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(54) **VERTICALLY ALIGNED MODE LIQUID CRYSTAL DISPLAY WITH DIFFERENTIATED B CELL GAP**

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(57) **ABSTRACT**

A thin film transistor array substrate is provided with a gate line assembly, a data line assembly, and thin film transistors. The data line assembly crosses over the gate line assembly while defining pixel regions. A pixel electrode is formed at each pixel region. A color filter substrate is provided with a black matrix, and color filters of red, green and blue are formed at the black matrix at the pixel regions. An overcoat layer covers the color filters, and a common electrode is formed on the overcoat layer with an opening pattern. The thin film transistor array substrate, and the color filter substrates face each other, and a liquid crystal material is injected between the thin film transistor array substrate, and the color filter substrate. The blue color filter has a thickness smaller than the red color filter or the green color filter such that the liquid crystal cell gap at the blue color filter is larger than the liquid crystal cell gap at the red or green color filter.

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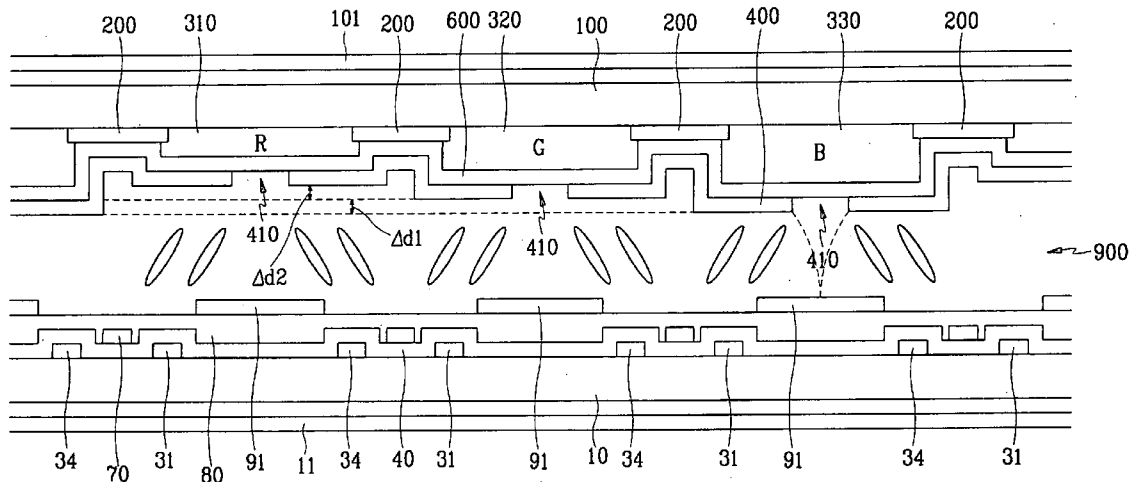
(73) Assignee: **Samsung Electronics, Co., Ltd**

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Related U.S. Application Data

(63) Continuation of application No. 10/036,305, filed on Dec. 28, 2001, now Pat. No. 7,075,600.



