

[54] SURFACE-TYPE ILLUMINATION DEVICE AND LIQUID CRYSTAL DISPLAY

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[52] U.S. Cl. 349/61; 349/5; 349/62

[58] Field of Search 359/40, 42, 48, 359/49, 50, 70; 362/26, 31, 32, 330

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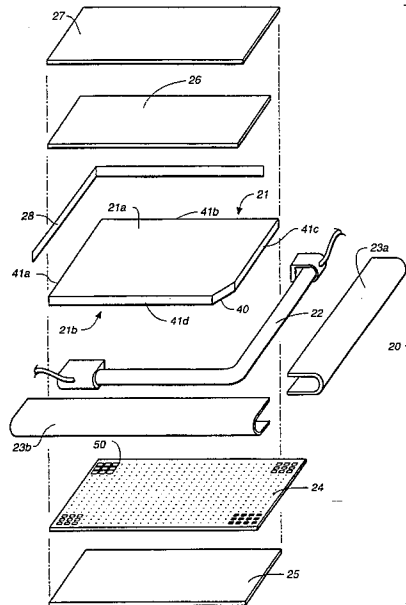
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[57] ABSTRACT

A surface-type illumination device suitable for providing backlight in a liquid crystal display is disclosed. For example, an L-shaped fluorescent light can be used as an illuminant and mounted next to two edges of a substantially rectangular light guide plate. The corner of an edge portion between the two edges is removed. The fluorescent light, the length of whose illuminating portion is long, is positioned with an appropriate gap from the light guide plate allowing for illumination with high brightness and low power consumption. Consequently, when the illumination device is used in a color liquid crystal display, appropriate backlight with high brightness can be obtained. Moreover, because the influence of the temperature from the illumination device is small, a stable color display can be achieved.

