

Search 1: SFT=(Segmented and scleral and band) (Results 54)

BIFOCAL CONTACT LENS

The diagram shows a dome-shaped structure with a central vertical axis. The top part is a small triangle labeled 'A'. Below it, the dome's surface is divided into several sections by dashed lines. Labels include 'H' at the top left, 'B' at the top right, 'C' on the left side, 'D' in the center, 'E' at the bottom left, 'F' at the bottom right, and 'G' at the very bottom. There are also numerical labels '10' and '12' near the base. The entire structure is enclosed within a larger rectangular frame.

Earliest Publication Date: 19840219

CONTACT LENS

Earliest Publication Date: 19860930

METHOD OF AND COMPOSITION FOR PREVENTING TISSUE DAMAGE

Treatment Group	% Animals with Histology Scores $\geq 2+$
No Coating	~68
PBS	~65
HA	~48
25% HA	~28
50% HA	~15

Earliest Publication Date: 19881012

PHARMACEUTICAL DIPEPTIDE COMPOSITIONS AND METHODS OF USE THEREOF: IMMUNOSTIMULANTS

Time (months)	0 mg L-Glu-L-T (%)	10 mg L-Glu-L-T (%)	50 mg L-Glu-L-T (%)	100 mg L-Glu-L-T (%)
0	100	100	100	100
25	0	82	82	82
50	0	0	42	42
70	0	0	42	10

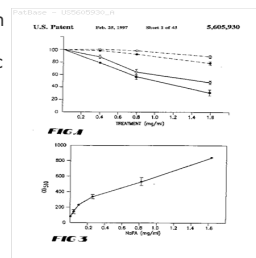
Earliest Publication Date: 19890713

COMPOSITIONS AND METHODS FOR TREATING AND PREVENTING PATHOLOGIES INCLUDING CANCER

Abstract: Source: US5605930A Compositions and methods of treating anemia, cancer, AIDS, or severe beta -chain hemoglobinopathies by administering a therapeutically effective amount of phenylacetate or pharmaceutically acceptable derivatives thereof or derivatives thereof alone or in combination or in conjunction with other therapeutic agents including retinoids, hydroxyurea, and flavonoids. Intravesicle methods of treatment of cancers phenylacetate. Pharmacologically-acceptable salts alone or in combinations and methods of preventing AIDS and malignant conditions, and inducing cell differentiation are also aspects of this invention. A product as a combined preparation of phenylacetate and a retinoid, hydroxyurea, or flavonid (or other mevalonate pathway inhibitor) for simultaneous, separate, or sequential use in treating a neoplastic condition in a subject. Methods of modulating lipid metabolism and/or reducing serum triglycerides in a subject using phenylacetate.

Probable Assignee: US HEALTH

Earliest Publication Date: 19930429



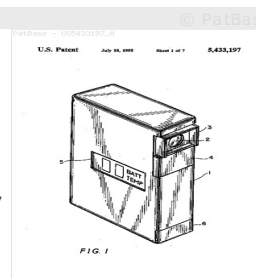
6) Family number: 9580813 (US5433197A)

NON-INVASIVE GLUCOSE MEASUREMENT METHOD AND APPARATUS

Abstract: Source: US5433197A A glucose sensor to provide a non-invasive means of determining blood glucose which is of particular value in the diagnosis and treatment of diabetes. The patient's eye is illuminated with near-infrared radiation which passes into the eye through the cornea and the aqueous humor, is reflected from the iris and/or lens surface, and then passes out through the aqueous humor and cornea. The reflected radiation is collected and detected by a near-infrared sensor which measures the reflected energy in one or more wavelength bands. Comparison of the reflected energy with the source energy provides a measure of the spectral absorption by the eye which is characteristic of the composition of the cornea, the aqueous humor, and the other structures within the eye through which the energy is transmitted or from which it is reflected. In particular, the level of glucose in the aqueous humor is a function of the level of glucose in the blood so that non-invasive determinations of blood glucose may be obtained by suitable calibration relating the measured spectral absorption of the aqueous humor to the measured blood glucose level. To obtain specificity and accuracy, the spectral data at several or many wavelengths may be utilized with a multivariate calibration and prediction process to separate the glucose information from the spectral influences of interfering substances, such as water, which also absorb the near-infrared radiation within the wavelength region utilized for the measurement. The system includes a computer for processing the spectral data and a display for readout of the result.

Probable Assignee: STARK EDWARD W

Earliest Publication Date: 19940330



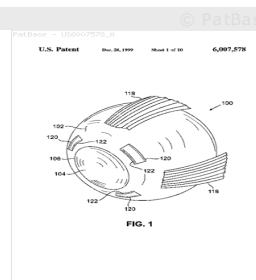
7) Family number: 33506899 (US6007578A)

SCLERAL PROSTHESIS FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US6007578A Presbyopia is treated by implanting within a plurality of elongated pockets formed in the tissue of the sclera of the eye transverse to a meridian of the eye, a prosthesis having an elongated base member having an inward surface adapted to be placed against the inward wall of the pocket and having a ridge on the inward surface of the base extending along at least a major portion of the major dimension of the base. The combined effect of the implanted prostheses is to exert a radially outward traction on the sclera in the region overlying the ciliary body which expands the sclera in the affected region together with the underlying ciliary body. The expansion of the ciliary body restores the effective working distance of the ciliary muscle in the presbyopic eye and thereby increases the amplitude of accommodation. Hyperopia, primary open angle glaucoma and/or ocular hypertension can be treated by increasing the effective working distance of the ciliary muscle according to the invention.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 19981211



