

ORGANIC SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

A semiconductor device is disposed and includes a substrate, on which a scan line, a data line, a source electrode, a drain electrode, an organic semiconductor pattern, an organic insulating layer, a gate electrode, and an organic protection layer are disposed. The source electrode is electrically connected to the data line. The organic semiconductor pattern is disposed between the source electrode and the drain electrode. The organic insulating layer is disposed on an upper surface and a side surface of the organic semiconductor pattern. The organic insulating layer is at least disposed between the side surface of the organic semiconductor pattern and the gate electrode and disposed between the upper surface of the organic semiconductor pattern and the gate electrode. The gate electrode is electrically connected to the scan line. The organic protection layer covers the gate electrode.

Fig. 1B