CLAIMS

1. An energized ophthalmic lens device comprising:

a lens for residing in or on human eye, the lens comprising an optical zone and a non-optical zone formed within a lens material;

an energy source at least partially embedded in the lens material in an area of the lens comprising the non-optical zone; and

an electrical current drawing component contained within a stacked integrated component device, wherein the stacked integrated component device is at least partially embedded within the lens material.

2. The device of Claim 1, additionally comprising a reenergizing component.

3. The device of Claim 2, wherein the reenergizing component comprises at least one of: a photoelectric device; a radio frequency absorbing device; an inductive energy coupling device; a capacitive energy coupling device; a thermoelectric device and a piezoelectric device.

4. The device of any one of Claims 2 or 3, wherein at least a portion of the reenergizing component is contained within the stacked integrated component device.

5. The device of ay one of Claims 2, 3 or 4, wherein the reenergizing component directly provides energy to reenergize the energy source.

6. The device of ay one of Claims 2, 3, 4 or 5, wherein the reenergizing component provides energy that is modified by an energy characteristic altering device to reenergize the energy source.

7. The device of any preceding claim, wherein the lens material comprises at least one of: etafilcon, senofilcon, galyfilcon and narafilcon.

8. The device of Claim 6, wherein the energy characteristic altering device is contained within a stacked integrated component device.

9. The device of any preceding claim 1, comprising a transceiver operable to receive a control signal to control a function component in the stacked integrated component device.

10. An ophthalmic lens comprising a device according to any one of Claims 1 to 9 embedded therein.

Claims

1. An energized ophthalmic lens device comprising:

a lens for residing in or on a human eye, the lens comprising an optical zone and a non-optical zone formed within a lens material;

a stacked integrated component device at least partially embedded within the lens material;

an energy source contained within the stacked integrated component device and at least partially embedded in the lens material in an area of the lens comprising the non-optical zone; and

an electrical current drawing component contained within an area of the stacked integrated component device that is in the non-optical zone of the lens.

2. The device of Claim 1, additionally comprising a reenergizing component.

3. The device of Claim 2, wherein the reenergizing component comprises at least one of: a photoelectric device; a radio frequency absorbing device; an inductive energy coupling device; a capacitive energy coupling device; a thermoelectric device and a piezoelectric device.

4. The device of any one of Claims 2 or 3, wherein at least a portion of the reenergizing component is contained within the stacked integrated component device.

5. The device of any one of Claims 2, 3 or 4, wherein the reenergizing component directly provides energy to reenergize the energy source.

6. The device of any one of Claims 2, 3, 4 or 5, wherein the reenergizing component provides energy that is modified by an energy characteristic altering device to reenergize the energy source.

7. The device of any preceding claim, wherein the lens material comprises at least one of: etafilcon, senofilcon, galyfilcon and narafilcon.

8. The device of Claim 6, wherein the energy characteristic altering device is contained within a stacked integrated component device.

9. The device of any preceding claim, additionally comprising a transceiver operable to receive a control signal to control a functional component in the stacked integrated component device.

10. An ophthalmic lens comprising a device according to any one of Claims 1 to 9 embedded therein.