

What is claimed is:

1. An assembly comprising
an electronic device; and
a multilayer film, the multilayer film comprising
a barrier stack adjacent the electronic device; and
a polymer weatherable sheet adjacent the barrier stack opposite the electronic device, and
a protective layer in contact with the electronic device and the weatherable sheet.
2. The assembly of claim 1 wherein the barrier stack comprises a polymer layer and an inorganic barrier layer.
3. The assembly of claim 2 wherein the inorganic barrier layer is an oxide layer.
4. ~~The assembly of claim 1 wherein the multilayer film is transparent and flexible.~~
54. The assembly of claim 1 wherein the multilayer film comprises a substrate between the electronic device and the barrier stack.
6. ~~The assembly of claim 1 wherein the electronic device comprises an encapsulant layer.~~
75. The assembly of claim 1 wherein the electronic device comprises an edge seal material.
8. ~~The assembly of claim 1 wherein the electronic device comprises a backsheet.~~
9. ~~The assembly of claim 1 wherein the electronic device comprises a roof.~~
10. ~~The assembly of claim 6 wherein the protective layer is in contact with the encapsulant.~~
116. The assembly of claim 75 wherein the protective layer is in contact with the edge seal.
12. ~~The assembly of claim 8 wherein the protective layer is in contact with the backsheet.~~

~~13.~~ The assembly of claim 9 wherein the protective layer is in contact with the roof.

~~14~~7. The assembly of claim ~~5~~4 wherein the protective layer is in contact with the substrate.

~~15~~8. The assembly of claim 1 wherein the protective layer is in contact with the barrier stack.

~~16~~9. The assembly of claim 1 wherein the protective layer is a weatherable tape.

~~17~~10. The assembly of claim 1 wherein the protective layer is a mechanical junction.

~~18~~11. The assembly of claim 1 wherein the protective layer is a curable resin.

~~19.~~ The assembly of claim 1 wherein the protective layer is opaque.

~~20~~12. The assembly of claim 1 wherein the protective layer is bonded to the electronic device.

~~21~~13. The assembly of claim 1 wherein the protective layer is bonded to the weatherable sheet.

~~22~~14. The assembly of claim ~~7~~5 wherein the edge seal material comprises butyl rubber.

~~23~~15. The assembly of claim ~~5~~4 wherein the substrate comprises at least one of polyethylene terephthalate, polyethylene naphthalate, polyetheretherketone, polyaryletherketone, polyacrylate, polyetherimide, polyarylsulfone, polyethersulfone, polyamideimide, or polyimide.

~~24~~16. The assembly of claim 1 wherein the weatherable sheet comprises a fluoropolymer.

~~25~~17. The assembly of claim ~~24~~16 wherein the fluoropolymer comprises at least one of an ethylene tetrafluoro-ethylene copolymer, a tetrafluoroethylene-hexafluoropropylene copolymer, a tetrafluoroethylene-hexafluoropropylene-vinylidene fluoride copolymer, or a polyvinylidene fluoride.

~~26~~18. The assembly of claim 1 comprising a pressure sensitive adhesive layer between the weatherable sheet and the barrier stack.

~~27. The assembly of claim 26 wherein the pressure sensitive adhesive is an acrylate, a silicone, a polyisobutylene, a urea or a blend thereof.~~

~~28~~19. The assembly of claim ~~26~~18 wherein the pressure sensitive adhesive comprises at least one of a UV stabilizer, a hindered amine light stabilizer, an antioxidant or a thermal stabilizer.

~~29~~20. The assembly of claim 1 wherein the barrier stack oxide layer shares a siloxane bond with the barrier stack polymer layer.

~~30~~21. The assembly of claim 1 wherein the electronic device is a photovoltaic cell.

~~31~~22. The assembly of claim ~~30~~21 wherein the photovoltaic cell is a CIGS cell.

~~32~~23. The assembly of claim ~~5~~4 wherein the substrate is heat stabilized.

~~33~~24. The assembly of claim 1 wherein the barrier stack has a water vapor transmission rate of less than 0.005 cc/m²/day at 50°C and 100% relative humidity.

~~34~~25. The assembly of claim 1 wherein the barrier stack has an oxygen transmission rate of less than 0.005 cc/m²/day at 23°C and 90% relative humidity.

~~35. The assembly of claim 1 wherein the barrier stack comprises at least two oxide layers.~~

~~36. The assembly of claim 1 wherein the barrier stack comprises at least two polymers layers.~~