18 Claims, 12 Drawing Sheets



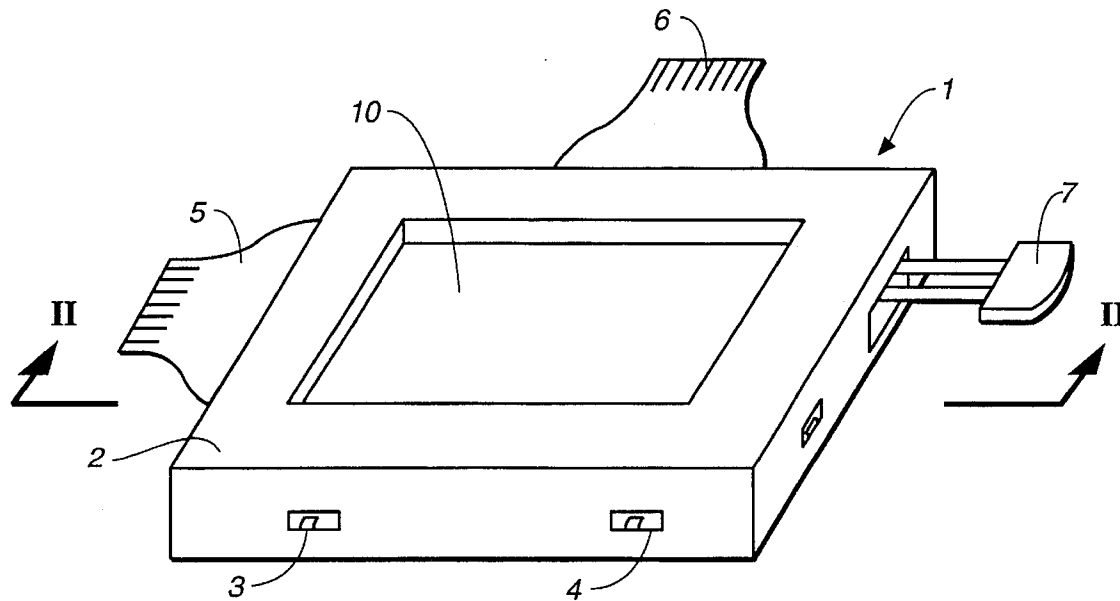


FIG. 1

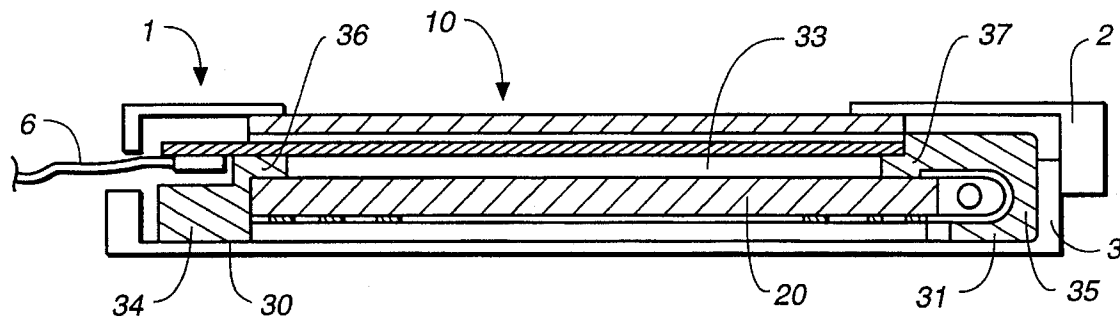


FIG. 2

