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Holladay

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(54) **MULTI-FOCAL INTRAOCULAR LENS SYSTEM AND METHODS**

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(58) **Field of Classification Search** 250/201.1, 250/201.2, 559.38; 345/127–131, 147, 156, 345/201, 472.1, 472.2, 670, 671; 356/3, 356/4.01

See application file for complete search history.

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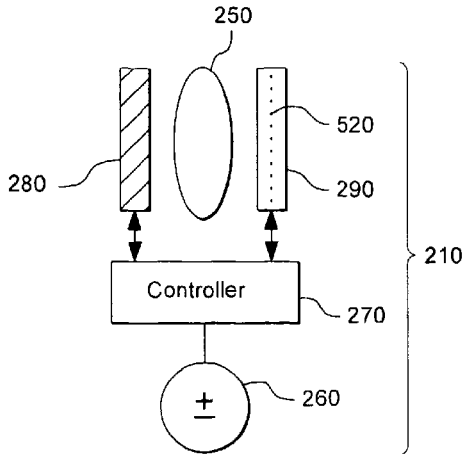
(57) **ABSTRACT**

The invention pertains to methods, components, and operations of multi-focal intraocular lens systems, including range finding for driving same and for discriminating between multiple objects and varying brightness conditions. The invention also pertains to intraocular photosensors and range-finding methods to be used with intra-ocular lens systems, and components, that provide multi-focal IOL capabilities in dynamic visual environments.

52 Claims, 19 Drawing Sheets