FIG. **4**, a second rod **78** is mounted on top of the first rod **76**. A preferred size of the second rod **78** is 1.7 cm wide and 60 cm long. The second rod **78** is preferably fabricated from anodized aluminum or steel.

After passing through the fluid **96**, the filtered radiation may be received by an image-receiving device **80**, which is mounted to either the second rod **78** (FIG. **4**) or the first rod **76** (FIG. **5**). A protractor **84** may be mounted in an opening in the base plate **72** under the artificial eye **10**. The protractor **84** indicates the angular position of the first and second rods **76**,**78** and, consequently, the angular position of the image-receiving device **80** relative to the artificial eye **10**. Preferably, the image-receiving device **80** is a CCD camera, optometer, or other type of radiometer which can detect the filtered radiation and create a high resolution map of the radiation pattern in electronic form.

The image-receiving device **80** relays the electronic interpretation of the radiation pattern to an image processor or computer **82**. The image processor **82** translates the electronic map into an image which can be understood by humans. In a preferred embodiment, the electronic map is converted into a high resolution printout or is displayed on a screen. The person evaluating the image determines whether or not the image intensity is below a predetermined safety threshold at all points. By mapping the intensity at each point of the image, rather than determining the total energy of the filtered radiation, the present invention reveals concentrations of energy which may damage the eye.

While the invention has been described with reference to certain preferred embodiments, numerous changes, alterations and modifications to the described embodiments are possible without departing from the spirit and scope of invention as defined in the appended claims, and equivalents thereof.

What is claimed is:

1. An artificial eye, comprising:

a generally spherically shaped container having a first opening;

a lens holder removably disposed in the first opening in the container;

a first fluid disposed in the container; and

a second fluid disposed in the lens holder;

wherein the generally spherically shaped container comprises a substantially hemispherical posterior portion made of a substantially transparent material, a substantially hemispherical anterior portion made of a substantially opaque material and a fastener for attaching the posterior portion to the anterior portion.

2. The artificial eye of claim **1** wherein the first fluid has substantially the same index of refraction as the vitreous humor of the human eye.

3. The artificial eye of claim **2** wherein the first fluid comprises a mixture of gelatin and water.

4. The artificial eye of claim **1** wherein the lens holder comprises a substantially cylindrical sleeve, a first lens disposed in the sleeve, an aperture disk disposed posterior to the first lens, a second lens disposed posterior to the aperture disk and end pieces disposed in both ends of the sleeve.

5. The artificial eye of claim **4** wherein the sleeve includes internal backing rings against which the second lens and the aperture disk rest.

6. The artificial eye of claim **5** wherein the first lens, the second lens and the sleeve define a chamber which is filled with the second fluid.

7. The artificial eye of claim **6** wherein the second fluid has substantially the same index of refraction as the aqueous humor of the human eye.

8. The artificial eye of claim **7** wherein the second fluid comprises water.

9. The artificial eye of claim **6** wherein the first lens comprises a meniscus lens.

10. The artificial eye of claim **9** wherein the second lens comprises a double convex lens.

11. An artificial eye, comprising:

a generally spherically shaped container having a first opening;

a lens holder removably disposed in the first opening in the container;

a first fluid disposed in the container; and

a second fluid disposed in the lens holder;

wherein the generally spherically shaped container comprises a substantially hemispherical posterior portion made of a substantially transparent material, a substantially hemispherical anterior portion made of a substantially opaque material and a fastener for attaching the posterior portion to the anterior portion and wherein the substantially transparent material comprises plexiglass, the substantially opaque material comprises one of aluminum and stainless steel and the fastener comprises two bands of aluminum.

12. An artificial eye, comprising:

a generally spherically shaped container having a first opening;

a lens holder removably disposed in the first opening in the container;

a first fluid disposed in the container; and

a second fluid disposed in the lens holder;

wherein the generally spherically shaped container comprises a substantially hemispherical posterior portion made of a substantially transparent material, a substantially hemispherical anterior portion made of a substantially opaque material and a fastener for attaching the posterior portion to the anterior portion and wherein the substantially hemispherical posterior portion further comprises an interior surface that is frosted.

13. An artificial eye, comprising:

a generally spherically shaped container having a first opening;

a lens holder removably disposed in the first opening in the container;

a first fluid disposed in the container; and

a second fluid disposed in the lens holder;

wherein the container is approximately 6.5 times the size of a human eye.

14. An artificial eye, comprising:

a generally spherically shaped container having a first opening;

a lens holder removably disposed in the first opening in the container;

a first fluid disposed in the container; and

a second fluid disposed in the lens holder;

wherein the generally spherically shaped container comprises a substantially hemispherical posterior portion made of a substantially transparent material, a substantially hemispherical anterior portion made of a substantially opaque material and a fastener for attaching the posterior portion to the anterior portion and wherein the lens holder comprises a substantially cylindrical sleeve, a first lens disposed in the sleeve, an aperture disk disposed posterior to the first lens, a second lens disposed posterior to the aperture disk and end pieces disposed in both ends of the sleeve and further wherein an external surface of the sleeve and an internal