## Claims

1. An apparatus for delivering electromagnetic radiation to a large portion of an anterior surface of an iris of a human eye to effect at least one of eye-color change or glaucoma treatment, comprising:

an electromagnetic radiation generator which comprises at least a laser device, configured to generate an electromagnetic radiation pathway,

a computerized scanning system to apply the electromagnetic radiation to a large portion of the anterior surface of the iris; and

a profile of anthe electromagnetic radiation pathway of the electromagnetic radiation which is a laser beam and is applied by the computer scanning system to a large portion of the anterior surface in such way that the beam profile converges to a focal point at the anterior surface and delivers sufficient energy density to the anterior surface to achieve efficacy with respect to at least one of eye-color change or glaucoma treatment; and then diverges from that focal point sufficiently to achieve efficacy with respect to at least one of eye-color change or glaucoma treatment; and then diverges from that focal point sufficiently to reduce the energy density at a fundus of the eye to a level that does not injure the fundus.~~that the energy density at the iris is greater than the energy density at the posterior portion of the eye~~.

~~2. The apparatus of Claim 1, wherein the electromagnetic radiation generator comprises a laser device and the electromagnetic radiation pathway is a laser beam.~~

32. The apparatus of Claim 1, wherein the electromagnetic radiation generator comprises a SASER device and wherein the electromagnetic radiation pathway is a SASER beam.

43. The apparatus according to claim ~~2 or 3~~1, wherein athe divergence angle of the pathway is 10.0-12.5 degrees.

54. The apparatus according to any of the previous claims, wherein the electromagnetic radiation generator comprises radio frequency.

65. The apparatus according to claim ~~2 or 3~~1, wherein the divergence angle of the pathway is 12.5-15.0 degrees.

~~7~~6. The apparatus according to claim ~~2 or 3~~1, wherein the divergence angle of the pathway is 15.0-20.0 degrees.

~~8~~7. The apparatus of any of the preceding claims ~~2 or 4-7 when depends on claim 2~~, wherein the computerized scanning system is configured to apply the laser beam to the anterior surface of the iris in a spiral pattern, the spiral pattern comprises two zones, both concentric to the pupil, the first zone extending from approximately the outer periphery of the pupillary constrictor muscles to approximately the outer periphery of the pupil, and the second zone extending from approximately the limbus to approximately the outer periphery of the pupillary constrictor muscles.

~~9~~8. The apparatus according to claim ~~8~~7, wherein the computerized scanning system is configured to apply the laser beam to the first zone prior to its application to the second zone.

~~10. The apparatus according to claim 1, wherein the electromagnetic radiation comprises radio frequency.~~

~~11~~9. The apparatus according to claim 1, wherein the electromagnetic radiation comprises ultrasound.

~~12~~10. The apparatus according to any of the previous claims, wherein the electromagnetic radiation is applied to a percentage of the total anterior surface area of the iris equal to 50-75%~~ or 75-100%~~.

~~13~~11. The apparatus according to any of the previous claims, wherein the computerized scanning system is configured to apply a first laser spot and a second laser spot on the anterior surface of the iris~~, wherein the first spot and the second spot overlap within a 24-hour period, and the area of overlap between the first spot and the second spot is equal to 0-10%, 10-20%, 20-30%, 30-40%, 40-50%, 50-60%, 60-70%, 70-80%, 80-90%, or 90-100%~~.

~~14~~12. The apparatus according to any of the previous claims, wherein the pathway produces a spot on the anterior surface of the iris with a diameter equal to 1-10 microns~~, 10-50 microns, or 50-100 microns~~.

~~15~~13. The apparatus according to any of the previous claims 1-6, 10-12, wherein the pathway produces a spot on the anterior surface of the iris with a diameter equal to ~~100-200~~10-50 microns ~~microns or 200-500 microns~~.

~~16~~14. The apparatus according to any of the previous claims, wherein the apparatus further comprises a bite bar.

~~17~~15. The apparatus according to any of the previous claims, wherein the apparatus further comprises a gaze fixation target.

~~18~~16. The apparatus according to any of the previous claims, wherein the apparatus further comprises an eye-movement detection device.

~~19~~17. The apparatus according to claim ~~18~~16, wherein the device is further configured to shift the direction of the pathway to correspond to the movement of the eye.

~~20. The apparatus according to claim 18 or 19, wherein movement of the eye is detected by movement of the pupil, and infrared iris transillumination is used to identify the pupil in dark irides.~~

18. The apparatus according to any of the previous claims 1-6, 10-12, wherein the pathway produces a spot on the anterior surface of the iris with a diameter equal to 100-200 microns.

19. The apparatus according to any of the previous claims 1-6, 10-12, wherein the pathway produces a spot on the anterior surface of the iris with a diameter equal to 200-500 microns.