

The use of an alterable storage unit on the semiconductor chip allows the control algorithm for the pump to be modified even after the pump is implanted. The use of a simple radio frequency detector and conventional radio frequency signalling techniques would allow the program to be altered to suit existing conditions. Alternatively, since the device is accessible to visible light, a simple optical device can be used to reprogram the device.

Various modifications can be made to the present invention without departing from the apparent scope thereof. The implanted switch can also be a receiver for receiving RF signals from an external source for energizing and providing communications command controls to the microprocessor control for regulating the distance between the two lenses.

I claim:

1. Intraocular lens system for implantation in an eye, comprising:

- a. implantable intraocular first lens means constructed of a substantially stiff material including means for supporting said lens means in an anterior chamber or a posterior chamber of said eye;
- b. second movable lens means constructed of a material of a soft and pliable nature secured to and disposed over said first lens means, said second lens means of a material for positioning of said second lens at a distance away from said first lens;
- c. means for moving said center of said second lens said distance away from said first lens, said movement means positioned in and about said first lens means, and connected to space between said first and second means;

wherein said movement means comprises:

- (i) fluid reservoir means positioned about the circumference of said first lens means;
- (ii) pump means and valve means, said pump means being connected between said reservoir and said valve means; and,
- (iii) means for connecting said valve means to said space between said first and second lens means.

2. System of claim 1 wherein said first lens means is an anterior chamber lens.

3. System of claim 2 wherein said first lens means is of PMMA material.

4. System of claim 1 wherein said first lens means is a posterior chamber lens.

5. System of claim 4 wherein said first lens means is of PMMA material.

6. System of claim 1 wherein said second movable lens means is of pliable rubber and secured about an edge of said first lens means.

7. System of claim 6 wherein said pliable rubber is silicon rubber.

8. System of claim 6 wherein said pliable rubber is urethane.

9. System of claim 1 wherein said fluid is distilled water.

10. Intraocular lens system for implantation in an eye, comprising:

- a. intraocular first lens means including means constructed of a substantially stiff material for supporting said lens means in an anterior or posterior chamber of the eye;
- b. second movable lens means secured to a periphery of said first lens means and disposed over said first lens means, said second means of a material of a soft and pliable nature for positioning over said first lens means at a distance away from said first lens means;
- c. means for storing fluid in a perimeter reservoir about a circumferential edge of said first lens means;
- d. means situated within said first lens means for pumping fluid from said reservoir means to space between said first lens means and said second lens means, said pump means connected to said reservoir means, and valving means connected between said pump means and said space between said first lens means and second lens means; and,
- e. means for controlling said pump, said means including computer means for turning said pump on and off on an external command whereby said controlling means controls said pump means for pumping fluid from said fluid storage means for allowing for accommodation from distance to near vision of the focal point between said first lens means and said second lens means thereby fine tuning the focal point of a lens implanted into said eye.

11. System of claim 10 wherein said first lens means is of PMMA material.

12. System of claim 10 wherein said second lens means is of silicon material.

13. System of claim 10 wherein said controlling means is a RF signal external to the eye.

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