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**Huang et al.**

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(54) **METHOD AND APPARATUS FOR MEASURING A RETINAL SUBLAYER CHARACTERISTIC**

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See application file for complete search history.

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(57) **ABSTRACT**

Methods and systems are provided for measuring a retinal sublayer characteristic of an eye. A plurality of axial scans are performed over an area of the retina of the eye. Reflections are measured during the axial scans to determine a plurality of sets of reflection intensity values. A given set of reflection intensity values is associated with one of the plurality of axial scans. A progressive refinement boundary detection algorithm is performed using the plurality of sets of reflection intensity values to determine at least one boundary location associated with the retinal sublayer for each of the plurality of sets of reflection intensity values. The retinal sublayer characteristic is determined in response to the determined boundary locations.

**30 Claims, 4 Drawing Sheets**

