Claims

1. An illumination system comprising:

a power storage device;

a photovoltaic generator in electrical communication with the power storage device for charging the power storage device;

a light emitting structure being coupled to the power storage device and operable for providing illumination, the light emitting structure comprising:

a first substrate;

a first electrode layer formed over the first substrate;

a interpose layer formed over the first electrode layer, the interpose layer comprising a light emitting material and a dielectric layer formed along the light emitting material;

a second electrode layer formed over the interpose layer, the first electrode layer and the second electrode layer for providing electrical connection for the light emitting structure; and

conductive adhesive formed over the interpose layer for coupling the second electrode layer thereto, the conductive adhesive being one of a silver filled polymer and silver filled AVA polymer.

2. The illumination system of claim 1, the second electrode layer further being formed on a second substrate for interposing the first substrate and the second substrate.

3. The illumination system as in claim 1, further comprising:

a power controller in electrical communications with the photovoltaic generator, the power storage device and the light emitting structure, the power controller for sensing the level of charge of the power storage device and the level of power being produced by the photovoltaic generator and to control charging of the power storage device and the illumination of the light emitting structure in response thereto.

4. The illumination system as in claim 1, the photovoltaic generator is disposed over the light emitting structure for forming a stacked module having a first face and a second face outwardly opposing the first face, the photovoltaic generator being positioned for

forming the first face for capturing sunlight therefrom, and the light emitting structure being positioned for forming the second face for illumination thereof.

5. The illumination system as in claim 4, the light emitting structure being spatially displaced from the photovoltaic generator in the stacked module.

6. The illumination system as in claim 1, the photovoltaic generator is disposed adjacent the light emitting structure along a plane for forming a planar module having a first face and a second face outwardly opposing the first face, the photovoltaic generator being positioned for forming at least a portion of the first face for capturing sunlight therefrom, and the light emitting structure being positioned for forming at least a portion of the second face for illumination thereof.

7. The illumination system as in claim 1, further comprising:

a roof structure being spatially displaceable from the ground and being shaped for providing shelter, at least one of the photovoltaic generator and the light emitting structure being one of coupled with, contained within and formed integral with the roof structure.

8. The illumination system as in claim 7, the roof structure having at least one transparent window for exposing the at least one of the photovoltaic generator and the light emitting structure contained therein.

9. The illumination system as in claim 7, the photovoltaic generator being substantially upwardly facing and the light emitting structure being substantially one of downwardly facing and sideward facing when configured with the roof structure.

10. The illumination system as in claim 7, further comprising a support structure extending from the ground whereto the roof structure is coupled for spatially displacing the roof structure from the ground.

11. The illumination system as in claim 2, at least one of the first substrate and the second substrate being made from one of glass and plastic.

12. The illumination system as in claim 1, one of the light emitting material and dielectric layer being formed on the first electrode and interposing the first electrode and the other thereof.

13. The illumination system as in claim 1, the light emitting material being formed over the first electrode layer and the dielectric layer formed over the light emitting material.

14. The illumination system as in claim 1, further comprising:

a conductive bus structure formed on the first electrode layer and spatially displaced from the interpose layer.

15. The illumination system as in claim 1, the conductive adhesive further for laminating the interpose layer.

16. The illumination system as in claim 1, the dielectric layer being formed from ceramic paste, the light emitting material being phosphor paste, the first electrode layer being formed from indium tin oxide and the second electrode layer being formed from silver paste.