

In the case of the end of the haptic fastener shown on the right in FIG. 7, the anterior chamber suspension 34, 35 is additionally drawn in with the dash-dotted line. The illustration shows the anterior chamber portion 19 and the suspension 24, 35 in a phase of production in which these portions together with the penetration portion 18 still have not been formed from the first plane of machining (e.g. material-removing machining) into the plane parallel offset function plane of the anterior chamber portion with the perpendicular or angled position of the penetration portion.

In the embodiment shown in FIGS. 8 to 10 the anterior chamber portion 19 is essentially identical to that in FIG. 7. However, here the penetration portion 18 is bent directly from the course of the posterior chamber portion (essentially swivelled tangentially) and essentially runs perpendicular to the iris. Here, the arrangement and design of the portions of the haptic fasteners are clearly visible, in particular in the perspective view in FIG. 10.

The embodiment shown in FIGS. 11 to 14 is a further variant of the embodiment in FIG. 7. Whereas in the embodiment in FIG. 7 the penetration portion 18 runs essentially perpendicular to the iris, in the embodiment shown in FIGS. 11 to 14 the penetration portion 18 runs essentially at an oblique angle or radially at an angle to the iris. There the penetration portion 18 is practically bent directly from the inwards arc 31 (swivelled radially), as is clearly visible in particular in FIGS. 11, 13 and 14. In FIG. 11 the broken line shows the position of the anterior chamber suspension 34 on the left-hand haptic fastener prior to being bent out of the plane of the lens. It will be apparent that relatively advantageous production is possible in the plane of the lens, after which the penetration portion 18 is bent out of the plane.

It can be seen from FIGS. 12 and 13 in comparison with in particular FIGS. 5 and 9 that the shaping of the posterior chamber portion can also vary, in particular as regards its angular alignment to the iris. Thus, for example, a posterior chamber portion can be inclined at a constant angle, as shown in FIG. 5. However, in its first part the posterior chamber portion can also be inclined at a steeper angle essentially as far as the supporting segment 20, whereas the further part leading to the penetration portion runs essentially parallel with the iris.

The embodiment shown in FIGS. 15 to 17 is a further variant of the embodiments shown in FIG. 7 and FIGS. 11 to 14. It can be seen that the interior chamber portion 19, which here exhibits a double-armed suspension 34, additionally has a radial part 36 between the suspension 34 and the penetration portion 18. The suspension 34 is moved radially outwards by the radial part 36 which lies in the same horizontal plane with the suspension 34 and in essentially the same radial vertical plane with the penetration portion 18. It can be seen that the radial part 36 can also be disposed so that it runs inwards, with the result that the suspension is located on the inside in relation to the iridectomy 12 and the penetration portion.

The radial part 36 can be provided per se in any of the artificial lenses shown in the figures described previously. The posterior chamber portion end, penetration portion and anterior chamber portion (with the radial part) must each be embodied or disposed in relation to one another so that none of the portion parts comes to lie in the same tangential vertical plane.

The invention is not limited by the embodiments described above which are presented as examples only but can be modified in various ways within the scope of protection defined by the appended patent claims.

I claim:

1. An intraocular artificial lens for placement in an eye having an iris, an anterior chamber and a posterior chamber, the intraocular artificial lens comprising:

a lens body configured to be arrangeable in the posterior chamber of the eye and defining a plane; and

at least one curved haptic fastener fixed to the lens body, the haptic fastener being formed of a plurality of portions, including:

a first, posterior chamber portion with a first end connected to the lens body and being configured to extend tangentially from a peripheral edge of the lens body and curved so that the posterior chamber portion forms a support segment that is elastically supportable in a posterior chamber angle of the eye;

a second, penetration portion arranged at a second end of the posterior chamber portion so as to curve out of the plane of the lens body so as to be passable through an iridectomy; and

a third, anterior chamber portion connected to the penetration portion so as to be substantially parallel to the plane of the lens body.

2. An intraocular artificial lens according to claim 1, wherein the penetration portion is configured to extend substantially perpendicular to the plane of the lens body.

3. An intraocular artificial lens according to claim 1, wherein the penetration portion is configured to extend at an angle to the plane of the lens body.

4. An intraocular artificial lens according to claim 3, wherein the penetration portion is configured to extend in a substantially perpendicular diameter plane relative to the lens body.

5. An intraocular artificial lens according to claim 4, wherein the haptic fastener further includes a radial transition portion between the penetration portion and the support segment of the posterior chamber portion, the transition portion being configured as an arc that curves inwardly from the support segment of the posterior chamber portion toward the lens body.

6. An intraocular artificial lens according to claim 3, wherein the penetration portion is configured to extend in a plane substantially tangential to the lens body.

7. An intraocular artificial lens according to claim 1, wherein at least two haptic fasteners are mounted on the lens body.

8. An intraocular artificial lens according to claim 1, wherein the anterior chamber portion is configured to be engagable at a radially outermost peripheral rim of the iris.

9. An intraocular artificial lens according to claim 1, wherein the anterior chamber portion is configured so as to be engagable with an anterior chamber angle of the anterior chamber of the eye.

10. An intraocular artificial lens according to claim 1, wherein the haptic fastener is configured so as to have segments that are relatively short and are engagable with portions of the eye so as to support the lens.

11. An intraocular artificial lens according to claim 1, wherein the anterior chamber portion of the haptic fastener is configured to have a starting arm that extends from the penetration portion, and a supporting arm that extends from the starting arm in an opposite direction.

12. An intraocular artificial lens according to claim 11, wherein the supporting arm has a first portion extending from the starting arm, and a second end portion, the first and second portions being configured and arranged so as to provide a two-point contact with the iris.

13. An intraocular artificial lens according to claim 11, wherein the supporting arm is configured so as to extend radially outside the penetration portion, relative to the lens body.