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(54) **METHODS AND APPARATUS FOR IMAGING OF OCCLUDED OBJECTS**

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G01J 3/10	(2006.01)
G01J 3/42	(2006.01)
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See application file for complete search history.

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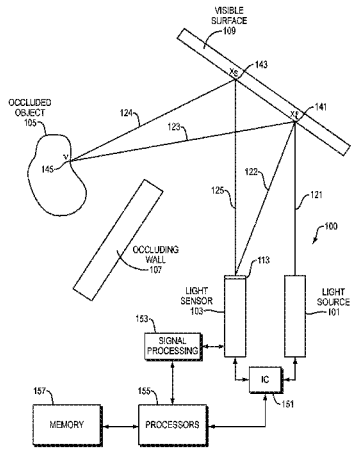
(57) **ABSTRACT**

An active imaging system, which includes a light source and light sensor, generates structured illumination. The light sensor captures transient light response data regarding reflections of light emitted by the light source. The transient light response data is wavelength-resolved. One or more processors process the transient light response data and data regarding the structured illumination to calculate a reflectance spectra map of an occluded surface. The processors also compute a 3D geometry of the occluded surface.

17 Claims, 5 Drawing Sheets