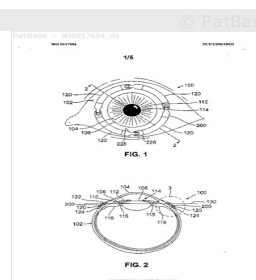
8) Family number: 33508345 (WO9917684A1)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 19990415



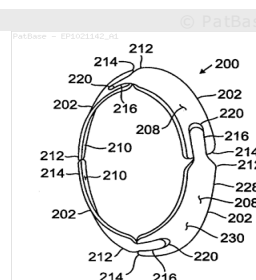
9) Family number: 33507975 (EP1021142B1)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: EP1021142B1 (Claim 1) 1. One scleral segment (200) of a plurality of scleral segments adapted to cooperatively form a segmented scleral expansion band, said one scleral segment comprising two ends, (212, 214) each of said ends adapted to fasten said one scleral segment with at least one other of said plurality of scleral segments to form said segmented scleral Expansion band, said formed scleral expansion band operable upon association with the sclera of an eye in the region of the ciliary body of the eye to increase the effective working distance of the ciliary muscle of the eye.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 19990427



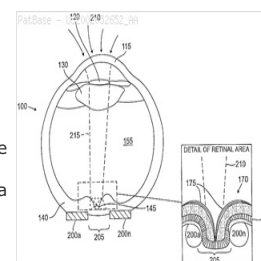
10) Family number: 49956965 (US2002052652A)

DEVICE FOR THE TREATMENT OF MACULAR DEGENERATION AND OTHER EYE DISORDERS

Abstract: Source: US2002052652A Introduced is a device that may be used to treat the effects of macular degeneration and other eye disorders by increasing the optical effect of the retinal surface of the eye. This may be accomplished using a device whose body has a shape prescribed to increase the depth of the fovea and, in the process, make the sides of the clivus more convex, thereby utilizing the varying optical properties of the retinal area. A suitable association of this device with the eye will cause an image beam traveling from the lens through the vitreous humor to magnify and impinge an image perception area encompassing the macula. According to one advantageous embodiment, the device includes a body adapted for association with the eye to manipulate the retina of the eye to effectively augment the photoreceptor cells proximate the macula of the eye. The body of the device may be that of a band, a segment, a partial band, a plate, or, for that matter, any shape suitably adapted to perform the functions described herein to treat the effects of macular degeneration as well as other eye disorders.

Probable Assignee: RAS HOLDING CORP

Earliest Publication Date: 20000511



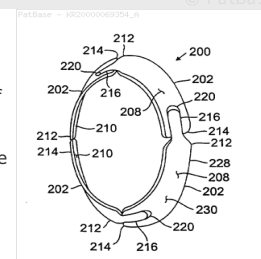
11) Family number: 44573487 (KR20000069354A)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: KR100541058B Snow in the shape of the body the outer sclera of the eyes placed adjacent to and within the segment of the transplant or is partitioned sclera expansion band is curved to match the curvature of the eyeball, the finished ball just part of each to form a single band swell from each other to split the combined number of signs of the Zodiac-type radial tunnel forming them are formed., and then insert them with the band through the tunnel segments, and a complete ball just swell to form the band combine only part of a segment on the sclera of the eye by the band is implanted. sclera expansion band presbyopia and other visually impaired is useful to treat the.

Probable Assignee: RAS HOLDING CORP

Earliest Publication Date: 20001125



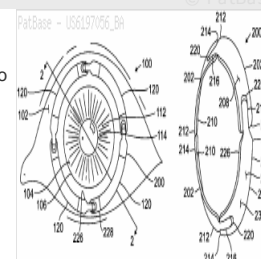
12) Family number: 33507008 (US6197056B)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US6197056B A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20010306



13) Family number: 50743763 (AR014673A)

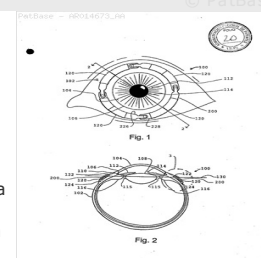
BANDA DE EXPANSION ESCLERAL SEGMENTADA ADAPTADA PARA SER ASOCIADA CON UNA ZONA DE LA ESCLEROTICA DE UN OJO EN LA REGION DEL CUERPO CILIAR DEL OJO Y SEGMENTO DE BANDA COMPRENDIDO EN LA MISMA
BANDA SCLERAL EXPANSION ADAPTED FOR SEGMENT ASSOCIATED WITH AN AREA OF AN EYE ON ESCLEROTICA THE BODY REGION CILIARY SEGMENT OF THE EYE AND WITHIN THE SAME BAND (MACHINE TRANSLATION)

Abstract: Source: AR014673A Una banda de expansion escleral segmentada para ser implantada dentro o sujeta a una zona de la esclerotica de un ojo que se encuentra fuera yadyacente del cuerpo ciliar del ojo esta formada por una cantidad de segmentos arqueados, curvadospara coincidir con la curvatura del globo ocular y unidosentre si en cada extremo para formar una banda de expansion escleral completa.

Machine translation: Segmented scleral expansion band to be implanted within or attached to a zone of the sclera of an eye that is outside yadyacente ciliary body of the eye is formed by a number of arcuate segments, curvadospara match the curvature of the globe unidosentre eye and if at each end to form a complete scleral expansion band.

