

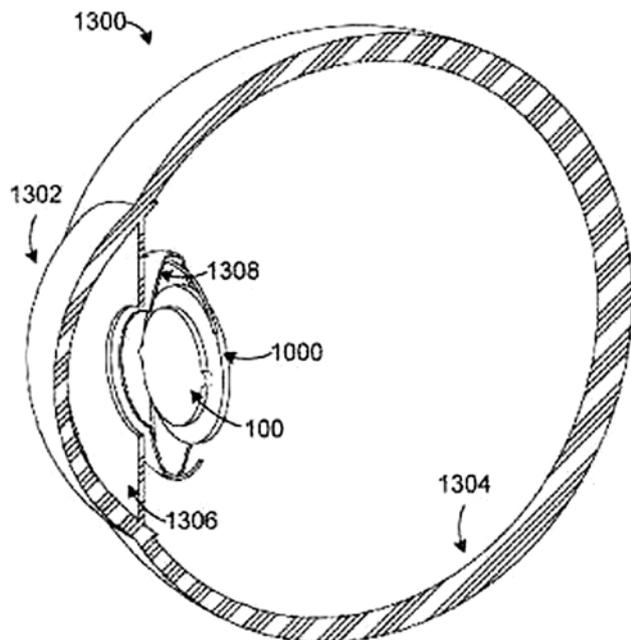
## ПАТЕНТЫ/PATENTS

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MX2017003760 (A) — 2018-02-23

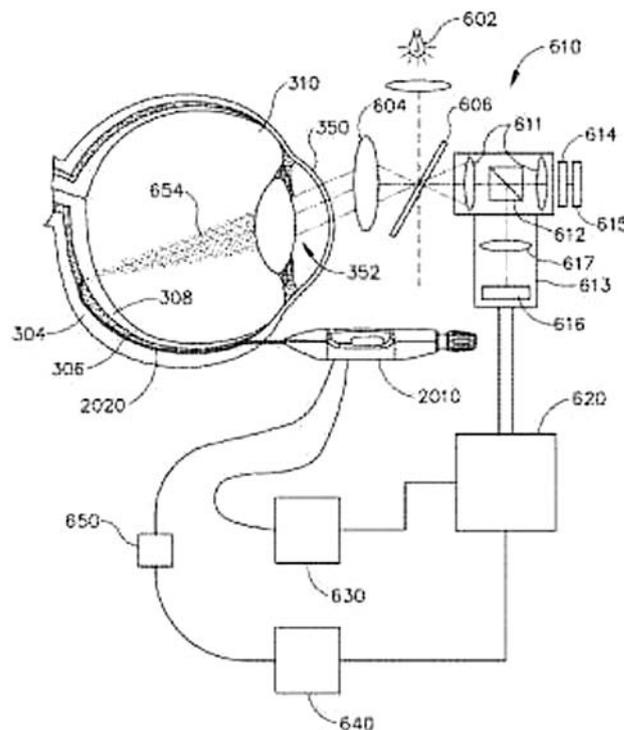
MX2017003249 (A) — 2018-02-12

### INTRAOCULAR PSEUDOPHAKIC CONTACT LENSES AND RELATED SYSTEMS AND METHODS



Various intraocular pseudophakic contact lenses (100, 400, 800, 900, 1600, 1700, 1800, 1900, 2000) are disclosed. For example, an intraocular pseudophakic contact lens can include a first optical lens (102, 402, 802, 902, 1602, 1702, 1802, 1902, 2002, 2100, 2102, 2200, 2250, 2300, 2400) and multiple anchors (106a-106b, 406a-406b, 1500). The first optical lens is configured to at least partially correct a residual refractive error in an eye (1300). The anchors are configured to be inserted through an anterior surface of an intraocular lens (1000) into lens material (1006) forming a second optical lens (1002) of the intraocular lens in order to secure the intraocular pseudophakic contact lens to the intraocular lens. The anchors can be configured to couple the intraocular pseudophakic contact lens to different types of intraocular lenses, including intraocular lenses not specifically designed to be coupled to or receive the intraocular pseudophakic contact lens. The intraocular pseudophakic contact lens could also include at least one drug-eluting device (1706, 1806, 1906) located on the first optical lens and configured to deliver at least one medication.

