intraocular surgery or in secondary implantation. The 5° vault of the housing unit **106** is the same for a rounded rectangular or oval lens optic as for a circular lens. The other components of the device are also similar to those used for a circular lens optic.

The flexibility of the lens is demonstrated by FIGS. **12** and **14** showing the lens in maximally compressed position as when inserted in a 10 mm diameter eye. Spring **110** and paired haptics **112**, **114** descent within cylinder **108** close to the base of housing unit **106**. Flexible haptics **112**, **114** are shown flexed outwardly away from each other, away from the paired parallel vertical orientation to a mirror image horizontal orientation, thereby effectively shortening the longitudinal dimension of the lens and allowing implantation into a small eye, while retaining the haptics in the elongated position during insertion of the device into the eye through a very small incision. The extreme flexibility which is enabled by the cylinder-spring design of the lens of the invention allows the lens to fit in the anterior chamber of any size of human eye, allowing stability, security and comfort.

Whether the patient has had complicated or simple cataract surgery, which may be intracapsular, extracapsular or phakoemulsification cataract surgery, the optic, which rests slightly anterior to the pupil, should be of appropriate power for the eye, as calculated preoperatively. Placement of the optic in the anterior chamber also prevents pupil block glaucoma. If it becomes apparent that laser treatment will be needed to open a clouded posterior capsule, the lens will not be damaged during the laser treatment, since the lens is never in apposition to the posterior capsule. The lens can thus be used for primary, secondary or complicated implantation surgery. The lens of the invention features each of the following attributes: good lens stability and fixation in the anterior chamber (which requires at least three fixation points to prevent floating, rocking and rotation against the cornea and dislocation in the anterior chamber); lens haptic flexibility to prevent glaucoma, dislocation, cornea damage, inflammation, and tissue tenderness and pain; one size to fit all eyes; compressibility from 14.5 mm to 10 mm; situation of the device in the anterior chamber without damage to the internal structures; and insertion through a small incision no larger than the smallest diameter of the lens.

An anterior chamber lens of the invention that can flex over a span of 4.5 mm can be considered for implantation into the eye of an infant or child. As the child and the eye grow, the haptics will expand and maintain the central position of the lens. This anticipates, and provides a solution for, the problem of selecting the proper size of lens, knowing that eye measurements change with time as the child matures.

Good anterior chamber fixation is necessary, and requires at least three fixation points. The lens of the invention preferably provides four fixation points (four haptics). An anterior chamber lens must be equally flexible in all directions to obtain centration, and this is provided by the cylinder-spring design of the invention which enables the distal 2.75 mm end of the haptic to compress upon itself and flex at its union with the proximal 1 mm straight portion of the haptic which also has the ability to compress at its junction with the optic, by means of the cylinder-spring compression feature.

The lens of the invention is also equally suitable for as a posterior chamber lens.

While the invention has been described above with respect to certain embodiments thereof, it will be appreciated that various changes and modifications may be made without departing from the spirit and scope of the invention.

What is claimed is:

1. An intraocular lens adapted for insertion into and fixation in the anterior chamber of substantially any size of human eye, said lens comprising a lens optic portion and fixation means for fixing the lens optic portion in any size of eye, said fixation means comprising haptic means for accommodating the lens optic portion in the eye and spring means for facilitating fixation, said spring means extending outwardly from the lens optic portion, said intraocular lens being insertable in the eye through an incision of substantially the same diameter as the smallest diameter of the lens optic portion, wherein the haptic means comprises a pair of haptics each having a straight portion in contact with the spring means, said straight portions extending outwardly from the lens in closely spaced parallel position, and a curved end portion for fixing the haptic means in the eye connected to each straight portion, the curved end portions facing away from each other, and wherein the spring means are increasingly compressed as the haptic means are increasingly flexed.

2. An intraocular lens of claim **1** wherein the lens optic portion comprises two diametrically opposed means for receiving the fixation means.

3. An intraocular lens of claim **2** wherein the means for receiving the fixation means comprise housing means.

4. An intraocular lens of claim **1** wherein the fixation means comprises cylinder means for receiving the spring means.

5. An intraocular lens of claim **3** wherein the housing means are formed integrally with the lens optic portion.

6. An intraocular lens of claim **5** wherein the housing means further includes cylinder means formed integrally with the lens optic portion.

7. An intraocular lens of claim **4** wherein the spring means comprises a material selected from the group consisting of stainless steel, polymethylmethacrylate and silicone.

8. An intraocular lens of claim **1** wherein the haptic means comprises a member selected from the group consisting of stainless steel, polymethylmethacrylate, and polypropylene and silicone.

9. An intraocular lens of claim **1** wherein the lens optic portion comprises a material selected from the group consisting of polymethylmethacrylate and silicone.

10. An intraocular lens of claim **1** wherein the lens optic portion comprises vaulted housing means.

11. An intraocular lens of claim **10** wherein the vaulting is at a 5° angle to the back of the lens optic portion.

12. An intraocular lens of claim **10** wherein the vaulted housing means are formed integrally with the lens optic portion.

13. An intraocular lens of claim **1** comprising a lens optic portion of rounded rectangular shape.

14. An intraocular lens of claim **1** comprising a lens optic portion of oval shape.

15. An intraocular lens adapted for insertion into and fixation in the anterior chamber of substantially any size human eye, comprising an optic portion having a flat back portion and three flexible haptics attached to the edge of said flat back portion, each said haptic being of