

(12) International Application Status Report

Received at International Bureau: 22 September 2018 (22.09.2018)

Information valid as of: 29 August 2019 (29.08.2019)

Report generated on: 23 September 2019 (23.09.2019)

(10) Publication number:

WO2019/046615

(43) Publication date:

07 March 2019 (07.03.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2018/048910

(22) Filing Date:

30 August 2018 (30.08.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

15/693,208 (US)

(31) Priority date(s):

31 August 2017 (31.08.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

A61N 5/06 (2006.01); **A61N 5/067** (2006.01); **A61F 9/007** (2006.01); **A61F 9/008** (2006.01); **A61F 9/013** (2006.01)

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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.

International search report:

Received at International Bureau: 12 January 2019 (12.01.2019) [US]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

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Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM