

ing environment, so that an excess timing of either etch is not harmful to the lamination which is not then intended to be etched.

For purposes of simplified presentation, the foregoing description has dealt with the laminations 12-13 of the composite starting sheet as if each lamination were a homogeneous solid, but it will be appreciated that, particularly in extra-ocular applications, a degree of gas and fluid permeability is desired, for enhanced compatibility with the human eye. Some of the above-indicated plastic materials exhibit a degree of such permeability, but I prefer to employ exposure to ion, neutron or other particle or X-ray bombardment, as a means of creating a desired mix of holes and hole sizes to thereby enhance permeability, the bombardment being preferably a controlled step applied to the composite sheet, prior to the erosion processes described above; alternatively, the bombardment to enhance permeability may be performed after masking and just before etching, or after the lens-finishing step. To provide a degree of gas and fluid permeability for applications in which glass is used rather than plastic, it can be noted that glasses with such permeability now exist and are available from Corning Glass Works, Corning, N.Y.

Also, for simplified presentation, the description of the invention has been concerned primarily with the lens element and its formation, so that it will be understood that conventional optical coating and other finishing steps desired for other lens configurations are equally applicable for the present case. Another such finishing step may be a third etch (without mask) to improve edge geometry and avoid sharp edges in the final product.

What is claimed is:

1. A unitary lens and haptic construction integrally formed from the same single composite continuously laminated sheet of two different uniformly thick ply materials at least one of which materials is transparent and of optical quality and constitutes a relatively thick rigid first ply of said single sheet, the other ply material of said single sheet being relatively thin compared to the thickness of said first ply, said construction comprising a relatively thick rigid central lens component peripherally eroded exclusively from said first ply material to a generally circular periphery of lens-component diameter (D_1), and a relatively thin pliant generally annular outer haptic component having a central opening concentric with said lens component and peripherally eroded exclusively from said other ply material to a diameter (D_5) which is less than the diameter (D_1) of said lens component, whereby said haptic component is in concentric peripherally continuous retained laminated overlap with one side of the rim region of said lens component, said haptic component comprising plural leg formations radiating from the lens periphery at angular offset from each other.

2. The construction of claim 1, wherein the lens-component diameter is in the range of 6 to 9 mm.

3. The construction of claim 1, wherein the haptic-component thickness is in the order of one thousandth of an inch.

4. The construction of claim 1, wherein said construction is one of a plurality of like constructions in laterally offset relation and formed from the same single laminated sheet, being integrally but severably joined to each other at local proximity of their respective haptic components.

5. The construction of claim 4, wherein a short integrally formed tie between adjacent haptic components is the means of severable connection.

6. The construction of claim 1, in which said first ply is of glass, and said other ply is of plastic.

7. The construction of claim 1, in which said first ply is of a first plastic material and said other ply is of a second plastic material.

8. The construction of claim 1, in which said composite laminated sheet is transparent.

9. The construction of claim 1, wherein the pattern of haptic formations includes an observable asymmetric indicium which establishes a recognizable reference orientation, and wherein the central lens component includes an astigmatic-correction curvature having an axis orientation of predetermined angular orientation with respect to said reference orientation.

10. The construction of claim 6, in which the glass ply is gas and fluid permeable.

11. The construction of claim 6 or claim 7, in which the plastic is gas and fluid permeable.

12. A unitary lens and haptic construction integrally formed from the same single composite continuously laminated sheet of two different uniformly thick ply materials at least one of which materials is transparent and of optical quality and constitutes a relatively thick rigid first ply of said single sheet, the other ply material of said single sheet being relatively thin compared to the thickness of said first ply, said construction comprising a relatively thick rigid central lens component peripherally eroded exclusively from said first ply material to a generally circular periphery of lens-component diameter (D_1), and a relatively thin pliant generally annular and radially outwardly extending haptic component formed exclusively of said other ply material, said haptic component having a central opening concentric with said lens-component and peripherally eroded from said other ply material to a diameter (D_5) which is less than the diameter (D_1) of said lens component, whereby said haptic component is in concentric peripherally continuous retained laminated overlap with one side of the rim region of said lens component.

13. A unitary lens and haptic construction integrally formed from the same single composite laminated sheet of two different materials at least one of which materials is transparent and of optical quality and constitutes a relatively thick rigid first ply of said single sheet, the other ply material of said single sheet being relatively thin compared to the thickness of said first ply, said construction comprising a relatively thick rigid central lens component formed exclusively of said first ply material and having a generally circular periphery, and a relatively thin pliant generally annular outer haptic component formed exclusively of said other ply material in peripherally continuous retained laminated overlap with at least the rim region of said lens component, said haptic component comprising plural leg formations radiating from the lens periphery at angular offset from each other; said construction being one of a plurality of like constructions in laterally offset relation and formed from the same single laminated sheet, said like constructions being integrally but severably joined to each other via a short integrally formed tie between adjacent haptic components, each tie having a locating aperture in a region external to the peripheral contour of each of the adjacent haptics thereby severably joined, whereby lens blanks associated with the severably connected haptics may be accurately positioned via such apertures, as for lens-finishing alignment and orientation, and for cut-off.

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