CLAIMS

1. An invisible light blocking structure, comprising:

a first transparent substrate having a first bottom side and a first upper side opposite to the first bottom side;

a metal layer disposed on the first bottom side and having a first metal side facing away from the first transparent substrate, the metal layer consisted of one component, wherein the component is Ag, Al, Cr, Ni, In, Ti or Sn;

a transparent protecting layer disposed on the first metal side, wherein the transparent protecting layer has a first protecting side facing away from the first transparent substrate; and

an invisible light blocking unit disposed on at least one of the first protecting side and the first upper side, wherein the invisible light blocking unit has cesium tungstate.

2. The invisible light blocking structure of claim 1, wherein the invisible light blocking unit is disposed on the first protecting side.

3. The invisible light blocking structure of claim 2, wherein the invisible light blocking unit comprises an infrared light blocking layer, and the infrared light blocking layer comprises:

a cesium tungstate film containing the cesium tungstate.

4. The invisible light blocking structure of claim 2, wherein the invisible light blocking unit comprises an infrared light blocking layer, and the infrared light blocking layer comprises:

a cesium tungstate-containing silicone sealant, comprising:

a polymer-containing silicone sealant colloid, comprising silane resin-containing group, acrylic resin-containing group, polyurethane-containing group and epoxy resin-containing group; and

a plurality of nanoparticles dispersed uniformly in the polymer silicone-sealant colloid and containing the cesium tungstate.

5. The invisible light blocking structure of claim 2, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

6. The invisible light blocking structure of claim 2, further comprising a second transparent substrate, wherein the invisible light blocking unit comprises:

an ultraviolet and infrared light blocking layer having a first blocking side facing away from the transparent protecting layer and comprising:

a polyvinyl butyral resin;

an organic ultraviolet light blocking component dispersed in the polyvinyl butyral resin; and

a plurality of nanoparticles dispersed in the polyvinyl butyral resin and containing the cesium tungstate;

wherein the second transparent substrate is disposed on the first blocking side.

7. The invisible light blocking structure of claim 6, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

8. The invisible light blocking structure of claim 1, wherein the invisible light blocking unit comprises:

an infrared light blocking layer disposed on the first protecting side, wherein the infrared light blocking layer containing the cesium tungstate; and

an ultraviolet light blocking layer disposed between the transparent protecting layer and the infrared light blocking layer, on the first upper side, or on a first side of the infrared light blocking layer, wherein the first side of the infrared light blocking layer faces away from the transparent protecting layer.

9. The invisible light blocking structure of claim 8, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

10. The invisible light blocking structure of claim 8, wherein the ultraviolet light blocking layer has cerium oxide or zinc oxide.

11. The invisible light blocking structure of claim 1, further comprising a second transparent substrate, wherein the invisible light blocking unit comprises:

an infrared light blocking layer disposed on the first protecting side, wherein the infrared light blocking layer contains the cesium tungstate; and

an ultraviolet light blocking layer disposed between the transparent protecting layer and the infrared light blocking layer, between the metal layer and the first transparent substrate, or on a first side of the infrared light blocking layer, wherein the first side of the infrared light blocking layer faces away from the transparent protecting layer;

wherein the second transparent substrate disposed between the first transparent substrate and the metal layer, between the transparent protecting layer and the infrared light blocking layer, or on the first side of the infrared light blocking layer.

12. The invisible light blocking structure of claim 11, wherein the ultraviolet light blocking layer is disposed between the metal layer and the first transparent substrate, and the second transparent substrate is disposed between the ultraviolet light blocking layer and the metal layer.

13. The invisible light blocking structure of claim 11, wherein the ultraviolet light blocking layer is disposed between the transparent protecting layer and the infrared light blocking layer, and the second transparent substrate is disposed between the ultraviolet light blocking layer and the infrared light blocking layer.

14. The invisible light blocking structure of claim 11, wherein the ultraviolet light blocking layer is disposed on the first side of the infrared light blocking layer, and the second transparent substrate is disposed on a first side of the ultraviolet light blocking layer, wherein the first side of the ultraviolet light blocking layer faces away from the transparent protecting layer.

15. The invisible light blocking structure of claim 12, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

16. The invisible light blocking structure of claim 13, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

17. The invisible light blocking structure of claim 14, further comprising:

a self-cleaning layer disposed on the first upper side and having fluorine.

18. The invisible light blocking structure of claim 11, wherein the ultraviolet light blocking layer comprises:

a polyvinyl butyral resin; and

an organic ultraviolet light blocking component dispersed in the polyvinyl butyral resin.