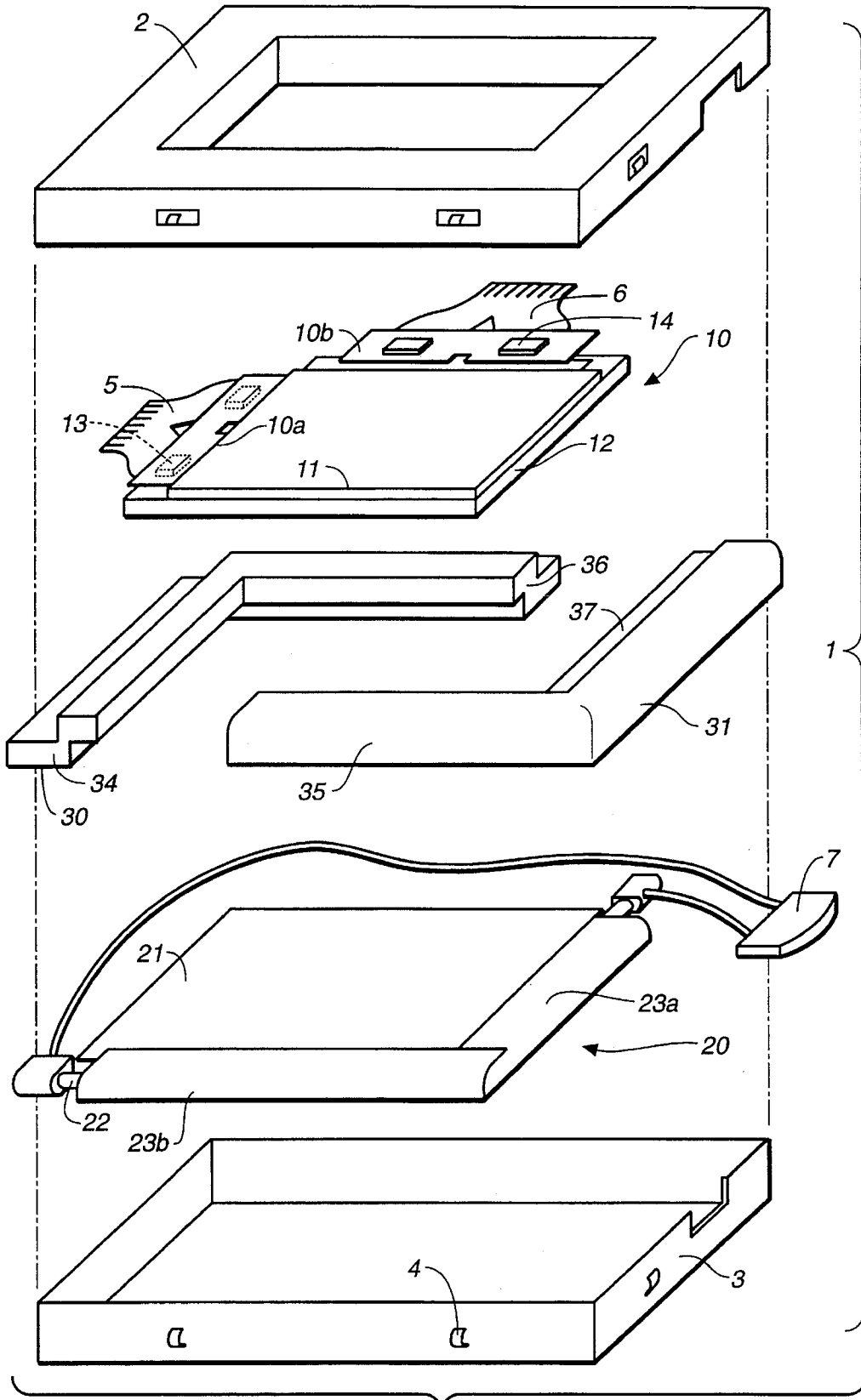


FIG. 3

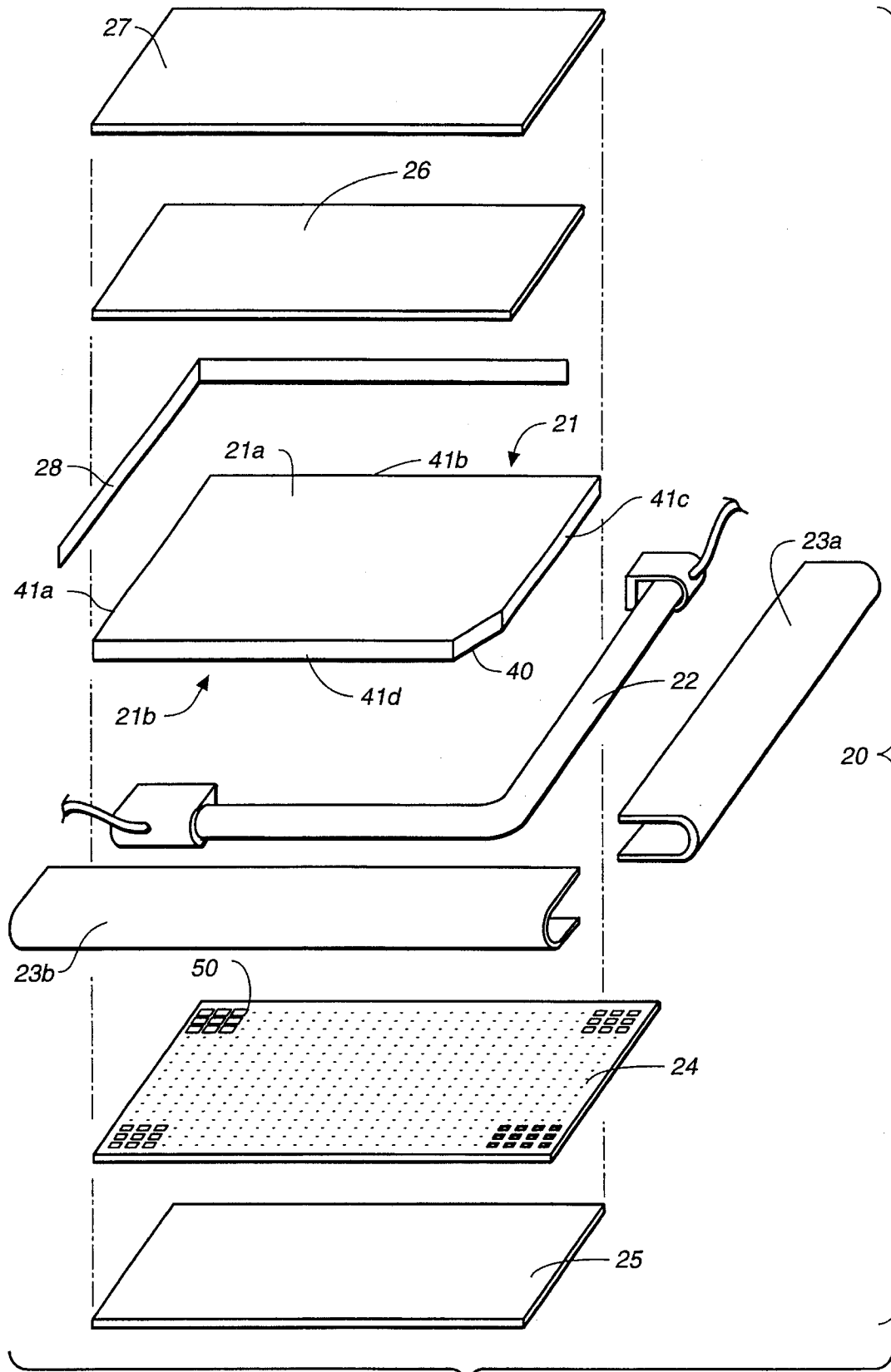


FIG. 4

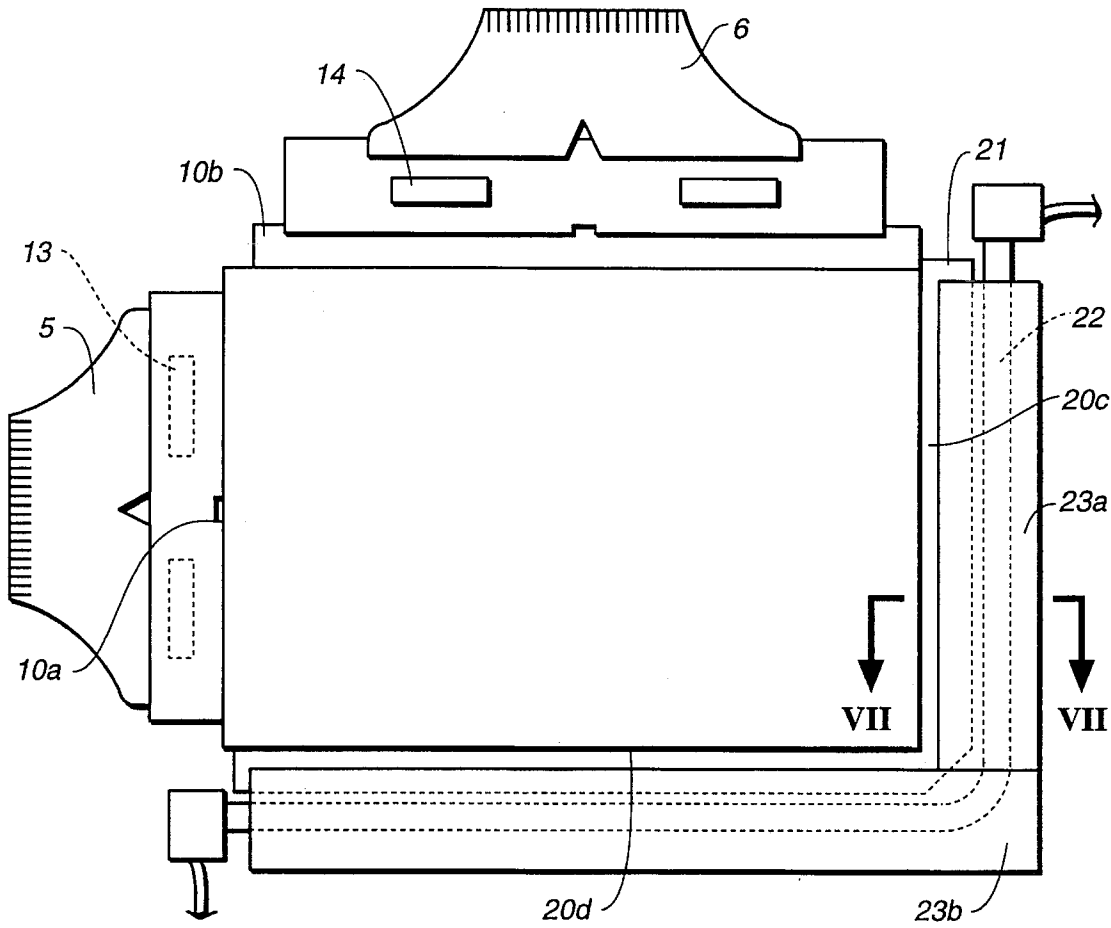


