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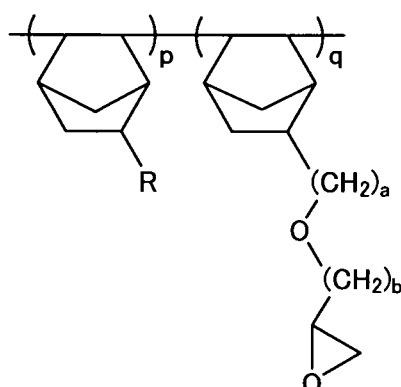


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ABSTRACT

An optical waveguide structure has excellent heat resistance and a low water absorbing property and can be manufactured with a low material cost. Such an optical waveguide structure includes: an optical waveguide having two surfaces, a core layer including core portions and cladding portions each having a refractive index lower than that of each of the core portions, the core layer having two surfaces, and cladding layers provided so as to make contact with the two surfaces of the core layer and having a refractive index lower than that of each of the core portions; and conductor layers provided on the two surfaces of the optical waveguide. In the optical waveguide structure, each of the cladding layers is formed of a norbornene-based polymer as a major component thereof. Further, it is preferred that the norbornene-based polymer is composed of molecules each represented by the following formula 1 as a major component thereof:

[formula 1]



wherein R is an alkyl group having a carbon number of 1 to 10, "a" is an integer of 0 to 3, "b" is an integer of 1 to 3, and "p" / "q" is 20 or less.