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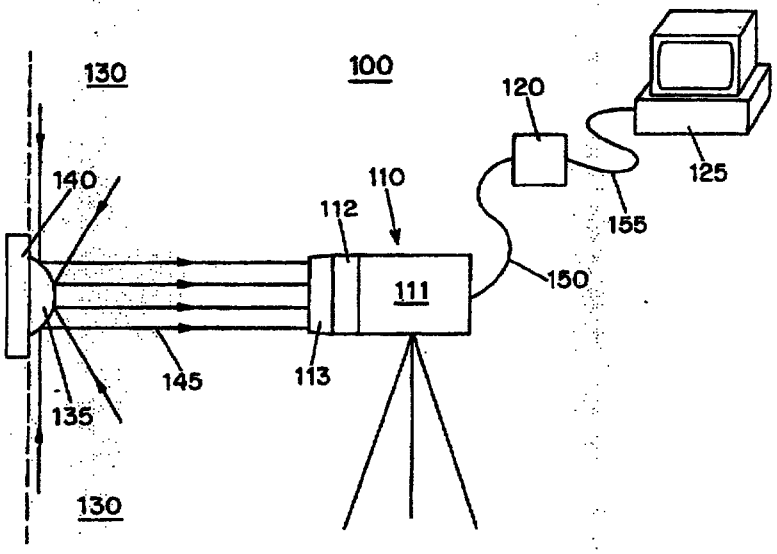
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(54) Title: OMNIDIRECTIONAL IMAGING APPARATUS



(57) Abstract

An omnidirectional image apparatus (130) for sensing an image of a substantially hemispherical scene from a single viewpoint, including a truncated, convex, substantially paraboloid-shaped reflector (135) positioned to orthographically reflect an image of the substantially hemispherical scene, and an image sensor (110) positioned to receive the orthographically reflected image. An omnidirectional image projection apparatus for projecting an image of a substantially hemispherical scene as viewed from a single viewpoint, including a means for projecting a collimated beam of light modulated with the image, and a truncated convex substantially paraboloid-shaped reflector positioned to orthographically reflect the collimated beam of light modulated with the image to project the hemispherical scene.