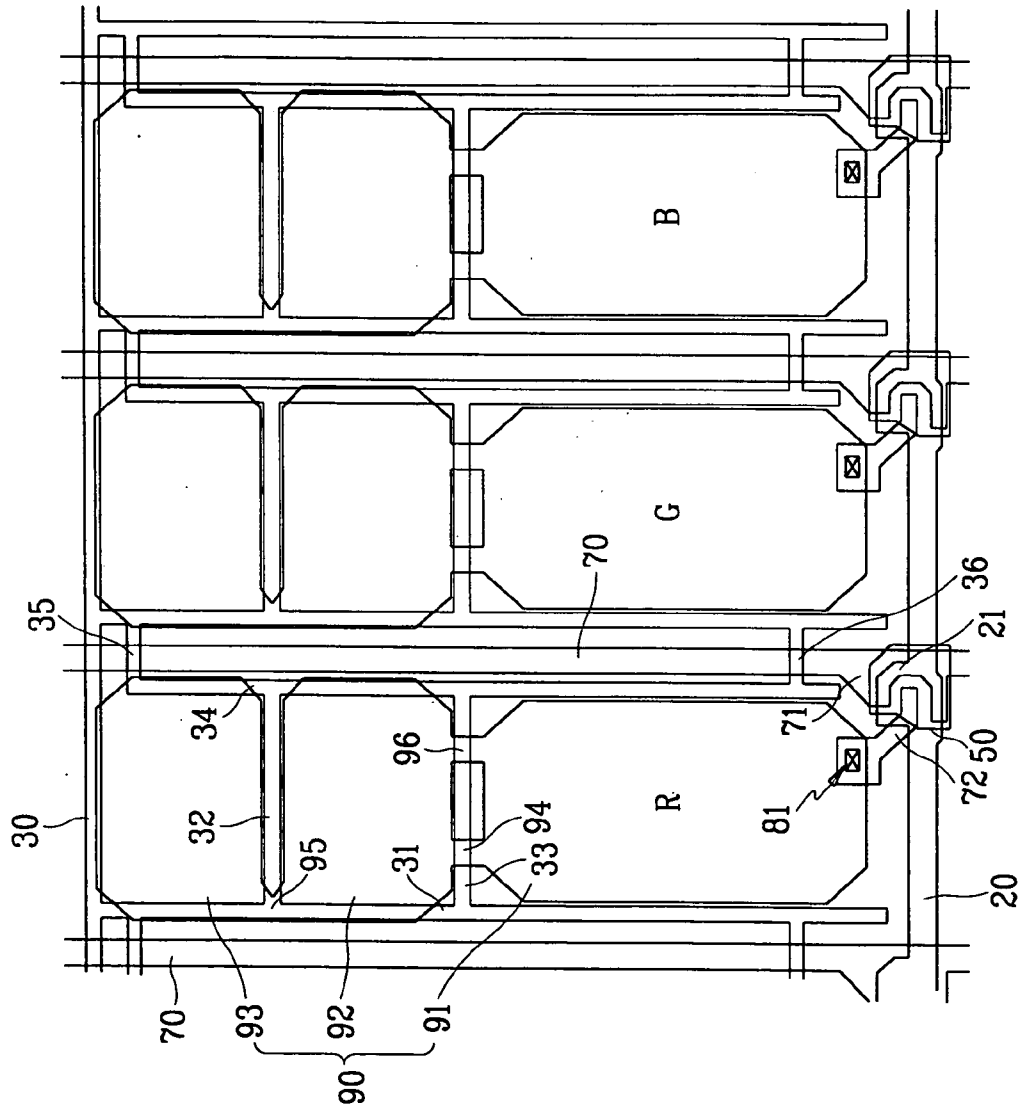


FIG. 1

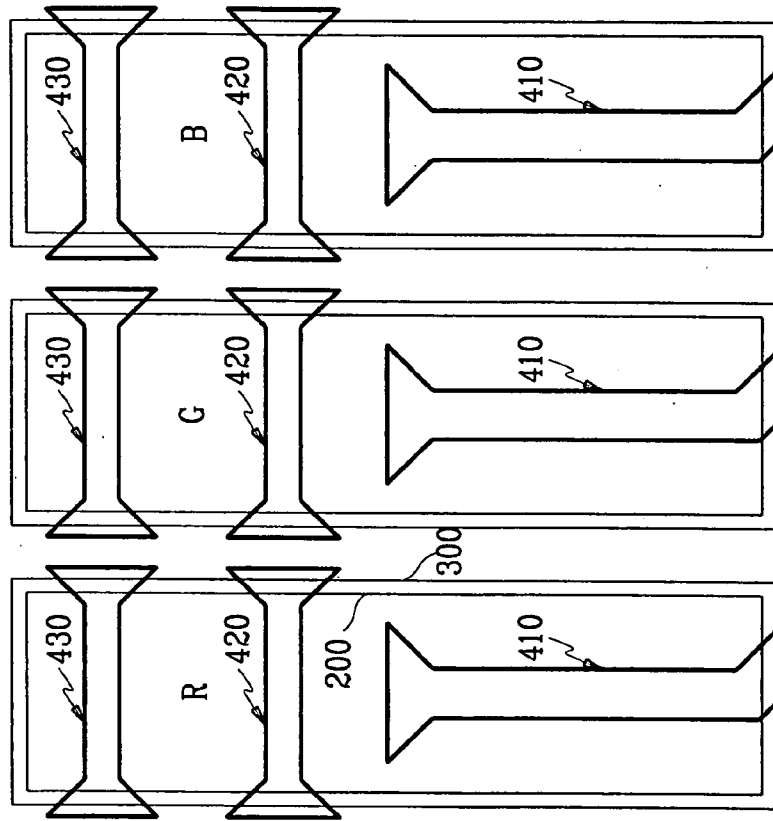


