

33. A lens implant as claimed in claim **32**, wherein said means for altering the focal length of said second lens portion comprises a second expansion channel extending around the interior periphery of said second lens portion.

34. A lens implant as claimed in claim **33**, and further comprising first access means for the injection of material into said expansion channel and second access means for the injection of material into said second expansion channel.

35. A lens implant for the eye, wherein the eye has a substantially intact capsular bag having anterior and posterior walls and a capsulorexis opening with edges in said anterior wall, said implant comprising:

a first lens portion of a deformable material, said lens portion having an interior periphery and anterior and posterior surfaces;

affixing means on said lens portion adjacent said periphery for affixing said first lens portion to the anterior wall of the capsular bag whereby forces on the anterior wall are transmitted to said lens portion; and

said first lens portion having an expansion channel extending around said interior periphery and access means for injection and removal of material into said expansion channel for altering the focal length of said first lens portion.

36. A lens implant for the eye, wherein the eye has a substantially intact capsular bag having anterior and posterior walls, each having front and rear surfaces and an opening in the anterior wall, said implant comprising:

a first lens portion of a deformable material, said first lens portion having an external periphery and an internal periphery and anterior and posterior surfaces;

a second lens portion having anterior and posterior surfaces and an interior periphery, the anterior surface of said second lens portion being affixed to the posterior surface of said first lens portion;

affixing means on said anterior surface on said first lens portion adjacent said external periphery thereof for affixing said first lens portion within the opening in the anterior wall of the capsular bag;

means for altering the focal length of said first lens portion comprising an expansion channel within said first lens portion and extending around the internal periphery thereof; and

access means for the injection and removal of material into and out of said expansion channel for altering focal length of said first lens portion.

37. A lens implant as defined in claim **36** and further including means for altering the focal length of said second lens portion comprising an expansion channel extending around the interior periphery of said second lens portion with access means for the injection and removal of material into and out of said expansion channel.

38. A method of implanting an accommodating intraocular lens within an eye, wherein the eye has a substantially intact, empty capsular bag having an opening in the interior wall thereof and the intraocular lens has an interior wall, a periphery, and a deformable portion comprising an expansion channel extending around said periphery with an access means for the injection and removal of a material into and out of said expansion channel for altering the shape and focal length of said intraocular lens, said method comprising the steps of:

inserting a material through said access means into said expansion channel for deforming said intraocular lens into a shape having a non-accommodating shape prior to inserting said lens into capsular bag;

inserting the intraocular lens into the capsular bag through the opening therein;

affixing the deformable portion of the lens to the edge of the capsular bag defined by the opening; and

adjusting the amount of said material through said access means in said channel to attain a desired focal length of said lens.

39. The method of implanting an accommodating intraocular lens as claimed in claim **38**, wherein the step of affixing the deformable portion includes the steps of:

forming a shelf on the anterior wall of the lens adjacent the periphery thereof; and

positioning the lens within the capsular bag so that the interior wall of the capsular bag adjacent the opening therein overlays and contacts the shelf.

40. The method of implanting an accommodating intraocular lens as claimed in claim **39**, and further including the steps of:

coating the shelf with a polymer gel; and

melting the gel to fuse the capsular bag to the shelf.

41. The method of implanting an accommodating intraocular lens as claimed in claim **39**, wherein the step of forming a shelf includes the steps of forming at least one flap adjacent the shelf.

42. The method of implanting an accommodating lens as claimed in claim **41**, and further including the step of overlaying the anterior wall of the capsular bag adjacent the opening therein with the flap after positioning the lens within a capsular bag.

43. The method of implanting an accommodating lens as claimed in claim **38**, and wherein the lens has a second deformable portion having a periphery with an expansion channel extending around the periphery thereof and an access means for the insertion of material into said expansion channel, including the step of:

deforming the second deformable portion to alter the shape thereof prior to insertion into the capsular bag.

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