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negative lens 36. In this case, however, the negative lens 36 is mounted to the end of a cylindrical lens holder 37 so that it extends rearwardly of the posterior face of the body member 30 and thereby produces a larger space between it and the positive lens 35. Such an arrangement increases the magnification of the intraocular insert.

In all other respects, the intraocular insert 30 illustrated in FIG. 3 is constructed and operates in the same manner as described above with respect to FIGS. 1 and 2.

FIG. 4 illustrates an intraocular insert, generally designated 40, including a body member 41 in the form of a soft lens formed with a central cavity in the form of a throughgoing bore 43 coaxial with the central axis of the soft lens. A cylindrical lens holder tube 44 is mounted to the anterior side of the soft lens 41 within its bore 43, and carries a positive lens 45 facing the anterior side of the eye. A negative lens 46 is mounted within bore 43 to face the posterior side of the eye. As seen in FIG. 4, the anterior face of the positive lens 45 projects forwardly of the anterior face of the soft lens 41, whereas the negative lens 46 is substantially in coaxial alignment with the soft lens. This produces a relatively large cavity between the two lenses 45, 46, thereby increasing the magnification of the intraocular insert.

The soft lens 41 is preferably made of a silicone, whereas lenses 45 and 46, as well as the cylindrical lens holder 44, are made of transparent glass or plastic. The center cavity of holder 44, between the two lenses 45, 46, may be filled with any suitable fluid, e.g., air, a gas or transparent liquid. In all other respects, the intraocular insert 40 illustrated in FIG. 4 is constructed and operates in the same manner as described above.

In the embodiment of FIG. 4, the body member 41 is preferably a soft lens, but could be a hard lens material, such as of glass, plastic or sapphire. Preferably the cavity defined by the cylindrical lens holder 44 is filled with air, but could be filled with another inert gas or inert liquid.

While it is contemplated that all the elements of the intraocular insert would be implanted as an assembly at one time, it is conceivable that the intraocular insert could include a body member formed with a central cavity implanted in the interior of the human eye, and the lenses attached to the body member during or after its implantation. The intraocular insert could also include more than two lenses, combination lenses, holographic lenses, etc. Many other variations, modifications and applications of the invention will be apparent.

What is claimed is:

1. An intraocular insert for implantation in the interior of a human eye having an anterior face and a posterior face, characterized in that said insert includes:

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a positive lens carried by the insert to face the anterior side of the eye;

a negative lens carried by the insert in alignment with and spaced behind said positive lens to face the posterior side of the eye;

and a body member supporting said positive lens and negative lens in spaced relation at the opposite ends of a cavity, in the insert with the outer periphery of a posterior face of the negative lens substantially flush with a posterior face of the body member, and with an anterior face of the positive lens projecting forwardly of an anterior face of the body member.

2. The intraocular insert according to claim 1, wherein said body member includes a soft lens carrying said positive lens and negative lens in alignment with a central axis of said soft lens.

3. The intraocular insert according to claim 2, wherein said positive lens and said negative lens are mounted at the opposite ends of a cylindrical lens holder carried by said soft lens.

4. An intraocular insert for implantation in the interior of a human eye, including a combination of lenses constituting a Galilean telescope to be mounted in the interior of the eye;

said combination of lenses including:

a positive lens to face the anterior side of the eye;

a negative lens in alignment with and spaced behind said positive lens to face the posterior side of the eye;

and a body member supporting said positive lens and negative lens in spaced relation at the opposite ends of a cavity, with the outer periphery of a posterior face of the negative lens substantially flush with a posterior face of the body member, and with an anterior face of the positive lens projecting forwardly of an anterior face of the body member.

5. The intraocular insert according to claim 4, wherein said positive lens and negative lens are separate elements fixed to the body member at opposite ends of said cavity.

6. An intraocular insert for implantation in the interior of a human eye, characterized in that said insert includes a body member of a transparent material formed with a central cavity adapted to receive a positive lens at one end of the cavity and a negative lens at an opposite end of the cavity.

7. The intraocular insert according to claim 6, wherein said central cavity is a throughgoing bore.

8. The intraocular insert according to claim 6, wherein said central cavity is integrally formed at one end with one of said lenses.

9. The intraocular insert according to claim 6, wherein said body member is a hard lens.

10. The intraocular insert according to claim 6, wherein said body member is a soft lens.

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