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Miller et al.

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(54) **SYSTEM AND METHOD FOR INCREASING THE DEPTH OF FOCUS OF THE HUMAN EYE**

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(58) **Field of Classification Search** 351/163, 351/165; 623/6.17, 6.31
See application file for complete search history.

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(57) **ABSTRACT**

A method and apparatus for increasing the depth of focus of the human eye is comprised of a lens body, an optic in the lens body configured to produce light interference, and a pinhole-like optical aperture substantially in the center of the optic. The optic may be configured to produce light scattering or composed of a light reflective material. Alternatively, the optic may increase the depth of focus via a combination of light interference, light scattering, light reflection and/or light absorption. The optic may also be configured as a series of concentric circles, a weave, a pattern of particles, or a pattern of curvatures. One method involves screening a patient for an ophthalmic lens using a pinhole screening device in the lens to increase the patient’s depth of focus. Another method comprises surgically implanting a mask in the patient’s eye to increase the depth of focus.

28 Claims, 7 Drawing Sheets

