

**WHAT IS CLAIMED IS:**

1. A coated article comprising a substrate, a first functional layer over at least a portion of the substrate, and a protective coating over at least a portion of the functional layer,

wherein an uppermost layer of the functional layer is a metal oxide film,  
and

wherein the protective coating comprises one or more layers of a metal nitride, a metal oxynitride, or a combination thereof.

2. The coated article of claim 1, wherein the metal nitride, the metal oxynitride, or the combination thereof is at least one of silicon nitride, silicon oxynitride, or a combination thereof.

3. The coated article of claim 1, wherein the protective coating comprises a metal oxynitride film over and in contact with at least portion of the metal oxide film of the uppermost layer of the first functional layer; and

a metal nitride film over and in contact with at least a portion of the metal oxynitride film.

4. The coated article of any one of claims 1-3, wherein the protective coating comprises a gradient metal oxynitride film over and in contact with at least part of the metal oxide film of the uppermost layer of the first functional layer, wherein the amount of oxygen in the metal oxynitride film decreases with increased distance from the uppermost layer of the first functional layer, wherein the metal oxynitride of the gradient layer is optionally silicon oxynitride.

5. The coated article of any one of claims 1-4, wherein the metal oxide film of the uppermost dielectric layer of the first functional layer comprises zinc stannate.

6. The coated article of any one of claims 1-5, wherein the first functional layer comprises a dielectric layer over at least a portion of the substrate, a metallic layer over at least a portion of the dielectric layer, and the uppermost layer over at least a portion of the metallic layer.

7. The coated article of claim 6, wherein the first functional layer further comprises a primer layer over the metallic layer and under at least a portion of the uppermost layer.

8. The coated article of claim 7, wherein the primer layer comprises titanium, or titanium and aluminum, and wherein at least a portion of the titanium, or titanium and aluminum are optionally oxidized after the titanium or titanium and aluminum are deposited over the metallic layer.

9. The coated article of claim 6, wherein the dielectric layer comprises zinc oxide and/or zinc stannate, the metallic layer comprises Ag, Cu, Au and/or Pd, and/or the uppermost layer comprises zinc stannate.

10. The coated article of any one of claims 1-9, wherein the uppermost layer does not comprise zinc oxide.

11. The coated article of any one of claims 1-9, further comprising a second functional layer beneath at least a portion of the first functional layer and over at least a portion of the substrate.

12. The coated article of any one of claims 1-11, further comprising a second protective film disposed at least partially over the one or more layers of a metal nitride, a metal oxynitride, or a combination thereof, and

wherein the second protective film comprises at least one of titania, alumina, silica, zirconia, an alloy of any one or more of the preceding, or a mixture of any of the preceding.

13. The coated article of claim 1, comprising:

- a glass substrate;
- a first layer of zinc stannate over at least a portion of the glass substrate;
- a layer of zinc oxide over at least a portion of the layer of zinc stannate;
- a layer of silver over at least a portion of the layer of zinc oxide;
- a primer layer comprising Ti, TiAl and/or oxides thereof over at least a portion of the layer of silver;
- a second layer of zinc stannate or zinc oxide over at least a portion of the primer layer;
- a metal oxynitride layer comprising SiON directly over at least a portion of the second layer of zinc stannate;
- a metal nitride layer comprising silicon directly over at least a portion of the metal oxynitride layer; and

a second protective layer comprising Ti, TiAl, and/or oxides of either of the preceding over at least a portion of the metal nitride layer.

14. The coated article of claim 1, comprising a functional layer comprising:

a glass substrate;

a first layer of zinc stannate directly over at least a portion of the glass substrate;

a layer of zinc oxide directly over at least a portion of the layer of zinc stannate;

a layer of silver directly over at least a portion of the layer of zinc oxide;

a primer layer comprising Ti, TiAl, and/or oxides of either of the preceding directly over at least a portion of the layer of silver;

a second layer of zinc stannate directly over at least a portion of the primer layer;

a metal oxynitride layer comprising silicon directly over at least a portion of the second layer of zinc stannate;

a metal nitride layer comprising silicon directly over at least a portion of the metal oxynitride layer; and

a second protective layer comprising TiAlO directly over at least a portion of the metal nitride layer.

15. The coated article of claim 1, comprising a functional layer comprising:

a glass substrate;

a first layer of zinc stannate over at least a portion of the glass substrate and having a thickness ranging from 250 Å to 400 Å;

a layer of zinc oxide over at least a portion of the layer of zinc stannate and having a thickness ranging from 70 Å to 90 Å;

a layer of silver over at least a portion of the layer of zinc oxide and having a thickness ranging from 70 Å to 90 Å;

a primer layer comprising Ti over at least a portion of the layer of silver and having a thickness ranging from 10 Å to 30 Å;

a second layer of zinc stannate over at least a portion of the primer layer and having a thickness ranging from 30 Å to 100 Å;

a metal oxynitride layer comprising SiON directly over at least a portion of the second layer of zinc stannate and having a thickness ranging from 70 Å to 400 Å;

a metal nitride layer comprising SiN directly over at least a portion of the metal oxynitride layer and having a thickness ranging from 100 Å to 400 Å; and

a second protective layer comprising TiAlO over the metal nitride layer and having a thickness ranging from 100 Å to 400 Å.