FIG. 2

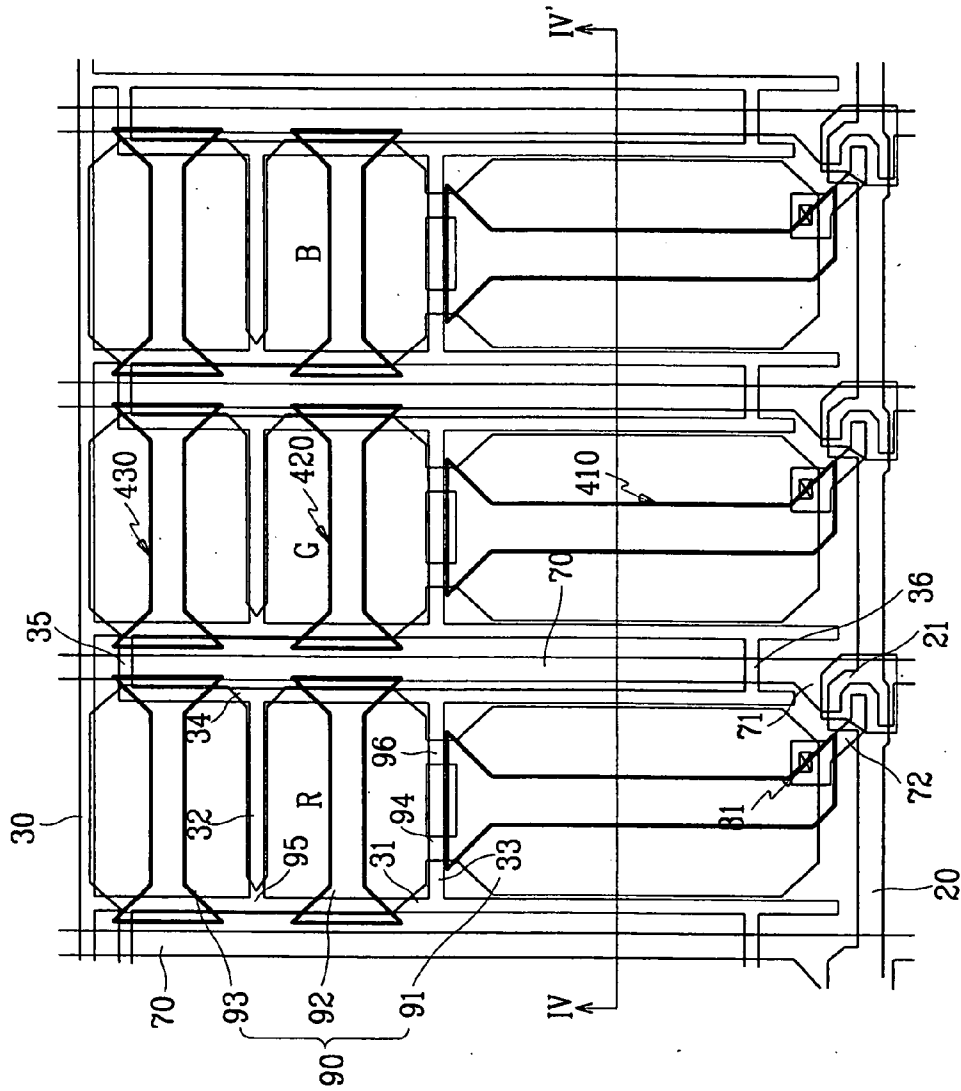
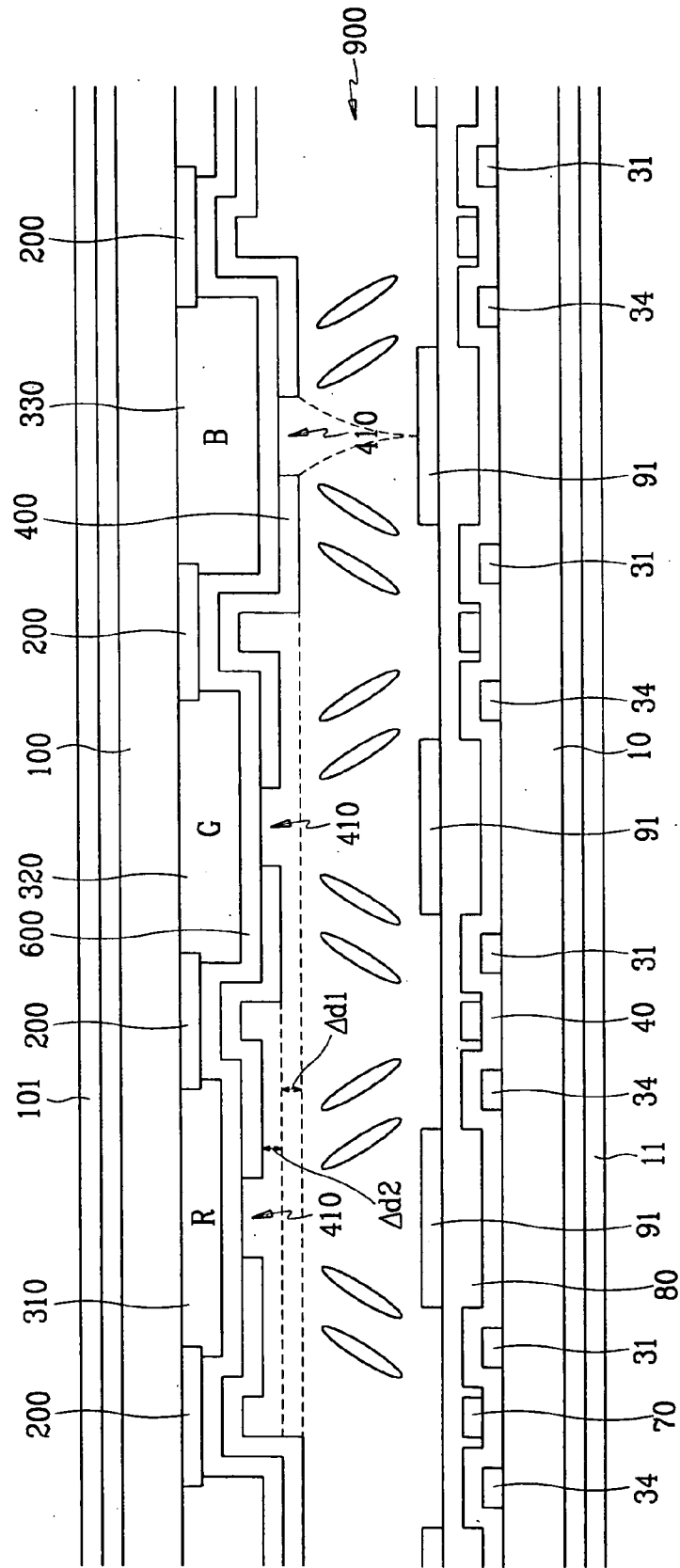


FIG. 3

FIG. 4



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