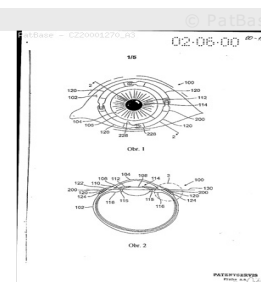
Probable Assignee: RAS HOLDING CORP

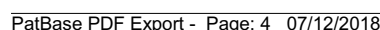
Earliest Publication Date: 20010328



14) Family number: 31607262 (CZ20001270A)

SEGMENTED EXPANDABLE SCLERAL BAND, SECTION OF THE SEGMENTED SCLERAL BAND AND THEIR USE WHEN PREPARING THE SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS





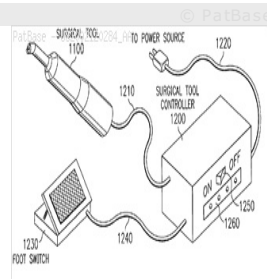
19) Family number: 30064125 (US2002120284A)

SYSTEM AND METHOD FOR MAKING INCISIONS FOR SCLERAL EYE IMPLANTS

Abstract: Source: US2002120284A A system and method is disclosed for making incisions in the sclera of an eye to form a scleral pocket to receive a scleral prosthesis. The system and method comprises a surgical tool comprising a surgical blade for making incisions in the sclera of an eye. When a surgeon places the surgical blade on the sclera of the eye a pressure sensor in the surgical tool determines whether there is sufficient pressure between the surgical tool and the sclera of the eye for the surgical tool to operate properly. The surgeon activates the surgical tool to cause the surgical blade to advance through the sclera to form an incision having dimensions to receive a scleral prosthesis. When the incision is complete the surgical blade is rotated back out of the incision. The incision has the exact dimensions to receive a scleral prosthesis.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20020829



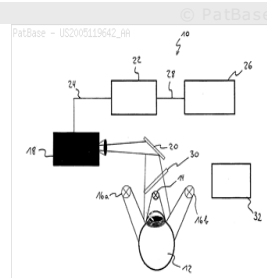
20) Family number: 28717979 (US2005119642A)

METHOD AND APPARATUS FOR EYE REGISTRATION

Abstract: Source: US2005119642A The invention refers to A system (10) for registering and tracking the position of a person's eye, in particular for refractive ophthalmic surgery. According to the invention, the system is designed such that eye images containing at least the iris and the pupil of the eye are made at a first wavelength of light and that eye images containing scleral blood vessels are made at a different second wavelength of light. The invention furthermore refers to a corresponding method for registering and tracking the position of a person's eye.

Probable Assignee: ALCON PHARMACEUTICALS LTD

Earliest Publication Date: 20030703



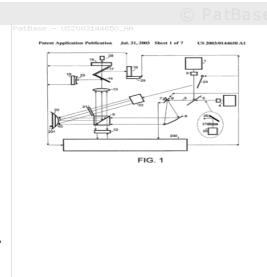
21) Family number: 28880685 (US2003144650A)

INTEGRATED WAVEFRONT-DIRECTED TOPOGRAPHY-CONTROLLED PHOTOABLATION

Abstract: Source: US2003144650A A system and method combining wavefront analysis with narrow-beam scanning photoablation where optimal corneal topography is first calculated then followed by real-time topographic feedback controlled photoablation. Eye movement and beam position sensing to within a tolerance of 5 μ m are provided by high speed digital computation in conjunction with specialized charge coupled devices. Lasers of three different wavelengths-one low-powered pulsed ultraviolet, a second continuous visible band type, and a pulsed infrared type are combined together into narrow beams whereupon a scanning mechanism generates coaxial collimated beams for the functions of ablation, beam position sensing, and fundus spot imaging. Transepithelial ablation is performed utilizing the same CCD used for wavefront analysis by switching between two dichroic mirrors. The light source for the raster videokeratography topography means is the UV laser used for ablation.

Probable Assignee: SMITH ROBERT F

Earliest Publication Date: 20030731



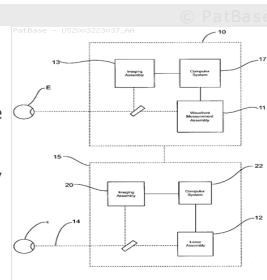
22) Family number: 30046043 (US2003223037A)

METHODS AND SYSTEMS FOR TRACKING A TORSIONAL ORIENTATION AND POSITION OF AN EYE

Abstract: Source: US2003223037A Methods and systems for tracking a position and torsional orientation of a patient's eye. In one embodiment, the present invention provides methods and software for registering a first image of an eye with a second image of an eye. In another embodiment, the present invention provides methods and software for tracking a torsional movement of the eye. In a particular usage, the present invention tracks the torsional cyclorotation and translational movement of a patient's eye so as to improve the delivery of a laser energy to the patient's cornea.

