CLAIMS

1. A photosensitive resin composition comprising an alkali-soluble ~~a~~ polymer (A-1), a glass filler (B), a photopolymerizable compound (C), ~~and~~ a photopolymerization initiator (D), and a thermal crosslinking agent (E),

wherein the glass filler (B) has a refractive index of 1.55 to 1.75 at a wavelength of 405 nm,

wherein the glass filler (B) contains ~~at least two selected from the group consisting of~~ silicon oxide and~~,~~ aluminum oxide, ~~and boron oxide,~~ and further contains yttrium oxide or lanthanoid oxide ~~a rare earth oxide~~.

2. The photosensitive resin composition according to claim 1, wherein a content of yttrium oxide or lanthanoid oxide ~~the rare earth oxide~~ in 100 wt% of the glass filler (B) is 15 to 35 wt%.

3. The photosensitive resin composition according to claim 1 or 2, wherein a total amount of magnesium ions, calcium ions, and zinc ions detected in an extract obtained by performing an extraction treatment on the glass filler (B) under a saturated water vapor pressure condition at 121°C for 24 hours is 100 ppm or less.

~~4. The photosensitive resin composition according to any one of claims 1 to 3, wherein a refractive index of the glass filler (B) is 1.55 to 1.75.~~

~~5~~4. The photosensitive resin composition according to any one of claims 1 to ~~4~~3, wherein an absolute value of a difference between a refractive index of the glass filler (B) and a refractive index of an organic component (excluding a solvent) obtained by removing the glass filler (B) from the photosensitive resin composition is 0.05 or less.

~~6~~5. The photosensitive resin composition according to any one of claims 1 to ~~5~~4, wherein the photopolymerizable compound (C) has one or both of an acrylic group and a glycidyl group.

~~7. The photosensitive resin composition according to any one of claims 1 to 6, wherein the polymer (A) includes an alkali-soluble polymer (A-1).~~

~~8~~6. The photosensitive resin composition according to ~~claim 7~~any one of claims 1 to ~~7~~5, wherein the alkali-soluble polymer (A-1) is polyimide having one or both of a phenolic hydroxyl group and a carboxyl group as an alkali-soluble group.

~~9. The photosensitive resin composition according to any one~~

~~of claims 1 to 8, further comprising a thermal crosslinking agent (E).~~

~~10~~7. A photosensitive resin sheet comprising at least a layer formed of the photosensitive resin composition according to any one of claims 1 to ~~9~~ 6 (a photosensitive resin layer) and a film that supports the layer (a support film).

~~11~~8. The photosensitive resin sheet according to claim ~~10~~7, wherein the support film has an oxygen permeability of 10 to 400 cc/m^2 and a haze of 0.1 to 1.5%.

~~12~~9. The photosensitive resin sheet according to claim ~~10~~ 7 or ~~11~~8, wherein the photosensitive resin sheet is used as a wall material or a roof material for forming a hollow structure.

~~13~~10. A cured material obtained by curing the photosensitive resin composition according to any one of claims 1 to ~~9~~ 6 or the photosensitive resin layer in the photosensitive resin sheet according to any one of claims ~~10~~ 7 to ~~12~~9.

~~14~~11. The cured material according to claim ~~13~~10, wherein a water vapor permeability is 50 to 250 g/(m^2•day).

~~15~~12. A hollow structure comprising:

a substrate;

a convex portion that is formed on the substrate and is provided to surround a part of a surface of the substrate; and

a film-shaped material that is in contact with a top of the convex portion and is formed of the cured material according to claim ~~13~~ 10 or ~~14~~11,

wherein a space (a hollow portion) closed by the substrate, the convex portion, and the film-shaped member is formed.

~~16~~13. The hollow structure according to claim ~~15~~12, wherein an area of the substrate in the hollow portion is 0.01 to 1.0 mm^2.

~~17~~14. The hollow structure according to claim ~~15~~ 12 or ~~16~~13, wherein a width of the convex portion is 15 to 300 μm.

~~18~~15. The hollow structure according to any one of claims ~~15 to 17~~12 or 13, wherein the convex portion contains polyimide.

~~19~~16. A method for producing the hollow structure according to claim ~~15~~12, the method comprising the following steps 1 to 6 in this order:

step 1: a step of forming the convex portion on the substrate;

step 2: a step of bonding the photosensitive resin layer side of the photosensitive resin sheet according to any one of

claims ~~10~~ 7 to ~~12~~ 9 to the convex portion formed on the substrate;

step 3: a step of exposing the photosensitive resin layer through the support film;

step 4: a step of peeling off the support film;

step 5: a step of developing the photosensitive resin layer; and

step 6: a step of thermally curing the photosensitive resin layer to form a cured material.

~~20~~17. An electronic component comprising the hollow structure according to any one of claims ~~15~~ 12 to ~~18~~15.

~~21~~18. An elastic wave filter comprising the hollow structure according to any one of claims ~~15~~ 12 to ~~18~~15.

~~22~~19. An electronic component comprising the cured material according to claim ~~13~~ 10 or ~~14~~11.