PMMA. The haptic members **64** and **65** may be made of a flexible, compressible, resilient plastic material such as PMMA or polypropylene, or other materials as well known in the art. Preferably, the entire intraocular lens **60** is made of an integral one-piece structure and also is made of PMMA. The intraocular lens **60** may serve as a bifocal vision system, with one lens **62** for reading and the other lens **63** for distant viewing.

As previously discussed, many prior art methods of providing bifocal vision systems, such as bifocal glasses, are exclusive. With the present embodiment this would not be the case. One of the lens portions would have a focal length that is for viewing near objects and the other of the lens portions would have a focal length different from the first lens portion and that is for viewing distant objects. Such a combination of lenses will produce two images on the retina which are superimposed. Always, one of the two images will appear blurred. The eye is constantly scanning the images created on the retina and selectively chooses the image (the sharp one) to see. By having an intraocular lens **60** that is equally split, with the chord **60***a* being a horizontal diameter, the iris of the eye will always be in position in front of both lens portions **62** and **63** and therefore the retina will always have an image formed on it from both the lens portions **62** and **63**. The area of the first lens portion **62** is preferably approximately equal to the area of the second lens portion **63**.

Again, when the two lens portions are equal, the chord **61***a* is substantially a diameter of the lens body **61**. However, the chord **61***a* could be offset from the center without departing from the invention.

As is clearly shown in FIG. **6**, the lens body **61** has a planar bottom surface **61***b* that extends across both the first lens portion **62** and second lens portion **63**. The first lens portion **62** has an upper convex surface **62***a* and the second lens portion **63** has an upper convex surface **63***a*, the latter one having a different radius of curvature than the first. Reference numeral **66** generally indicates a transition region between the two lens portions which for the preferred embodiment shown, is chord **61***a*. In FIG. **6** plane **67** represents a division of the lens **61** into its two halves **62** and **63** of different powers. While different radii of curvatures are drawn, the difference is small and hard to see. It will nevertheless be understood to be present.

FIG. **7** is a cross-sectional view of a lens incorporating the present invention taken from a point of view generally analogous to the use for FIG. **1**, but showing an alternate thereto. In particular, the lens body of FIG. **7** is shown having a plano-convex structure. That is, it is generally planar on one side and convex on the other. This arrangement may be advantageous, in that it is potentially easier to construct. For the arrangement shown in FIG. **7**, the reference numeral **100** generally designates the eye, and the reference numeral **111** the lens. The arrangement will be understood to be analogous to that shown in FIGS. **1–3**, but for the utilization for a plano-convex structure for the lens. The near vision portion **112** of the lens may be, for example, of the relative diameter to the distant vision portion **113**, as previously described for FIGS. **1–3**. In the alternative, that ratio of areas described previously for FIG. **2A**, may also, preferably, be used. Desirable corrective factors for the two portions may be as previously indicated; that is, preferably, with the distance portion having a corrective power of between about +15 and +25 diopters, and with the corrective power of the inner, near vision, lens portion preferably having an add on power of between about +3 and about +4 diopters, and more preferably at least about +3.5 diopters.

In FIG. **8** a top plan view of the lens of FIG. **7** is shown. Again, except for the plano-convex structure, the arrangement is analogous to that shown in FIG. **2**.

Finally, in FIG. **8A** an alternate to the arrangement shown in FIG. **7** and **8** is shown, wherein the inner lens portion **112'** is constructed smaller, with respect to the outer lens portion **113'**. Specifically, for this arrangement it will generally be preferred that the annular portion have a diameter of about 6.0 to about 7.0 millimeters, while the inner portion has a diameter of about 1.8 to about 2.0 millimeters. Thus, the arrangement is generally analogous to that shown in FIG. **2A**, but for the plano-convex structure.

In general, arrangements according to FIGS. **7**, **8** and **8A** are more readily susceptible to manufacture according to the described method of molding, than are the embodiments of FIGS. **1–6**. A reason for this is that molds having a target arrangement providing for an inner concave region of one diameter and an outer concave region of another diameter can be fairly easily ground.

Although the preferred embodiment of the invention is a bifocal lens, it should be understood that one or more additional lenses may be incorporated to correct for different distances.

Other modifications of the invention will be apparent to those skilled in the art in light of the foregoing description. This description is intended to provide specific examples of individual embodiments which clearly disclose the present invention. Accordingly, the invention is not limited to these embodiments or to the use of elements having specific configurations and shapes as presented herein. All alternative modifications and variations of the present invention which follow in the spirit and broad scope of the appended claims are included.

We claim:

1. A rigid intraocular lens implant adapted for use as an artificial lens implant in a posterior chamber of an eye; said intraocular lens comprising:

(a) means for non-movably retaining said lens implant within a posterior chamber of a user's eye; and,

(b) a lens body comprising a material having a first index of refraction and substantially no index of refraction gradient therein; said lens body having a first circular lens portion and a second annular lens portion, said second annular lens portion surrounding said first circular lens portion;

(i) said first lens portion comprising a portion of said lens body having said first index of refraction and a first radius of curvature defining a first optical power;

(ii) said second lens portion comprising a portion of said lens body having said first index of refraction and a second radius of curvature defining a second optical power;

(iii) said second lens portion being constructed and arranged for viewing relatively distant objects and having an optical power of between about +15 and about +25 diopters;

(iv) said first lens portion being constructed and arranged for viewing relatively near objects and having: a power of at least +3.0 diopters greater than said second lens portion; and, a diameter of no greater than about 2.0 mm.