Probable Assignee: AMO MFG USA LLC

Earliest Publication Date: 20031204



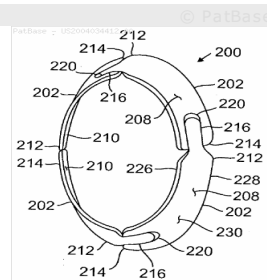
23) Family number: 33505546 (US2004034412A)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US2004034412A A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20040219



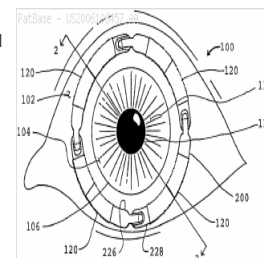
24) Family number: 33506001 (US2006106457A)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US2006106457A A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20060518



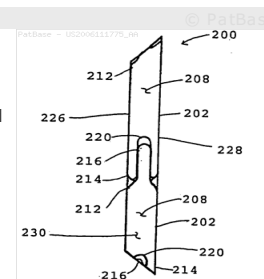
25) Family number: 33506005 (US2006111775A)

SEGMENTED SCLERAL BAND FOR TREATMENT OF PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US2006111775A A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20060525



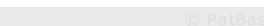
26) Family number: 33123361 (US2006159771A)

TAMPONADE COMPOSITIONS AND METHODS FOR RETINAL REPAIR

Abstract: Source: US2006159771A Described herein are methods of repairing retinal tissue using resorbable tamponade compositions that are heavier than aqueous humor and contain one or more glycosaminoglycans.

Probable Assignee: EDDIE KADRMAS

Earliest Publication Date: 20060720



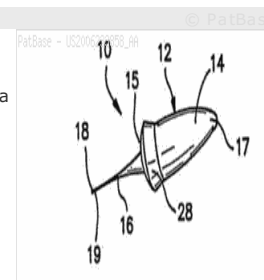
27) Family number: 33341137 (US2006233858A)

SYSTEMS AND METHODS PROVIDING TARGETED INTRAOCULAR DRUG DELIVERY

Abstract: Source: US2006233858A Drug delivery systems suitable for administration into the interior of an eye of a person or animal are described. The present systems include a drug delivery element that provides directional delivery of one or more drugs to a desired target site in the eye and remain invisible to the individual in which the element is placed. The present drug delivery systems may include an adhesive portion that adheres the drug delivery element to the retina of the eye, and/or a polymeric envelope substantially surrounding the drug delivery element to form an intravitreal implant. The envelope may enhance the stability and handling of the implant when the implant is being placed in the eye. Methods of producing and using the drug delivery systems are also described.

Probable Assignee: ALLERGAN INC

Earliest Publication Date: 20060914



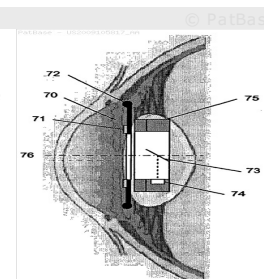
28) Family number: 34234595 (US2009105817A)

ARTIFICIAL ACCOMMODATION SYSTEM

Abstract: Source: US2009105817A The invention relates to a device for restoring the accommodating ability of the eye, which comprises: a) at least one optical system (3) b) at least one data acquisition system (8) that does not touch the ciliary muscle and has either acoustic or optical means to detect the movement of the ciliary body, or it has means to detect the spatial orientation of the two eyeballs with respect to each other, or it has means for measuring the diameter of the pupil and the luminance in at least one eye as a physiological control signal for accommodation c) at least one data processing system to produce a regulating signal for the optical system from the physiological control signal received d) at least one power supply system (10), and e) at least one system for attachment (22).

Probable Assignee: FORSCHUNGSZENTRUM KARLSRUHE GMBH

Earliest Publication Date: 20070222



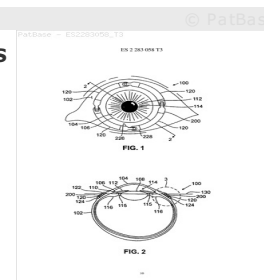
29) Family number: 34851438 (ES2283058T)

BANDA ESCLERAL SEGMENTADA PARA EL TRATAMIENTO DE LA PRESBIOPIA Y OTROTRASTORNOS OCULARES. SEGMENTADA SCLERAL BAND FOR THE TREATMENT OF PRESBYOPIA AND OTROTRASTORNOS EYE. (MACHINE TRANSLATION)

Abstract: A segmented scleral expansion band adapted for implantation within or fastening to a segment of the sclera of an eye lying outside of and adjacent to the ciliary body of the eye, is formed from a number of arcuate segments, curved to match the curvature of the globe of the eye, and joined together at each end to form a complete scleral expansion band. The band is implanted in the sclera of the eye by forming circumferential tunnels, inserting the band segments through the tunnels, and joining the ends of the segments to form a complete scleral expansion band. The scleral expansion band is useful in treating presbyopia and other ocular disorders.

Probable Assignee: REFOCUS OCULAR INC

Earliest Publication Date: 20070415



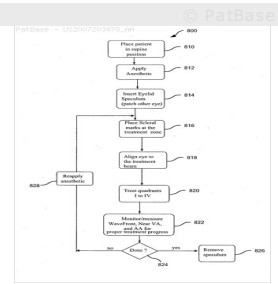
30) Family number: 35861502 (US2007203478A)

METHOD AND SYSTEM FOR ELASTO-MODULATION OF OCULAR TISSUE

Abstract: Source: US2007203478A Excitation and radiation techniques and apparatus for performing customized elasto-modulation of ocular tissue in an annular region around the cornea, such as for the purpose of ciliary translocation (ACT) or promotion of aqueous outflow to relieve ocular pressure are provided utilizing a transconjunctival incisionless scleral treatment. Laser radiation is for example applied to scleral tissue to decrease zonular slack, or alter equatorial offsets between lens and ciliary muscles as a treatment for presbyopia by way of example.

