CLAIMS

1. A p-type oxide,

wherein the p-type oxide is amorphous and is represented by the following compositional formula: $xAO.yCu_2O$ where x denotes a proportion by mole of AO and y denotes a proportion by mole of CU_2O and x and y satisfy the following expressions: $0 \leq x < 50$, or $50 < x < 100$ and $x + y = 100$, and A is any one of Mg, Ca, Sr and Ba, or a mixture containing at least one selected from the group consisting of Mg, Ca, Sr and Ba.

2. A p-type oxide-producing composition comprising:

a solvent;

a Cu-containing compound; and

a compound containing at least one selected from the group consisting of Mg, Ca, Sr and Ba,

wherein the p-type oxide -producing composition is ~~designed to produce~~used for production of the p-type oxide according to claim 1.

3. A method for producing the p-type oxide according to claim 1 comprising:

applying a composition onto a support; and

heat treating the composition after the applying,

wherein the composition comprises a solvent, a Cu-containing compound, and a compound containing at least one selected from the group consisting of Mg, Ca, Sr and Ba.

4. A semiconductor device comprising:

an active layer,

wherein the active layer comprises the p-type oxide according to claim 1.

5. The semiconductor device according to claim 4, further

comprising:

a first electrode; and

a second electrode,

wherein the semiconductor device is a diode where the active layer is formed between the first electrode and the second electrode.

6. The semiconductor device according to claim 4, further

comprising:

a gate electrode configured to apply gate voltage;

a source electrode and a drain electrode which are configured to extract electric current; and

a gate insulating layer,

wherein the semiconductor device is a field effect transistor where the active layer is formed between the source electrode and the drain electrode, and the gate insulating layer is formed between the gate electrode and the active layer.

7. A display device comprising:

a light control device configured to control output of light based on a driving signal; and

a driving circuit containing the semiconductor device according to claim 4 and configured to drive the light control device.

8. The display device according to claim 7, wherein the light control device comprises an organic electroluminescence device or an electrochromic device.

9. The display device according to claim 7, wherein the light control device comprises a liquid crystal device, an electrophoretic device or an electrowetting device.

10. An image display apparatus comprising:

a plurality of the display devices according to claim 7 which are arranged in a matrix form and each contain a field effect transistor;

a plurality of wirings configured to individually apply gate voltage and signal voltage to the field effect transistors of the display devices; and a display control apparatus configured to individually control the gate voltage and the signal voltage in the field effect transistors via the wirings based on image data,

wherein the image display apparatus is configured to display an image based on the image data.

11. A system comprising:

the image display apparatus according to claim 10; and

an image data generation apparatus configured to generate image data based on image information to be displayed, and output the image data to the image display apparatus.