### METHOD AND APPARATUS FOR SENSING POSITION BETWEEN LAYERS OF AN EYE



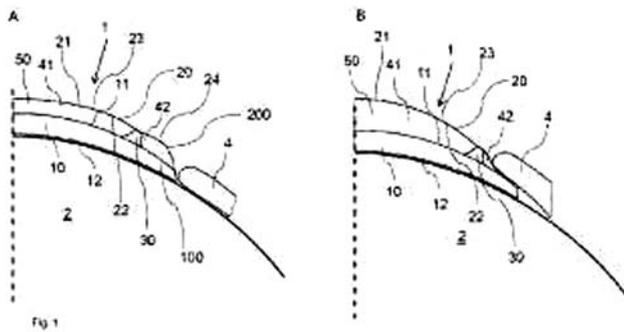
An apparatus (10) for delivering therapeutic agent to an eye comprises a body (40), a cannula (20), a hollow needle (30), an actuation assembly (60), and a detection/visualization system. The cannula extends distally from the body and is sized and configured to be insertable between a choroid and a sclera of a patient's eye. The actuation assembly is operable to actuate the needle relative to the cannula to thereby drive a distal portion of the needle along an exit axis. The cannula may be inserted through a sclerotomy incision and advanced through the choroid to deliver the therapeutic agent adjacent to the potential space between the neurosensory retina and the retinal pigment epithelium layer. The detection/visualization system is operable to detect or visualize penetration of the choroid of a patient's eye and provide feedback to the operator and/or automatic control of the apparatus based on penetration of the choroid.

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MX2017013827 (A) — 2018-02-21

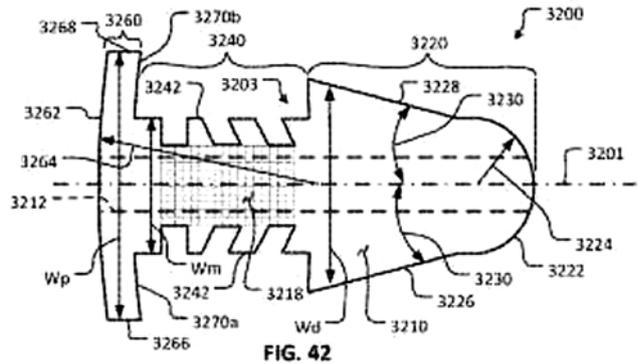
CA3000402 (A1) — 2017-04-06

**CONTACT AND INTRAOCULAR LENSES COMPRISING AN ADJUSTABLE FOCUS LENGTH**



The invention relates to a lens (1) for vision correction, wherein the lens (1) is configured to be placed directly on the surface of an eye (2) of a person or to be implanted into an eye (2) of a person, and wherein the lens (1) further comprises: a transparent base element (10) having a back side (12) and a front side (11) facing away from the back side (12), a transparent and elastically expandable membrane (20) connected to said base element (10), wherein said membrane (20) comprises a back side (22) that faces said front side (11) of the base element (10), a ring member (30) connected to said back side (22) of the membrane (20) so that the ring member (30) defines a curvature-adjustable area (23) of the membrane (20), and wherein the lens (1) comprises a lens volume (41) adjacent said curvature-adjustable area (23) of the membrane (20), which lens volume (41) is delimited by the ring member (30), and wherein the lens (1) comprises a reservoir volume (42) adjacent a boundary area (24) of said membrane (20), wherein said two volumes (41, 42) are filled with a transparent liquid (50), and wherein said volumes (41, 42) are fluidly connected or fluidly connectable to each other such that, when the reservoir volume (42) is compressed, liquid (50) residing in the reservoir volume (42) is pressed into the lens volume (41) such that the curvature of said curvature-adjustable area (23) of the membrane (22) increases and the focal length of the lens (1) decreases. Further, the invention relates to a method for manufacturing a contact lens according to the invention.