FIG. 5

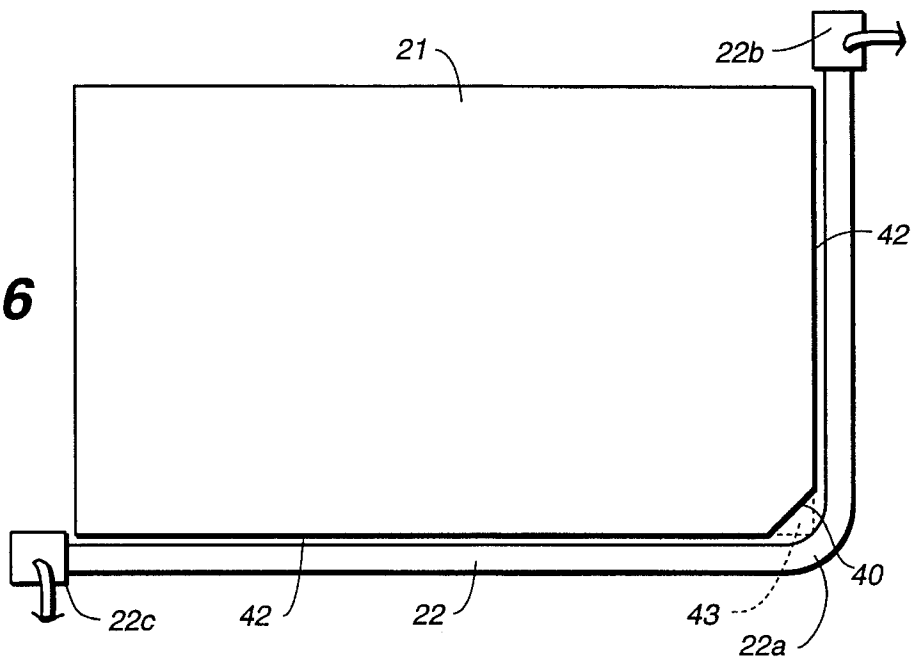


FIG. 6

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