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(54) Title (EN): DEVICES AND METHODS FOR NOVEL RETINAL IRRADIANCE DISTRIBUTION MODIFICATION TO IMPROVE AND RESTORE VISION

(54) Title (FR): DISPOSITIFS ET PROCÉDÉS DESTINÉS À UNE NOUVELLE MODIFICATION DE DISTRIBUTION D'ÉCLAIREMENT ÉNERGÉTIQUE DE LA RÉTINE AFIN D'AMÉLIORER ET DE RESTAURER LA VISION

(57) Abstract:

(EN): Devices and methods for novel retinal irradiance distribution modification (IDM) to improve, stabilize or restore vision are described herein. Also encompassed herein are devices and methods to reduce vision loss from diseases, injuries and disorders that involve damaged and/or dysfunctional and/or sensorily deprived retinal cells. Conditions that may be treated using devices and methods described herein include macular degeneration, diabetic retinopathy and glaucoma. Therapy provided by retinal IDM devices and methods described herein may also be used in combination with other therapies including, but not limited to, pharmacological, retinal laser, gene and stem cell therapies.

(FR): L'invention concerne des dispositifs et des procédés destinés à une nouvelle modification de distribution d'éclairage énergétique (IDM) de la rétine afin d'améliorer, de stabiliser ou de restaurer la vision. L'invention concerne également des dispositifs et des procédés permettant de réduire la perte de vision provoquée par des maladies, des lésions et des troubles qui impliquent des cellules de la rétine endommagées et/ou dysfonctionnelles et/ou à privation sensorielle. Les états qui peuvent être traités à l'aide de dispositifs et de procédés selon l'invention comprennent la dégénérescence maculaire, la rétinopathie diabétique et le glaucome. La thérapie fournie par des dispositifs et des procédés d'IDM de la rétine décrits dans la présente invention peut également être utilisée en combinaison avec d'autres thérapies comprenant, entre autres, des thérapies pharmacologiques, au laser de la rétine, géniques et par les cellules souches.

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