WHAT IS CLAIMED IS:

1. An organic semiconductor device, comprising:

a substrate;

a scan line disposed on the substrate;

a data line disposed on the substrate;

a source electrode and a drain electrode disposed on the substrate, wherein the source electrode is electrically connected to the data line;

an organic semiconductor pattern disposed on the substrate and between the source electrode and the drain electrode, wherein the organic semiconductor pattern covers on the source electrode and the drain electrode, and a side surface of the organic semiconductor pattern surrounds the source electrode and the drain electrode;

an organic insulating layer disposed on the substrate, wherein the organic insulating layer covers on an upper surface and the side surface of the organic semiconductor pattern;

a gate electrode disposed on the substrate, wherein the gate electrode covers on an upper surface and a side surface of the organic insulating layer, the organic insulating layer is disposed at least between the side surface of the organic semiconductor pattern and the gate electrode and between the upper surface of the organic semiconductor pattern and the gate electrode, and the gate electrode is electrically connected to the scan line; and

an organic protection layer disposed on the substrate and covering the gate electrode.

2. The organic semiconductor device according to claim 1, wherein in a normal directional of the substrate, a projected area of the organic semiconductor pattern is in the gate electrode.

3. The organic semiconductor device according to claim 1, wherein the organic insulating layer comprises an island-shaped portion and a planarization portion, an annular space is sandwiched between the island-shaped portion and the planarization portion, and the annular space surrounds the island-shaped portion.

4. The organic semiconductor device according to claim 3, wherein the gate electrode is filled in the annular space.

5. The organic semiconductor device according to claim 1, wherein the organic insulating layer comprises an island-shaped portion, and the gate electrode covers the island-shaped portion.

6. The organic semiconductor device according to claim 1, further comprising a protection pattern, wherein the protection pattern is disposed on the upper surface of the organic semiconductor pattern and sandwiched between the organic semiconductor pattern and the organic insulating layer.

7. The organic semiconductor device according to claim 1, further comprising a planarization layer, wherein the planarization layer is disposed between the source electrode and the drain electrode and the substrate, and at least one of the scan line and the data line is disposed between the planarization layer and the substrate.

8. The organic semiconductor device according to claim 7, further comprising a conductive connection pattern, wherein the source electrode is connected to the data line through the conductive connection pattern.

9. The organic semiconductor device according to claim 8, wherein the source electrode is connected to the conductive connection pattern through an opening of the planarization layer.

10. The organic semiconductor device according to claim 7, further comprising a conductive connection pattern, wherein the gate electrode is connected to the scan line through the conductive connection pattern.

11. The organic semiconductor device according to claim 10, wherein the gate electrode is connected to the conductive connection pattern through an opening of the planarization layer.

12. The organic semiconductor device according to claim 1, further comprising a buffer layer, wherein the buffer layer is disposed between the scan line and the data line and the

substrate.

13. The organic semiconductor device according to claim 1, further comprising a pixel electrode, wherein the pixel electrode is disposed on an upper surface of the organic protection layer and is electrically connected to the drain electrode.

14. The organic semiconductor device according to claim 1, wherein the organic insulating layer is a cap and covers the organic semiconductor pattern.

15. The organic semiconductor device according to claim 1, wherein the gate electrode is a cap and covers the organic insulating layer.

16. An organic semiconductor device, comprising:

a substrate;

a scan line disposed on the substrate;

a data line disposed on the substrate;

a source electrode and a drain electrode disposed on the substrate, wherein the source electrode is electrically connected to the data line;

an organic semiconductor pattern disposed on the substrate and between the source electrode and the drain electrode;

an organic insulating layer disposed on the substrate and on an upper surface and a side surface of the organic semiconductor pattern;

a gate electrode disposed on the substrate, wherein the gate electrode covers on an outermost upper surface and an outermost side surface of the organic insulating layer, the outermost side surface of the organic insulating layer is on a side of the source electrode opposite to a side facing the drain electrode or on a side of the drain electrode opposite to a side facing the source electrode, the organic insulating layer is disposed at least between the side surface of the organic semiconductor pattern and the gate electrode and between the upper surface of the organic semiconductor pattern and the gate electrode, and the gate electrode is electrically

connected to the scan line; and

an organic protection layer disposed on the substrate and covering the gate electrode.

17. The organic semiconductor device according to claim 16, wherein in a normal directional of the substrate, a projected area of the organic semiconductor pattern is in the gate electrode.

18. The organic semiconductor device according to claim 16, wherein the organic insulating layer comprises an island-shaped portion and a planarization portion, an annular space is sandwiched between the island-shaped portion and the planarization portion, and the annular space surrounds the island-shaped portion.

19. The organic semiconductor device according to claim 18, wherein the gate electrode is filled in the annular space.

20. The organic semiconductor device according to claim 16, wherein the organic insulating layer comprises an island-shaped portion, and the gate electrode covers the island-shaped portion.