

Display data and the like are transmitted via, for instance, a flexible printed circuit board **152**. Since the elements themselves emit light, no backlight is required, which makes it possible to provide an image display module with a lower profile compared to an image display module constituted with a liquid crystal module. In this case, too, the quantity of light output can be controlled in correspondence to each pixel by controlling the quantity of emitted light in correspondence to a specific element, and the organic EL module which includes a color filter is ideal for full-color display of still and dynamic images, as is the liquid crystal module. Furthermore, since pixels set in a non-light emitting state are black areas where light having been transmitted through transmitting areas at the character display module **20** is absorbed, the transmitting areas can be shown as is. Thus, the organic EL module can be utilized in a manner similar to that explained in reference to the previous embodiments. It is to be noted that the image display module may instead be constituted by using inorganic EL elements.

[**0172**] FIG. **29** presents an example in which a single glass substrate is shared by an image display module and a character display module. Namely, the glass substrate and **61** in the figure is used both as an upper glass substrate of the image display module (liquid crystal module) and as a lower glass substrate of the character display module. A transparent electrode portion for the image display module is formed on the lower surface side of the glass substrate **61**, whereas a transparent electrode portion for the character display module is formed on the upper surface side of the glass substrate **61**. In this structure, a polarizing plate **13** on the upper side of the image display module is disposed at the upper surface of the character display module. FIG. **30** presents an example in which a single glass substrate **62** is used for dual purposes, i.e., as a glass substrate on the upper side of the image display module (organic EL module) and also as a glass substrate on the lower side of the character display module.

[**0173**] By allowing the two display modules to share a single glass substrate in this manner, a reduction in the number of required parts and a lower profile are achieved while assuring advantages similar to those described earlier.

[**0174**] It is to be noted that while the display element at the character display module is constituted with a cholesteric liquid crystal in the explanation given above, the display element may instead be constituted with a PN (polymer network) liquid crystal. Since a PN liquid crystal is also used to provide display by setting the individual pixels in either a transmitting state or a reflecting state, it can be used in applications similar to those explained above. Since the PN liquid crystal does not have a memory retention property, power must be continuously supplied in order to sustain the display. However, since no light is emitted, the power consumption can be kept at an absolute minimum, and thus, better power efficiency is assured compared to the power requirement for a system in which all displays are provided through an image display module.

[**0175**] Moreover, since the reflected light at the PN liquid crystal is white light, black-and-white displays can be provided via the PN liquid crystal. In other words, instead of the yellow display explained earlier in reference to the cholesteric liquid crystal, a white color display (white characters or a white background) achieving a higher contrast can be provided.

[**0176**] While the present invention is adopted in electronic devices (electronic instruments) such as a PDA, a digital camera and a portable telephone in the embodiments described above, it may be adopted with equal effectiveness in other types of electronic devices, e.g., various portable devices including Electronic Books, mobile personal computers and the like.

[**0177**] While the invention has been particularly shown and described with respect to preferred embodiments and variations thereof by referring to the attached drawings, the present invention is not limited to these examples and it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit, scope and teaching of the invention.

[**0178**] The disclosures of the following priority applications are herein incorporated by reference:

[**0179**] Japanese Patent Application No. 2004-320096 filed Nov. 4, 2004

[**0180**] Japanese Patent Application No. 2005-017882 filed Jan. 26, 2005

[**0181**] Japanese Patent Application No. 2005-058593 filed Mar. 3, 2005.

1. A display device, comprising:

a first display unit that provides a light emitting display by individually controlling a light emitting quantity for each pixel; and

a second display unit that allows either a transmitting state for transmitting ambient light or a reflecting state for reflecting the ambient light to be selected in correspondence to each pixel and brings up a display by assuming a specific combination of a transmitting area and a reflecting area, wherein:

the second display unit is layered over the first display unit so that the first display unit can be viewed through the transmitting area at the second display unit.

2. A display device according to claim 1, wherein:

when a display is brought up at the first display unit, an area of the second display units corresponding to a display area at the first display unit at least is set as the transmitting area at the second display unit.

3. A display device according to claim 1, wherein:

when a display is brought up at the second display unit, all pixels at the first display unit corresponding to a display area at the second display unit are set in a non-emitting state at the first display unit.

4. A display device according to claim 1, wherein:

when a display is brought up at the second display unit, pixels at the first display unit corresponding to a specific area containing the transmitting area in a display area of the second display unit are set in an emitting state and other pixels are set in a non-emitting state at the first display unit.

5. A display device according to claim 3, wherein:

when a display is brought up over the display area of the second display unit and a display is brought up over another display area at the first display unit simultaneously, an area at the second display unit, which