

Title (en)
SYSTEM FOR MODIFYING EYE TISSUE AND INTRAOCULAR LENSES

Title (de)
SYSTEM ZUR MODIFIZIERUNG DES AUGENGWEBES UND INTRAOKULARLINSEN

Title (fr)
SYSTÈME PERMETTANT DE MODIFIER UN TISSU OCULAIRE ET LENTILLES INTRAOCULAIRES

Publication
EP 3331481 A1 20180613 (EN)

Application
EP 15756504 A 20150803

Priority
US 2015043504 W 20150803

Abstract (en)
[origin: WO2017023296A1] A system for ophthalmic surgery includes a laser source configured to deliver an ultraviolet laser beam comprising laser pulses having a wavelength between 320 nm and 370 nm to photodecompose one or more intraocular targets within the eye with chromophore absorbance. The pulse energy, the pulse duration, and the focal spot are such that an irradiance at the focal spot is sufficient to photodecompose the one or more intraocular targets without exceeding a threshold of formation of a plasma and an associated cavitation event. An optical system operatively coupled to the laser source and configured to focus the ultraviolet laser beam to a focal spot and direct the focal spot in a pattern into the one or more intraocular targets. The optical system focuses the laser beam at a numerical aperture that provides for the focal spot to be scanned over a scan range of 6 mm to 10 mm.

IPC 8 full level
A61F 9/008 (2006.01)

CPC (source: EP)
A61F 9/00825 (2013.01); **A61F 2009/00842** (2013.01); **A61F 2009/00844** (2013.01); **A61F 2009/00853** (2013.01); **A61F 2009/00872** (2013.01)

Citation (search report)
See references of WO 2017023296A1

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 2017023296 A1 20170209; AU 2015404411 A1 20180222; AU 2015404411 A8 20180301; AU 2015404411 B2 20210527; CA 2994799 A1 20170209; CA 2994799 C 20211019; CN 108366876 A 20180803; CN 108366876 B 20210713; EP 3331481 A1 20180613; JP 2018523526 A 20180823

DOCDB simple family (application)
US 2015043504 W 20150803; AU 2015404411 A 20150803; CA 2994799 A 20150803; CN 201580083580 A 20150803; EP 15756504 A 20150803; JP 2018505677 A 20150803