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13. The structure according to claim 10 wherein said gate conductive structure is formed of a material selected from a group consisting of chromium (Cr), tungsten molybdenum (WMo), tantalum (Ta), aluminum (Al) and copper (Cu).

14. The structure according to claim 10 wherein said gate insulating structure is formed of silicon oxide. 5

15. A structure of a thin film transistor (TFT) planar display panel comprising:

a light-transmissible substrate;

a buffer layer formed on said light-transmissible substrate; 10

a top-gate TFT structure formed on said buffer layer and including a channel region; and

a light-shielding structure formed between a back light source of said thin film transistor planar display panel and said top-gate TFT structure and electrically isolated 15 from said top-gate TFT structure, and serving as a mask while defining said channel region of said top-gate TFT structure so that an area of said light-shielding structure is substantially aligned with and generally coextensive 20 with said channel region for protecting said channel region from illumination of said back light source.

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16. A structure of a thin film transistor (TFT) planar display panel comprising:

a light-transmissible substrate;

a light-shielding structure formed on said light transmissible substrate;

a buffer layer formed over said light-transmissible substrate;

a top-gate TFT structure formed on said buffer layer and electrically isolated from said light-shielding structure, said top-gate TFT structure having a channel region defined by a patterned photoresist, wherein said photoresist is patterned in an exposing step using said light-shielding structure as a mask so that an area of said light-shielding structure is substantially aligned with and generally coextensive with said channel region for protecting said channel region from illumination of a back light source of said thin film transistor planar display panel.

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