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(54) **Color cathode ray tube and fabrication method of fluorescent surface thereof**

(57) A color cathode ray tube is disclosed, that comprises an optical filter layer 2 formed on an inner surface of a glass panel 1, a thin film formed on a front surface of the optical filter layer 2 and composed of a metal oxide, and a fluorescent substance layer 4 formed on the thin film 3 corresponding to a pattern of the optical filter layer 2. The surface state of the thin film 3 is rougher than the surface state of the optical filter layer 2 and similar to the surface state of the fluorescent substance layer 4. Thus, the optical filter layer 2 sparsely contacts the fluorescent substance layer 4. Thus, the influence of the optical filter layer 2 to the fluorescent substance layer 4 can be reduced. Consequently, fluorescent substance particles of the fluorescent substance layer 4 can be suppressed from breaking, dropping, and so forth. Thus, an excellent fluorescent surface can be obtained at high throughput.

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