

Title (en)

LIGHT-ADJUSTABLE HYDROGEL AND BIOANALOGIC INTRAOCULAR LENS

Title (de)

LICHTEINSTELLBARES HYDROGEL UND BIOANALOGIE INTRAOKULARLINSE

Title (fr)

HYDROGEL À PROPRIÉTÉS OPTIQUES AJUSTABLES ET LENTILLE INTRAOCULAIRE BIOANALOGIQUE

Publication

EP 3474910 A1 20190501 (EN)

Application

EP 17758264 A 20170621

Priority

- US 201615190715 A 20160623
- IB 2017000911 W 20170621

Abstract (en)

[origin: WO2017221068A1] A bioanalogic implantable ophthalmic lens ("BIOL") capable of replacing the natural crystalline lens (NCL) in its various essential functions after the NCL having been removed and BIOL implanted into the posterior eye chamber and placed into the capsular bag vacated from the NCL. At least the posterior surface of the lens has a convex shape and is made from a transparent flexible hydrogel material. At least the anterior and posterior optical surfaces are defined by rotation of one or more conic sections along the main optical axis and the surfaces defined by the rotation will include a plane perpendicular to the axis and conical surface symmetrical by the axis. A hydrogel implantable ophthalmic lens whose optical parameters can be optimized and/or customized by a controlled absorption of electromagnetic radiation resulting in a change of the refractive index of the irradiated hydrogel.

IPC 8 full level

A61F 2/16 (2006.01); **A61L 27/16** (2006.01); **A61L 27/52** (2006.01)

CPC (source: EP KR)

A61F 2/1613 (2013.01 - EP KR); **A61F 2/1627** (2013.01 - EP KR); **A61F 2/1659** (2013.01 - KR); **A61L 27/16** (2013.01 - EP KR); **A61L 27/52** (2013.01 - EP KR); **C08J 3/24** (2013.01 - KR); **C08K 5/13** (2013.01 - KR); **C08K 5/1545** (2013.01 - KR); **C08K 5/18** (2013.01 - KR); **C08L 33/08** (2013.01 - KR); **C08L 33/10** (2013.01 - KR); **A61L 2430/16** (2013.01 - EP KR)

Citation (search report)

See references of WO 2017221068A1

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017221068 A1 20171228; AU 2017283194 A1 20190117; BR 112018076401 A2 20190409; CA 3027646 A1 20171228; CN 109789241 A 20190521; EP 3474910 A1 20190501; IL 263706 A 20190228; JP 2019520966 A 20190725; KR 20190039401 A 20190411; MX 2018016173 A 20190328

DOCDB simple family (application)

IB 2017000911 W 20170621; AU 2017283194 A 20170621; BR 112018076401 A 20170621; CA 3027646 A 20170621; CN 201780045664 A 20170621; EP 17758264 A 20170621; IL 26370618 A 20181213; JP 2019520513 A 20170621; KR 20197002326 A 20170621; MX 2018016173 A 20170621