continuing effort to improve the insulating capabilities of such coverings with an example of such being in U.S. Patent No. 5,974,763 owned by the assignee of the present application. In that patent, cells are provided within other cells with the arrangement commonly referred to as a cell-in-cell, and this arrangement provides improved insulation even though issues are raised with the thickness of the covering when it is retracted and such issues are addressed in the aforenoted U.S. patent. Further, dependent upon the see-through capability of the fabric from which the outer cells in such a covering is made, the inner cell might also have an effect on the see-through capability of the covering whether it is transparent or translucent. Of course, if the outer cell were opaque, the light-transmitting characteristics of the inner cell would have no bearing. Coloring of the inner and outer cells is also a factor in the aesthetics of the product where the outer cells are made of a transparent or translucent material.

[0007] Typically, both the outer and inner cells are made of a woven or non-woven material which could be of natural or synthetic fibers and may include a resin to bond the fibers. When cell-in-cells are utilized in a retractable covering and when both cells are made of such a woven or non-woven material, the see-through capability is typically adversely affected, and as mentioned previously, the coloring and stacking capabilities can also be adversely affected.

[0008] It is an object of the present invention to provide a cell-in-cell retractable covering for architectural openings which improves upon the characteristics of prior art coverings.

SUMMARY ~~OF THE INVENTION~~

[0009] The retractable covering of the present ~~invention~~ disclosure includes a plurality of elongated horizontally extending, transversely collapsible cell-in-cell units which are longitudinally secured to upper and lower like units to form a transversely collapsible cellular panel. While the outer cell can be made of a woven, knit, or non-woven fabric of natural or synthetic fibers, the inner cell is made of a low modulus film having relatively high surface tension so it can be bonded to the outer cell in a manner which is dependable at high temperatures such as are experienced in windows, doors, and the like. Of course, the cells could be oriented vertically rather than horizontally, if desired.

[009a] In accordance with a first aspect of the present disclosure, there is provided a cellular covering for an architectural opening comprising: a plurality of elongated outer tubular transversely collapsible cells interconnected along adjacent longitudinal sides to form an expandable and collapsible panel movable between extended and retracted positions, each said outer cell including an inner substantially concentric tubular cell secured to said outer cell along at least two peripherally spaced longitudinal lines of attachment, said inner cell

being made of an air impermeable material to improve the insulating capability of said panel, wherein said outer cell is air permeable.

[009b] In accordance with a second aspect of the present disclosure, there is provided a cellular panel for an architectural opening comprising: at least one air permeable outer cell; and at least one inner cell at least partially received within the at least one outer cell and operably connected to the outer cell, said at least one inner cell formed at least partially of an orientated polypropylene film.

[009c] In accordance with a third aspect of the present disclosure, there is provided a cellular shade configured to cover an architectural opening comprising: a first cell that is substantially air permeable; a second cell at least partially received within the first cell and operably connected to the first cell, and the second cell constructed at least in part by an air impermeable film.

[0010] Other aspects, features and details of the present ~~invention~~ disclosure can be more completely understood by reference to the following detailed description of a preferred embodiment, taken in conjunction with the drawings and from the appended claims.

connected to the first cell, and the second cell constructed at least in part by an air impermeable film.

18. The cellular shade of claim 17, wherein the air impermeable film is an orientated polypropylene.

19. The cellular shade of any of claims 17 or 18, wherein the air impermeable film further includes a polyvinylidene chloride coating.

20. The cellular shade of any of claims 17 and 18, wherein the air impermeable film is approximately 1.5 mil thick.

21. The cellular shade of any of claims 19 or 20, wherein the polyvinylidene coating has a melting or softening point above 225°F.

22. The cellular shade of any of claims 19, 20, or 21 where the second cell further includes a base material, where the air impermeable film is operably attached to at least a portion of an outer surface of the base material.

23. The covering of claim 1, wherein the inner cell is made of a substantially translucent or transparent, air impermeable material.

24. The cellular panel of claim 9, wherein the at least one inner cell is formed at least partially of a substantially translucent or transparent orientated polypropylene film.

25. The cellular shade of claim 17, wherein the second cell is constructed at least in part by a substantially translucent or transparent, air impermeable film.