

Title (en)

HIGH DEFINITION AND EXTENDED DEPTH OF FIELD INTRAOCULAR LENS

Title (de)

HOHE AUFLÖSUNG UND ERWEITERTE SCHÄRFENTIEFE FÜR INTRAOKULARE LINSE

Title (fr)

LENTILLE INTRAOCULAIRE DE HAUTE DÉFINITION À PROFONDEUR DE Foyer ÉTENDUE

Publication

EP 3934580 A4 20221130 (EN)

Application

EP 20787946 A 20200408

Priority

- US 2020027197 W 20200408
- US 201916380622 A 20190410

Abstract (en)

[origin: WO2020210305A1] A virtual aperture integrated into an intraocular lens is disclosed. Optical rays which intersect the virtual aperture are widely scattered across the retina causing the light to be virtually prevented from reaching detectable levels on the retina. The use of the virtual aperture helps remove monochromatic and chromatic aberrations yielding high-definition retinal images. For a given definition of acceptable vision, the depth of field is increased over a larger diameter optical zone. In addition, thinner intraocular lenses can be produced since the optical zone can have a smaller diameter. This in turn allows smaller corneal incisions and easier implantation surgery.

IPC 8 full level

A61F 2/16 (2006.01); **A61F 9/008** (2006.01)

CPC (source: EP KR)

A61F 2/1618 (2013.01 - EP KR); **A61F 2/1637** (2013.01 - EP KR); **A61F 9/008** (2013.01 - EP KR); **A61F 2002/1681** (2013.01 - EP KR); **A61F 2002/1699** (2015.04 - EP KR); **A61F 2009/00889** (2013.01 - KR)

Citation (search report)

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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

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