[0011]

Moreover, for suppressing the warpage of a substrate in a method such as that disclosed in PLT 5, there is a problem that an operation to stick a shape-retaining layer to a lower CTE layer via an adhesive layer is required and, as a result, the production process becomes complicated.

[0012]

In PLT 6 is disclosed a method for obtaining a polyimide film that attains both a low CTE and a low birefringence using a specific acid anhydride and a specific diamine by a specific technique, but there is a problem that freedom in monomer design is a little reduced due to limitation in the type of monomer. While low molecular weight compounds (an imidating agent, a dehydration catalyst) is used for chemical imidization, these compounds cause degassing in the heating process in the module production, which may generate a defect.

[0013]

In view of the above problems, it is an object of the embodiments disclosed herein to provide a substrate for a display: being able to be applied to a color filter, an organic EL element, or the like without the need to carry out any complex operations; allowing high-definition displays to be manufactured; and being provided with a low CTE,

a low birefringence, and flexibility.

[0013a] In an aspect, there is provided a substrate for a display, the substrate having a film B comprising a polysiloxane resin on at least one surface of a film A comprising a polyimide resin, wherein the film B contains inorganic oxide particles therein.

[0013b] In another aspect, there is provided a color filter having a black matrix and a colored pixel on or over the film B of the substrate for a display as defined above.

[0013c] In another aspect, A method for producing a color filter, comprising at least the following steps (1) to (6):

(1) a step of coating a resin solution containing a polyimide precursor resin onto a substrate to obtain a coated film A';

(2) a step of coating a polysiloxane resin composition onto the film A' to obtain a film B';

(3) a step of heating the film A' and the film B' individually to obtain a resin stack;

(4) a step of forming a black matrix on the resin stack;

(5) a step of forming a colored pixel on the resin stack; and

(6) a step of peeling the resin stack from the substrate.

[0013d] In another aspect, there is provide an organic EL element having an organic EL element on or over the film B of the substrate for a display as defined above.

[0013d] In another aspect, there is provided an organic EL

element having an organic EL element on or over the film B of the substrate for a display as defined above.

[0013e] In another aspect, there is provided a flexible organic EL display comprising a color filter as defined above and/or an organic EL element as defined above.

[Solution to Problem]

[0014]

That is, the disclosure provides a substrate for a display, the substrate having a film B including a polysiloxane resin on at least one surface of a film A including a polyimide resin, wherein the film B contains inorganic oxide particles therein.

[Advantageous Effects]

[0015]

According to the present disclosure, it is possible to provide a substrate for a display: being able to be applied to a color filter, an organic EL element, or the like without the need to carry out any complex operations; allowing high-definition displays to be manufactured; and being provided with a low CTE, a low birefringence, and flexibility.

[Brief Description of Drawings]

[0016]

[Fig. 1]

Fig. 1 is a schematic perspective view showing the execution of evaluation of the flex resistance of a color filter.

[Fig. 2]

Fig. 2 is a schematic perspective view showing the execution of evaluation of the flex resistance of a color