Probable Assignee: SEROS MEDICAL LLC

Earliest Publication Date: 20070830



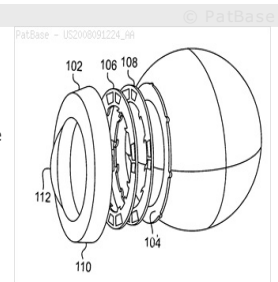
31) Family number: 41082922 (US2008091224A)

APPARATUS AND METHOD FOR SECURING OCULAR TISSUE

Abstract: Source: US2008091224A Various ocular fixation devices are disclosed. One ocular fixation device includes first and second rings, where at least one of the rings includes means for fixating ocular tissue of an eye. The means for fixating are arranged to grasp the ocular tissue of the eye and to release the ocular tissue of the eye based on rotation of at least one of the first and second rings. The ocular fixation device may also include one or more structures on which a surgical tool can be mounted on the ocular fixation device at one or more locations. For instance, a dome of the ocular fixation device could include one or more holes that are configured to receive one or more projections from the surgical tool. As another example, a base of the ocular fixation device could include one or more notches configured to receive a projection from the surgical tool.

Probable Assignee: REFOCUS GROUP INC

Earliest Publication Date: 20080117



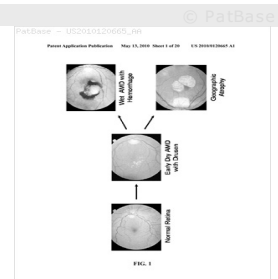
32) Family number: 42134522 (US2010120665A)

TREATMENT OF DISEASES CHARACTERIZED BY INFLAMMATION

Abstract: Source: US2010120665A The invention provides, in part, methods, nucleic acids, vectors, proteins and binding molecules that can be used to modulate a pathway such as a complement pathway. These methods and compositions can be utilized, inter alia, for the study and/or treatment of various conditions or diseases related to a complement pathway.

Probable Assignee: WELLSTAT IMMUNOTHERAPEUTICS LLC

Earliest Publication Date: 20080904



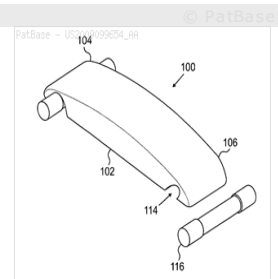
33) Family number: 42899990 (US2009099654A)

SCLERAL PROSTHESIS HAVING CROSSBARS FOR TREATING PRESBYOPIA AND OTHER EYE DISORDERS

Abstract: Source: US2009099654A A scleral prosthesis includes a prosthesis body having first and second side surfaces and a cavity extending through the prosthesis body from the first side surface to the second side surface. The scleral prosthesis also includes a crossbar configured to be inserted into the cavity, where the crossbar is wider than the prosthesis body. The cavity could define a narrower central opening and wider end openings, and the crossbar could have a narrower central portion and wider end portions. Also, the prosthesis body could include multiple cavities, and the scleral prosthesis could include multiple crossbars configured to be inserted into the multiple cavities. Each of the cavities could be located proximate to an end of the prosthesis body. The crossbar could be substantially straight with a cylindrical cross section.

Probable Assignee: REFOCUS GROUP INC

Earliest Publication Date: 20090205



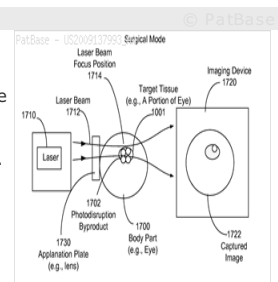
34) Family number: 43046208 (US2009137993A)

METHODS AND APPARATUS FOR INTEGRATED CATARACT SURGERY

Abstract: Source: US2009137993A Techniques, apparatus and systems for cataract surgery. Implementation of the described techniques, apparatus and systems includes a method for cataract eye surgery is presented, including: determining a surgical target region in a lens of the eye and applying laser pulses to photodisrupt a portion of the determined target region before making an incision on a capsule of the lens within an integrated surgical procedure. The laser pulses can be applied before making an incision on a cornea of the eye. In some cases, the target region includes the nucleus of the lens. The integrated surgical procedure involves using the same pulsed laser source for three functions: for photodisrupting the target region, for making an incision on the capsule of the lens and for making an incision on the cornea of the eye.

Probable Assignee: ALCON LENSX INC

Earliest Publication Date: 20090326



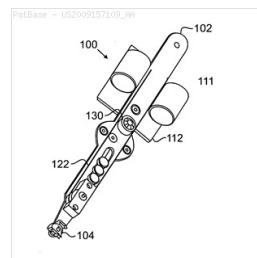
35) Family number: 43296348 (US2009157109A)

APPARATUSES AND METHODS FOR FORMING INCISIONS IN OCULAR TISSUE

Abstract: Source: US2009157109A A surgical tool includes a surgical blade configured to be moved to form an incision. The surgical tool also includes a wire configured to cause movement of the surgical blade. The surgical tool further includes an actuator configured to shorten a length of the wire to cause the movement of the surgical blade. The surgical tool could be configured to move the surgical blade in a first direction and then in a second direction in response to a single shortening of the wire. Also, the wire could represent a first wire, the surgical tool could include a second wire, and the surgical tool could be configured to move the surgical blade in a first direction in response to shortening the first wire and to move the surgical blade in a second direction in response to shortening the second wire.