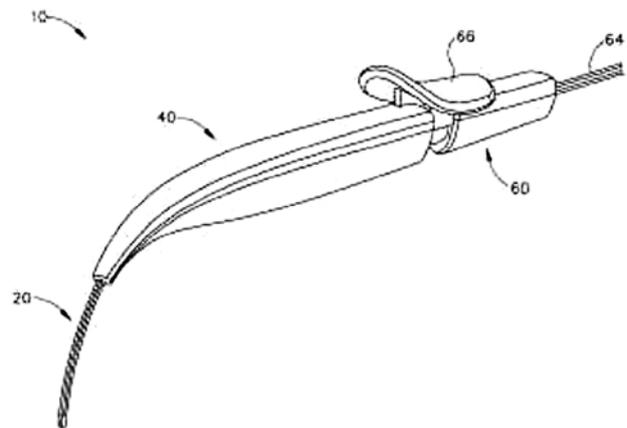
**DRY EYE TREATMENT DEVICES AND METHODS**



Devices can be implanted in an eye to treat a dry eye condition. The devices include a body defining a lumen and having first and second ends and external and luminal surfaces. The body has a length sufficient to provide fluid communication between the anterior chamber and tear film of the eye through the lumen when the device is implanted in the sclera. In some embodiments, the device is filterless. In some embodiments, a filter is included. The dry eye treatment devices provided herein prevent bacterial ingress, provide outflow resistance to retain a normal intraocular pressure, and provide moisture (e.g., aqueous humor) to an otherwise dry eye. Methods of treating a dry eye condition wherein the device is implanted in the sclera of an afflicted eye are also described.

MX2017003260 (A) — 2018-02-12

**MOTORIZED SUPRACHOROIDDAL INJECTION OF THERAPEUTIC AGENT**



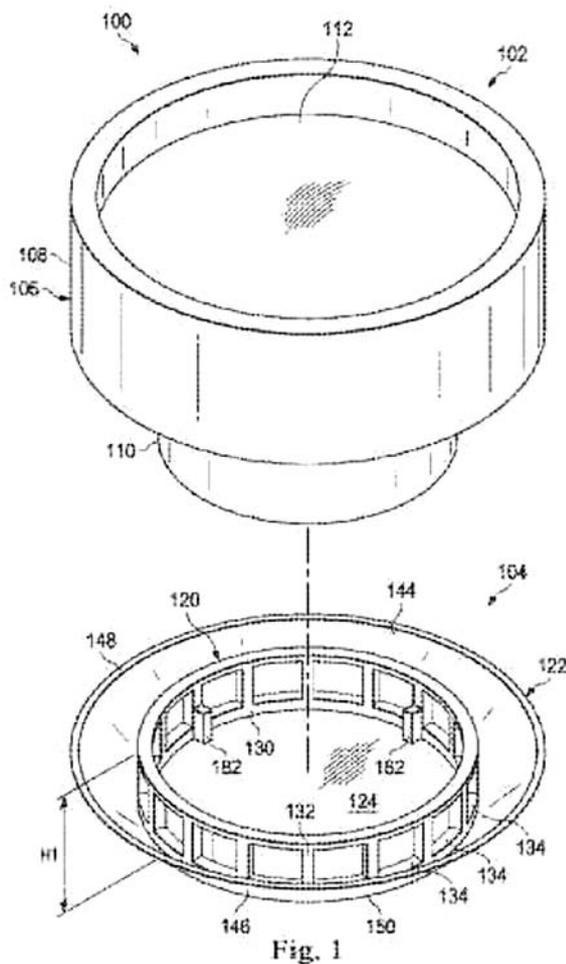
An apparatus for delivering therapeutic agent to an eye comprises a body, a cannula, a hollow needle, and an automated actuation assembly. The cannula extends distally from the body and is sized and configured to be insertable

