

43100-00694

WHAT IS CLAIMED IS:

1. A display device comprising:

an organic light emitting device, wherein said organic light emitting device includes an exposed surface; and

a sealing structure formed on said exposed surface for sealing said organic light emitting device, wherein said sealing structure comprises a dielectric film formed on said exposed surface and a metal film formed directly on said dielectric film, wherein said dielectric film has a dielectric film exposed surface and said metal film is formed over and in contact with said entire dielectric film exposed surface.

2. The display according to claim 1, wherein said metal film of said sealing structure comprises a material which reacts with moisture to seal pin holes.

3. The display according to claim 1, wherein said metal film of said sealing structure comprises a material which reacts with oxygen to seal pin holes.

4. The display according to claim 1, further comprising an opening in said sealing structure for connecting said organic light emitting device to electrical circuitry.

5. The display according to claim 1, wherein said sealing structure comprises a multi-layer stack of dielectric film and metal film layers.

6. The display according to claim 5, wherein said multilayer stack comprises a first dielectric film overlying said organic light emitting device, followed by alternating layers of metal film and dielectric film.

7. A display device comprising:

a matrix comprising a plurality of organic light emitting devices, wherein each of said organic light emitting devices includes an exposed surface;

a sealing structure formed on said exposed surface for sealing of said plurality of organic light emitting devices, wherein said sealing structure comprises a dielectric film formed on said exposed surface and a metal film formed directly on said dielectric film, wherein said dielectric film has a dielectric film exposed surface and said metal film is formed over and in contact with said entire dielectric film exposed surface;

a plurality of conductors underlying said sealing structure, wherein each conductor functions as either an anode or cathode for more than one of said organic light emitting devices; and

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means for permitting direct contact between circuitry external to the matrix and the conductors underlying the sealing structure.

8. The display according to claim 7, wherein said sealing structure comprises a multi-layer stack of dielectric film and metal film layers.

9. The display according to claim 7, wherein said multilayer stack comprises a first dielectric film overlying said organic light emitting device, followed by alternating layers of metal film and dielectric film.

10. The display according to claim 7, wherein said means for permitting direct contact comprise openings in said sealing structure.

11. A method for sealing an organic light emitting device having an exposed surface comprising the steps of:

forming a dielectric film layer directly on the exposed surface of said organic light emitting device, wherein said dielectric film has a dielectric film exposed surface; and

forming a metal film layer directly on said dielectric film such that said metal film is formed over and in contact with said entire dielectric film exposed surface.

12. The method according to claim 11, comprising the further step of covering the organic light emitting device and film layers with a layer of photoresist material.

13. The method according to claim 11, further comprising the step of: presealing pin holes in the metal film layer, following the step of forming the metal film layer over the dielectric film.

14. The method of claim 13, wherein said presealing step comprises baking said display device in purified air.

15. The method of claim 13, wherein said presealing step comprises baking said display device in an N-O₂ atmosphere.



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