

is of a diameter of 2-4 mm as previously discussed. The lens optic can assume a bi-convex optic configuration. A bi-convex lens optic 52 is illustrated in FIG. 3. The optic 52 of FIG. 3 includes an upper convex surface 56, a lower convex surface 58, and an edge 60. The angulated soft skirt 54 is of a curved convex - concave rim cross-section configuration, and contains a configured channel or groove 62 including channel lips 64 and 66, and a channel bottom 68 in the inner circumference of the skirt 54. The optic edge 60 of optic 52 engages between annular lips 64 and 66, and against the channel bottom 68 of annular channel 62 thus positively securing the soft skirt 54 about the lens optic 52. Soft skirt 54 angles downwardly from 54a to form an angulated skirt edge 56b including a ridge barrier 54c, and including rounded edge 54d thus increasing yag space 70 as formed between the convex surface 58 and the plane of the bottom portion of rounded edge 54d to take up slack in the capsular bag. The ridge barrier can be either continuous or intermittent spacing. The thickness of the angulated skirt can be 0.05 to 0.5 mm. The channeled skirt can be made of silicone, hydrogel, or other like biocompatible material, the outer diameter is 6-9 mm. The skirt can also be provided with positioning holes 70a-70n about the outer circumference of the skirt 54 as so desired.

FIG. 4 illustrates a side view of the intraocular lens 50, where all numerals correspond to those elements previously described. Particularly noted is the laser yag dissection space 70 which has been increased essentially by the angulated skirt edge 54b to take slack out of the capsular bag.

FIG. 5 illustrates a top view of an alternate embodiment of an intraocular lens 80, the present invention, including a hard optic 82, and an angulated soft skirt 84 including a dual ridge barrier as later described in detail. The hard optic 82 is of a high refractive index material such as PMMA, polysulfone, polycarbonate, or the like, and is of a diameter of 2-4 mm. The lens optic can assume a bi-convex optic configuration. A bi-convex lens optic 82 has been illustrated in FIG. 5. The optic 82 of FIG. 5 includes an upper convex surface 85, a lower convex surface 86, and an edge 88. The soft skirt 84 is of a curved convex - concave rim cross-section configuration and contains a configured channel or groove 90 including channel lips 92 and 94, and a channel bottom 96 in the inner circumference of the skirt 84. The optic edge 88 of optic 82 engages between annular lips 92 and 94 and against the channel bottom 96 positively securing the soft skirt 84 about the lens optic 82. The soft skirt angles downwardly from 84a to form an angulated skirt edge 84b including a dual ridge barrier 98 including rounded concentric barrier elements 98a and 98b with a separating channel 100 between them. The yag

space 102 is formed between the convex surface 86 and the plane of the bottoms of the barrier elements 98a and 98b to take up slack in the capsular bag. The dual ridge barrier can use either continuous or intermittent spacing. The thickness of the angulated skirt can be 0.05 to 0.5 mm. The skirt can be made of silicone, hydrogel, or other like biocompatible material and would have an outer diameter of 8-9 mm. The skirt can also be provided with positioning holes 104a-104n about the outer circumference of the skirt 54 as so desired.

FIG. 6 illustrates a side view of the intraocular lens 80, where all numerals correspond to those elements previously described. Particularly noted is the laser yag dissection space 102 which has been increased essentially by the angulated skirt edge 84b to take slack out of the capsular bag.

MODE OF OPERATION

The lenses of FIGS. 1-6 provide that the skirt can be folded about the hard lens optic allowing for insertion of the lens in a small incision in the eye similar to that of a phako operation. The hard optic, of course, is non-foldable, but the skirt is soft enough to be pliable, and is secured in place about the hard optic by use of a groove. The soft skirt provides for placement in the capsular bag and is inherently self centering. The lens also has the advantage of having no loops which require subsequent placement.

Various modifications can be made to the present invention without departing from the apparent scope thereof.

I claim:

1. Intraocular lens, free of haptic loops, comprising:
 - a. hard bi-convex lens optic of high refractive index material; and,
 - b. channeled soft skirt surrounding the edge of said lens optic and of a foldable material, and angulated skirt edge means extending downwardly therefrom an upper surface of said skirt and forming a barrier ridge and forming two concentric rings which act as a dual barrier ridge.
2. Lens of claim 1, wherein said material of said lens optic is PMMA, polysulfone, polycarbonate, or like high refractive index material.
3. Lens of claim 1, wherein said soft skirt is of silicone, hydrogel or like foldable material.
4. Lens of claim 1, wherein said center optic is 2-4 mm. diameter.
5. Lens of claim 1, wherein said skirt has an outer diameter of 6-9 mm.
6. Lens of claim 1, wherein said skirt thickness is 0.05-0.5 mm.

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