be made to the aforementioned embodiments within a scope that does not deviate from the intent of the present invention.

For example, it goes without saying that the touch panel **50** pertaining to the first embodiment and the touch panel **50** pertaining to the second embodiment may be attached not only to the aforementioned liquid crystal display device, but also to other display devices such as organic EL display devices.

What is claimed is:

1. An electro-optical device, comprising:

an electro-optical panel including a first substrate, a second substrate, and an electro-optical substance interposed between the first and the second substrates;

a third substrate arranged on the second substrate;

a fourth substrate made from glass and arranged on the third substrate via a spacer;

a position detector provided on the third substrate and detecting a pressed position on the fourth substrate based on changes in surface waves generated on the third substrate;

a resin film provided on the fourth substrate and opposed to the third substrate; and

a resin plate arranged on the fourth substrate, the fourth substrate having a first side and a second side opposing the first side, the resin film being provided on the first side, the second side having a depressed part in which the resin plate is disposed, the depressed part substantially corresponding to a touch area.

2. The electro-optical device according to claim **1**,

wherein the electro-optical panel is a liquid crystal display panel,

the electro-optical substance is a liquid crystal, and

the resin plate is a polarization plate.

3. The electro-optical device according to claim **1**, wherein Young's modulus of the resin film is smaller than that of the fourth substrate and smaller than that of the resin plate.

4. The electro-optical device according to claim **1**, wherein the Young's modulus of the resin film is 4 GPa or less.

5. The electro-optical device according to claim **1**, wherein the resin film is polyethylene.

6. Electronic equipment that comprises the electro-optical device according to claim **1**.

7. The electro-optical device according to claim **1**, wherein the resin film and the resin plate are made of different materials.

8. An electro-optical device, comprising:

an electro-optical panel including a first substrate, a second substrate, and an electro-optical substance interposed between the first and the second substrates;