System for Peripheral Vision Scotoma Screening

Tech ID: 19189 / UC Case 1999-059-0

TECHNOLOGY DESCRIPTION

The invention utilizes a virtual reality display to present a random noise stimulus to a patient. Using an input device, a patient indicates the location of disturbances in the random noise display. In a preferred embodiment, a scanning retinal-laser projects the random noise stimulus directly onto a patient's eye(s). The image is preferably presented at virtual infinity and can be imaged over the peripheral retina. A patient is directed to centrally fixate on the random noise display, typically using a cross-hair target. With a scanning laser virtual-reality device having a narrow exit, the failure of a patient to centrally fixate causes the image presented to be distorted, incomplete, or disappear from view. While a patient views the random noise display, the patient is directed to indicate any areas of disturbance using an input device. This is easy to use while also viewing the random noise display. Preferably, the display changes when a patient uses the input device so that the patient sees the location being indicated, either in place of or superimposed upon the random noise display.

PATENT INFORMATION

The patent application is published and at this link.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	6,736,511	05/18/2004	1999-059
United States Of America	Issued Patent	6,494,578	12/17/2002	1999-059

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OTHER INFORMATION

KEYWORDS

image processing, eye disease, medical device, screening

CATEGORIZED AS

- **Medical**
  - Devices

RELATED CASES

1999-059-0