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Other existing lens can be a pseudophakic lens, or a lens, such as a natural lens of the eye.

Light-blocking darkened or opaque zones may be provided on or at or proximate the lens periphery, as for example are indicated at 80 in FIG. 2.

Sensors embedded in the elastomide (synthetic resin) of the lens unit, as for example in haptic structure, will detect activity, such as movement of the ciliary muscle, to which the haptic becomes attached, as described. For example, ciliary muscle contraction, as detected at the multiple points (four as described) of circuit sensor location, is detected, as the lens optic is advanced forwardly, by accommodation, and the reverse occurs when the optic retracts as the ciliary muscle relaxes.

Such sensors can be used to detect rotation of the toric lens. Also, maintenance of immobility of the lens unit and ciliary muscle, as desired during healing, i.e., adhesion attachment of the haptics to the ciliary muscle, can be monitored using such sensors. Local control of lens darkening, using such circuitry with current flow between selected points on the lens unit to effect such selected zone darkening is also contemplated.

I claim:

1. An artificial lens assembly insertible into the eye, that includes, in combination:

- a) a lens unit having a lens zone to transmit light, and haptic means to position the unit in the eye, and
- b) electronic circuitry carried by said haptic means,
- c) said circuitry including a strain sensor responsive to haptic means movement.

2. The combination of claim 1 wherein said circuitry includes multiple sensors to detect haptic means movement.

3. The combination of claim 2 wherein said sensors are spaced apart to sense lens unit deflection.

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4. The combination of claim 1 including means spaced from said lens unit and from said sensor to transmit a signal to and/or from said circuitry.

5. The combination of claim 1 wherein said circuitry includes means to determine a physical characteristic of the lens unit when inserted in the eye.

6. The combination of claim 5 wherein said circuitry includes means for changing a physical characteristic of the lens unit when inserted into the eye, by electromagnetic transmission of energy into the eye from the exterior thereof and from the exterior of a head in which the eye is located.

7. In apparatus for detecting or controlling the physical insertion of a synthetic lens unit within the eye, the combination that includes:

- a) an electronic circuit component or components configured to be implanted in the eye, in association with a haptic projecting from a synthetic lens unit in the eye, and wherein the circuit component or components is or are everywhere spaced from the lens unit,
- b) said circuit component or components including means to effect one of the following:
 - i) detect or monitor ciliary muscle movement,
 - ii) detect or monitor movement of said synthetic lens unit,
 - iii) detect or monitor electronic current flow through circuitry associated with said haptic,
 - iv) detect or monitor changed coloration of said synthetic lens unit or a portion thereof,
 - v) effect current flow through circuitry associated with said haptic.

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