

anteriorly projecting flanges 158 with radially inwardly depending shoulders 160. The flanges 156, 158 and shoulders 160 define receiving spaces 162 for an SIOL 170 of the type shown in FIGS. 19 and 20.

The SIOL 170, unlike those described above, does not include projecting tabs or other protrusions. Instead, a peripheral edge 178 of an optic 172 is shaped to engage the receiving spaces 162. The flanges 156, 158 and shoulder 160 have sufficient memory and stiffness to hold the SIOL 170 in place on the anterior face of the PIOL 140 and form a composite IOL (not shown).

In the embodiment of FIGS. 21-24, there can be seen a primary IOL 180 having an optic 182 portion with a peripheral edge 184. The optic 182 includes an anterior face 186 and a posterior face 188. A pair of loops 190 and 192 are affixed to the lens at attachments 194 and 196. A supplemental IOL 200 includes an optic 201 portion terminating at a peripheral edge 202. The optic includes an anterior face 204 and a posterior face 206. An annular mounting ring 208 communicates with a peripheral edge 202 and can be integral therewith. The annular ring 208 includes an inwardly facing annular mounting surface 210 which registers with the peripheral edge 184 of the primary IOL 180. A pair of circumferentially spaced slots 212 and 214 are formed in the mounting ring 208 so that loops 190 and 192 can register with the slots 212 and 214 respectively when the supplemental IOL 200 is affixed to the primary IOL 180. The supplemental IOL would be affixed to the primary IOL 180 by frictionally engaging the mounting ring 208 to the optic 182 of the primary IOL 180 so that the peripheral edge 184 would frictionally engage the mounting surface 210 of the annular mounting ring 208. In such a configuration, the posterior 206 face of supplemental IOL 200 would register with and abut the anterior face 186 of the primary IOL 180.

In the embodiment of FIGS. 25-27, a primary IOL 220 includes a peripheral edge 222 of an optic 224 which has a posterior face 226 and an anterior face 228. Curved mounting flanges 230 are provided on the primary IOL which include lips 232 terminating at the edges 231. A pair of posterior mounting flanges 233 on the SIOL 240 form lip portions 234. The supplemental IOL 240 includes an optic 241 having a peripheral edge 242 which registers with the mounting flanges 230 as shown in FIGS. 25-27. The anterior face 228 of optic 224 registers with the posterior face 243 of the supplemental IOL 240.

In the embodiment of FIGS. 28-31, there can be seen a primary IOL 250 having a lens optic 252 with a peripheral edge 254. The lens optic 252 has anterior 256 and posterior 258 face portions. A pair of loops 260 and 262 extend from the lens optic 252. A pair of opposed mounting clips 264 are provided extending from the optic 252 peripheral 254. Each clip 264 includes a horizontal strut 265 attached integrally to a pair of vertical struts 266. Each vertical strut 265 attached integrally to a pair of vertical struts 266. Each vertical strut 266 has an end portion 268 which is embedded in the lens optic 252. The clips 264 are preferably circumferentially spaced approximately 180° about the lens periphery 254.

In FIGS. 30-31, a supplemental IOL 270 is shown which is connectable to the primary IOL 250 of FIGS. 28-29. Supplemental IOL 270 includes a lens optic 271 having a peripheral edge 273. A pair of mounting flange assemblies 272 are provided and are faced circumferentially about the periphery 273 of optic 271 as shown in FIG. 30. Each mounting flange assembly includes a flange 274 which extends posterior of optic 271 and includes a shoulder 275. The shoulder 275 and flange

274 have sufficient memory and stiffness to engage and retain the clips 264 when optics 252 and 271 are placed against each other so that the posterior surface 276 of supplemental IOL 270 registers upon the anterior surface 256 of primary IOL 250.

In the embodiment of FIGS. 28-31, the optics 252 and 271 could be correspondingly sized. Upon assembly of supplemental IOL 270 upon primary IOL 250, the mounting flange assemblies 272 register with and engage the clips 264. Upon such assembly, the horizontal struts 265 of clips 264 would register with and abut against the shoulder 275 and occupy the recess 278 defined by the shoulder 275 and the posterior flange 274 as shown in FIG. 31.

All of the SIOLs described above could preferably be formed of the "soft" plastics mentioned above so that they can be folded and inserted through a relatively small incision and easily mated with their corresponding PIOLs formed of a stiffer plastic. Alternatively, the PIOLs could be formed of a soft material and the SIOL of a stiffer material or both formed of the soft materials. Both the PIOLs and SIOLs could be formed of stiffer materials such as PMMA so that the SIOLs could easily be mated to the PIOLs through the friction fit connections described above.

Because other embodiments may be made within the scope of the invention, and because many modifications may be made in the embodiments herein described, it is to be understood that the details herein are to be interpreted as being illustrative and not in a limiting sense.

What is claimed is:

1. A method of changing the refractive power of an intraocular lens, comprising the steps of:

- a. implanting a primary intraocular lens formed of a biocompatible transparent material with a predetermined diopter power;
- b. connecting a supplemental intraocular lens formed of a biocompatible transparent material with a second predetermined diopter power to the primary intraocular lens while the primary lens remains implanted in the eye.

2. The method of claim 1, wherein the step of implanting a primary intraocular lens includes implanting a primary lens without a supplemental intraocular lens.

3. The method of claim 1, wherein the step of implanting a primary intraocular lens includes implanting a primary lens with a first supplemental lens connected to the primary lens and the step of connecting includes connecting a second supplemental lens after removing the first supplemental lens.

4. The method of claim 3, wherein the first supplemental lens has multi-focal characteristics.

5. A method of altering the refractive power of an implanted primary intraocular lens, comprising the steps of:

- a. providing a supplemental intraocular lens formed of a biocompatible transparent material with a predetermined diopter power wherein the predetermined diopter power will alter the refractive power of the implanted primary intraocular lens; and
- b. connecting the supplemental intraocular lens to the implanted primary intraocular lens in situ without removal of said primary intraocular lens.

6. The method of claim 5 wherein the supplemental intraocular lens is formed of a foldable plastic.

7. The invention of claim 5 wherein the supplemental intraocular lens is formed of a relatively stiff plastic.

8. The invention of claim 5 wherein the supplemental intraocular lens has multifocal characteristics.

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