Probable Assignee: REFOCUS GROUP INC

Earliest Publication Date: 20090528



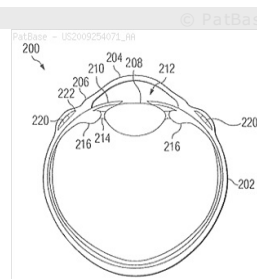
36) Family number: 43811570 (US2009254071A)

SYSTEM AND METHOD FOR IDENTIFYING A POSITION TO INSERT A SCLERAL PROSTHESIS INTO AN EYE

Abstract: Source: US2009254071A A method includes identifying an actual location of a ciliary body in a patient's eye. The method also includes identifying a position for a scleral prosthesis to be inserted into scleral tissue of the patient's eye based on the identified location of the ciliary body. The method could also include forming a scleral tunnel in the scleral tissue of the patient's eye based on the identified position and inserting the scleral prosthesis into the scleral tunnel. Identifying the actual location of the ciliary body could include illuminating a first portion of the patient's eye using illumination provided at a second portion of the patient's eye. The illumination provided at the second portion of the patient's eye may be provided through an eyelid of the patient and may travel under a cornea of the patient's eye to the first portion of the patient's eye.

Probable Assignee: REFOCUS GROUP INC

Earliest Publication Date: 20091008



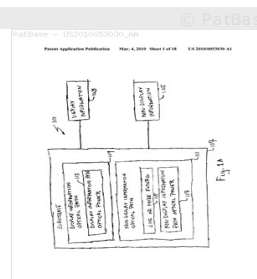
37) Family number: 44453519 (US2010053030A)

METHOD AND APPARATUS TO PROCESS DISPLAY AND NON-DISPLAY INFORMATION

Abstract: Source: US2010053030A In some embodiments, an apparatus includes a substrate including a display information optical path to receive display information and includes a non-display information optical path to receive non-display information. In some embodiments, the display information optical path includes a display information optical power. In some embodiments, the non-display information optical path includes one or more filters and a non-display information optical power.

Probable Assignee: INNOVEGA INC

Earliest Publication Date: 20100304



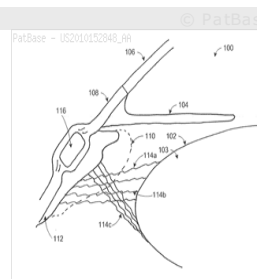
38) Family number: 45027721 (US2010152848A)

ARTIFICIAL INTRAOCULAR LENS, ALTERED NATURAL CRYSTALLINE LENS, OR REFILLED NATURAL CRYSTALLINE LENS CAPSULE WITH ONE OR MORE SCLERAL PROSTHESES FOR IMPROVED PERFORMANCE

Abstract: Source: US2010152848A A system includes an intraocular lens configured to replace a natural crystalline lens of an eye. The system also includes one or more scleral prostheses configured to be inserted into scleral tissue of the eye. The one or more scleral prostheses are configured to modify a structure of the eye to improve an accommodative ability of the eye with the intraocular lens. The intraocular lens could represent an accommodating intraocular lens, and the one or more scleral prostheses could be configured to increase an amount of accommodation achievable using the accommodating intraocular lens. The intraocular lens could also represent a non-accommodating intraocular lens, and the one or more scleral prostheses could be configured to provide an amount of accommodation achievable using the non-accommodating intraocular lens.

Probable Assignee: REFOCUS GROUP INC

Earliest Publication Date: 20100527



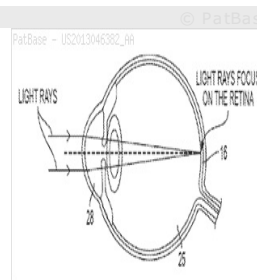
39) Family number: 49470844 (US2013046382A)

MINIMALLY-INVASIVE METHOD AND APPARATUS FOR RESTRUCTURING THE RETINA

Abstract: Source: US2013046382A The present invention comprises an implant for placing inside the eye such that the implant comes into contact with the interior tissue of the eye such that it conforms to the inner globe geometry of the eye. Implants of the present invention may also be used to alter the focal length of the eye thereby providing a treatment method for the correction of myopia and hyperopia. The device may consist of several possible configurations, an open mesh structure, a solid metal ring, a solid polymer shape, a mesh polymer shape or combination of these. The shape may be a curve, a sphere, a ring or a combination thereof that are specifically shaped to approximate a desired portion of the interior globe of the eye in order to treat myopia or hyperopia.

Probable Assignee: OPTISTENT INC

Earliest Publication Date: 20110825



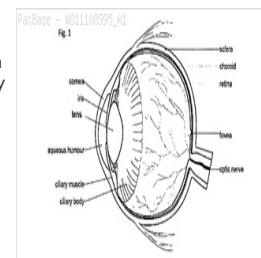
40) Family number: 49556623 (WO1108995A1)

AUTOMATIC ANALYSIS OF IMAGES OF THE ANTERIOR CHAMBER OF AN EYE

Abstract: An eye image including an image of the region containing the intersection of the cornea and iris is processed to identify whether it contains two proximate lines, since it is experimentally observed that this is characteristic of a non-zero value of the iridocorneal angle. The method includes an edge detection step, and then a method of determining whether edges have been detected which comprise these two proximate lines. The lines may be required to meet pre-known criteria, which are obtained from knowledge about the structure of the eye. In this way, it is possible to reduce the influence of other spurious edges in the eye image. The invention makes possible a precise, efficient and automatic system to grade the angle, which in turn makes it possible to provide large-scale clinical use.