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between a choroid and a sclera of a patient's eye. The actuation assembly is operable to actuate the needle relative to the cannula to thereby drive a distal portion of the needle along an exit axis that is obliquely oriented relative to the longitudinal axis of the cannula. The cannula may be inserted through a sclerotomy to position a distal end of the cannula at a posterior region of the eye, between the choroid and sclera. The needle may be advanced through the choroid to deliver the therapeutic agent adjacent to the potential space between the neurosensory retina and the retinal pigment epithelium layer, adjacent to the area of geographic atrophy.

CA2999951 (A1) — 2017-05-04

**LENS HOLDER FOR CONTACT VITRECTOMY LENS**

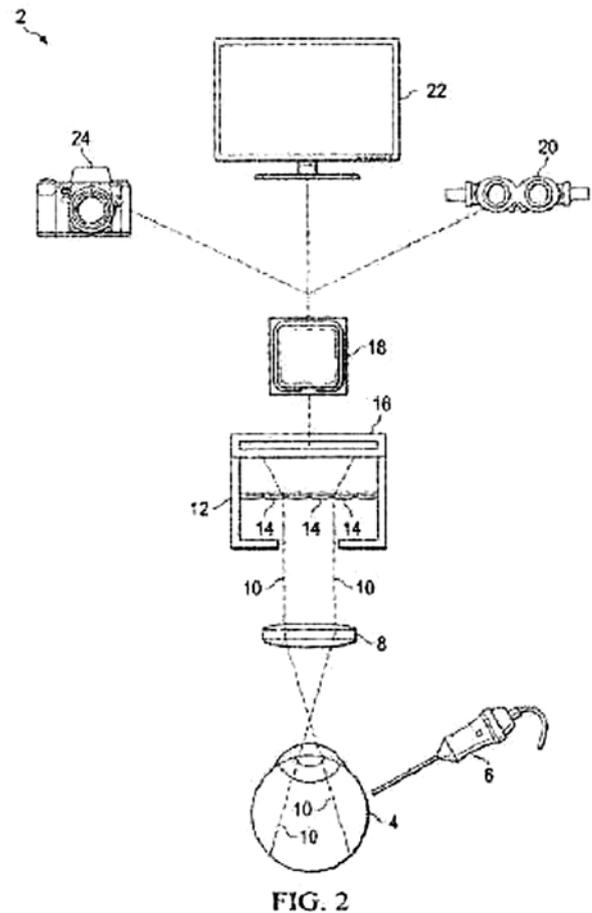


A lens holder (104) for holding a vitrectomy lens (102) during a surgical procedure, comprising: a support ring (120) sized and shaped to receive a portion of a vitrectomy lens to provide visualization of a surgical site in an eye of a patient, the support ring being configured to rest upon the eye of the patient during a surgical treatment procedure performed on the eye; a transparent, flexible membrane (124) disposed along a bottom plane of the support ring, and configured

to conform to a surface feature on the eye and to separate a wetting agent in the support ring from the eye. The support ring comprises an interior surface (130), an exterior surface (132), and at least one perforation (134) extending through a side of the support ring from the interior surface to the exterior surface. The lens holder comprises and an overflow wall (122) that extends from the lower edge (138) of the support ring in an upward direction tapering outwardly from the support ring so as to form an overflow trough (154) that extends about the ring.

CA2999595 (A1) — 2017-04-20

**OPHTHALMIC SURGERY USING LIGHT-FIELD MICROSCOPY**



A system and method for ophthalmic surgery in which a light field camera is used to capture a digital image of the surgical field including the eye. The digital image is used to create image information and directional information, which is then used to form a three dimensional (3D) image with motion parallax.