

Title (en)
METHOD AND APPARATUS FOR ILLUMINATING A FIELD OF VIEW OF AN OPTICAL SYSTEM FOR GENERATING THREE DIMENSIONAL IMAGE INFORMATION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BELEUCHTUNG EINES SICHTFELDES EINES OPTISCHEN SYSTEMS ZUR ERZEUGUNG VON DREIDIMENSIONALEN BILDINFORMATIONEN

Title (fr)
PROCÉDÉ ET APPAREIL D'ÉCLAIRAGE D'UN CHAMP DE VISION D'UN SYSTÈME OPTIQUE POUR GÉNÉRER DES INFORMATIONS D'IMAGE TRIDIMENSIONNELLE

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Application
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Abstract (en)
[origin: WO2013033811A1] A method and apparatus for generating three dimensional image information is disclosed. The apparatus includes an optical system having an imaging path disposed to capture light within a field of view of the optical system. The imaging path includes at least one illuminating portion operably configured to couple the illumination flux to illuminate at least a portion of the field of view of the optical system. The apparatus also includes an image modulator operably configured to cause first and second images to be received through respective first and second imaging portions of the imaging path, the first and second imaging portions being disposed adjacent to the at least one illuminating portion. The first imaging portion has a first perspective viewpoint within the field of view and the second imaging portion has a second perspective viewpoint within the field of view, the first and second images together being operable to represent three dimensional spatial attributes of objects within the illuminated field of view. In another aspect of the invention an illuminator is operably configured to alternate between directing the illumination flux through a second portion of the imaging path to illuminate a first portion of the field of view of the optical system while the first image is being received, and directing the illumination flux through the first portion of the imaging path to illuminate a second portion of the field of view of the optical system, while the second image is being received.

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