Probable Assignee: SINGAPORE HEALTH SERV PTE LTD

Earliest Publication Date: 20110909



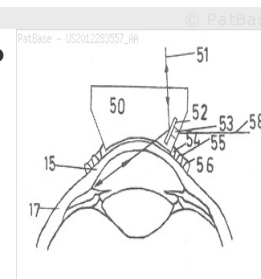
41) Family number: 52328816 (US2012283557A)

METHODS AND APPARATUSES FOR THE TREATMENT OF GLAUCOMA USING VISIBLE AND INFRARED ULTRASHORT LASER PULSES

Abstract: Source: US2012283557A Transcorneal and fiberoptic laser delivery systems and methods for the treatment of eye diseases wherein energy is delivered by wavelengths transparent to the cornea to effect target tissues in the eye for the control of intraocular pressure in diseases such as glaucoma by delivery systems both external to and within ocular tissues. External delivery may be effected under gonioscopic control. Internal delivery may be controlled endoscopically or fiberoptically, both systems utilizing femtosecond laser energy to excise ocular tissue. The femtosecond light energy is delivered to the target tissues to be treated to effect precisely controlled photodisruption to enable portals for the outflow of aqueous fluid in the case of glaucoma in a manner which minimizes target tissue healing responses, inflammation and scarring.

Probable Assignee: BERLIN MICHAEL S

Earliest Publication Date: 20121108



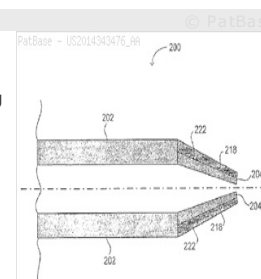
42) Family number: 53735846 (US2014343476A)

OCULAR IMPLANT WITH INTRAOCULAR FLUID PRESSURE REGULATION

Abstract: Source: US2014343476A An ocular implant comprising a shunt and a fluid absorbing conduit for reducing intraocular pressure, and optionally comprising a biodegradable ring.

Probable Assignee: OPR GROUP LTD

Earliest Publication Date: 20130516



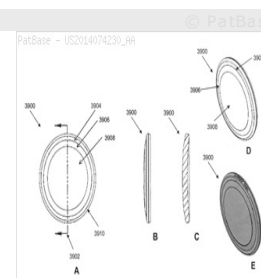
43) Family number: 55977263 (US2014074230A)

EYE APERTURE ENHANCING PROSTHESIS AND METHOD

Abstract: Source: US2014074230A A prosthesis capable of being worn on the eye of a wearer having a convex surface and a concave surface. The prosthesis has an aperture widening zone located on the convex surface. The prosthesis widens the natural palpebral fissure (aperture) of the wearer's eye by at least 1 mm. A method of widening the natural palpebral fissure of a wearer's eye by at least 1 mm is also provided.

Probable Assignee: BEAUTIEYES LLC

Earliest Publication Date: 20140313



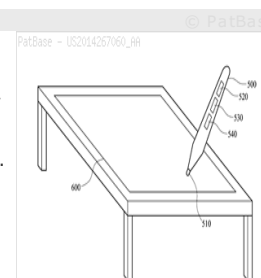
44) Family number: 57372006 (US2014267060A)

METHODS FOR DATA TRANSMISSION AND ELECTRONIC DEVICES USING THE SAME

Abstract: Source: US2014267060A Methods for data transmission for use in an electronic device including a touch-sensitive display unit are provided. First, a first event indicating that a specific button has been pressed, and then held is received. In response to the first event, contacts and movements of an object on the touch-sensitive display unit are received and touching script data corresponding to the contacts and movements of the object are recorded. Thereafter, in response to receiving a second event indicating that the specific button has been released, the touching script data is transmitted to at least one device such that the touching script data is displayed in a display unit of the device when the touching script data has been received.

Probable Assignee: HTC CORP

Earliest Publication Date: 20140916

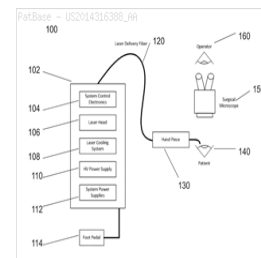


45) Family number: 57412899 (US2014316388A)

SYSTEMS AND METHODS FOR AFFECTING THE BIOMECHANICAL PROPERTIES OF CONNECTIVE TISSUE

Abstract: Source: US2014316388A A device for delivering ablative medical treatments to improve biomechanics comprising a laser for generating a beam of laser radiation used in ablative medical treatments to improve biomechanics, a housing, a controller within the housing, in communication with the laser and operable to control dosimetry of the beam of laser radiation in application to a target material, a lens operable to focus the beam of laser radiation onto a target material, and a power source operable to provide power to the laser and controller.

Earliest Publication Date: 20140918



GEOGRAPHIC ATROPHY IDENTIFICATION AND MEASUREMENT

Earliest Publication Date: 20150722

DEVICES AND METHODS TO PROVIDE HANDS FREE SCLERAL DEPRESSION DURING OPHTHALMIC PROCEDURES

A schematic cross-sectional diagram of a spiral-wound membrane module. The diagram shows a central hub (12) with a spiral-wound membrane (14) and spacer fabric (15) assembly. A feed channel (16) is formed by the outer edges of the spiral. A central tube (18) is shown passing through the center of the module. A small circular feature (14) is also indicated near the center.

Earliest Publication Date: 20151217

SYSTEMS AND METHODS FOR RESTORING COGNITIVE FUNCTION

Earliest Publication Date: 20151217

NON-INVASIVE MEASUREMENT OF CHOROIDAL VOLUME CHANGE AND OCULAR RIGIDITY THROUGH OCT IMAGING

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graph TD
    102[OBTAINING TIME-BASED IMAGES OF CHOROID USING OCT] --> 104[GENERATING TIME SERIES OF CHOROIDAL THICKNESS USING SEGMENTATION]
    104 --> 106[CONVERTING TIME SERIES OF CHOROIDAL THICKNESS INTO OCULAR VOLUME CHANGE]
    106 --> 108[DETERMINING OCULAR RIGIDITY USING OCULAR VOLUME CHANGE AND IOP]
  
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FIGURE 1

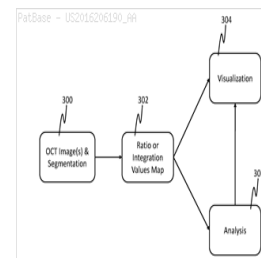
Earliest Publication Date: 20151217

GEOGRAPHIC ATROPHY IDENTIFICATION AND MEASUREMENT

Abstract: Source: US2016206190A Geographic atrophy of the eye can be detected and measured by imaging the eye at a depth greater than the retinal pigment epithelium (RPE) at a plurality of locations of the eye, for example, using optical coherence tomography (OCT); determining a ratio of the intensities of imaging signals of a retinal layer(s) with respect to the intensity of imaging signals of a sub-RPE layer(s) at each location; determining representative values based at least in part on the determined ratios; generating a map of the representative values; and identifying diseased areas from the map. Contours and binary maps may be generated based on the identified diseased areas. The size and shape of the identified areas may be analyzed and monitored over a period of time to phenotype subjects and classify diseases.

Probable Assignee: TOPCON KK

Earliest Publication Date: 20160721



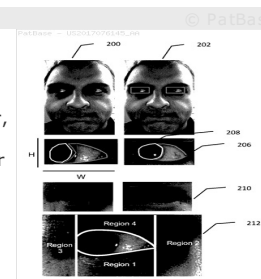
51) Family number: 65153604 (US2017076145A)

IMAGE ENHANCEMENT AND FEATURE EXTRACTION FOR OCULAR-VASCULAR AND FACIAL RECOGNITION

Abstract: Source: US2017076145A Biometric enrollment and verification techniques for ocular-vascular, periocular, and facial regions are described. Periocular image regions can be defined based on the dimensions of an ocular region identified in an image of a facial region. Feature descriptors can be generated for interest points in the ocular and periocular regions using a combination of patterned histogram feature descriptors. Quality metrics for the regions can be determined based on region value scores calculated based on texture surrounding the interest points. A biometric matching process for calculating a match score based on the ocular and periocular regions can progressively include additional periocular regions to obtain a greater match confidence.

Probable Assignee: EYEVERIFY INC

Earliest Publication Date: 20170316



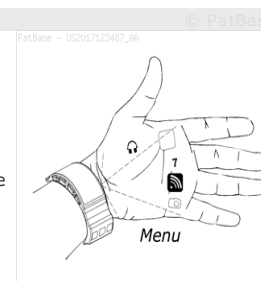
52) Family number: 65566654 (US2017123487A)

SYSTEM AND METHODS FOR ON-BODY GESTURAL INTERFACES AND PROJECTION DISPLAYS

Abstract: Source: US2017123487A A wearable system with a gestural interface for wearing on, for instance, the wrist of a user. The system comprises an ultrasonic transceiver array structure and may comprise a pico projector display element for displaying an image on a surface. User anatomical feature inputs are received in the form of ultrasound signals representative of a spatio-temporal cross-section of the wrist of the user by articulating wrist, finger and hand postures, which articulations are translated into gestures. Inputs from inertial and other sensors are used by the system as part of the anatomical feature posture identification method and device. Gestures are recognized using a mathematically-modeled, simulation-based set of biological metrics of tissue objects, which gestures are converted to executable computer instructions. Embodiments of the system disclosed herein may also be used to monitor biometric and health data over computer networks or using onboard systems.

Probable Assignee: OSTENDO TECHNOLOGIES INC

Earliest Publication Date: 20170504



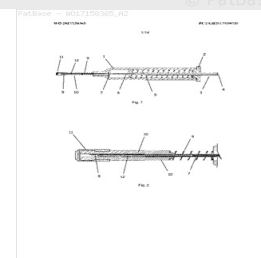
53) Family number: 65761668 (WO17158366A3)

OPHTHALMIC DELIVERY DEVICE AND OPHTHALMIC DRUG COMPOSITIONS

Abstract: The present invention provides a cannulation device for administering an active agent containing composition to the suprachoroidal space or supraciliary space. The invention provides methods of treatment of an ocular disease or condition accordingly. The invention also provides compositions for use in a method of treatment of an ocular disease or condition for delivery into the suprachoroidal space or supraciliary space.

Probable Assignee: OXULAR LTD

Earliest Publication Date: 20170921



54) Family number: 71239336 (WO18165697A1)

APPARATUS, METHOD AND SYSTEM FOR MEASURING THE INFLUENCE OF OPHTHALMIC LENS DESIGN

Abstract: A method for measuring an influence of an ophthalmic lens design is disclosed. The method comprises splitting an optical light beam into a wavefront measurement light path and a wavefront modulation light path; implementing the ophthalmic lens design in an adaptive optics device positioned in the wavefront modulation light path; and obtaining ocular biometric data in the ocular biometric and wavefront measurement light path to measure the influence of the ophthalmic lens design. Also disclosed are an apparatus and a system for measuring an influence of an ophthalmic lens design along with a method for assembling the device and system. The ocular biometric device may be an interferometer and the adaptive optics device may comprise one or more wavefront shapers.

Probable Assignee: QUEENSLAND UNIV OF TECHNOLOGY

Earliest Publication Date: 20180920

