

TITLE: LOW COST OPTICAL DEVICE FOR THE DIAGNOSIS OF GLAUCOMA AND KERATOCONUS

FIELD OF INTEREST

Medical devices (Ophtalmology, Diagnosis)

CLINICAL NEED

The current commercial technologies including clinical diagnosis may be sufficiently sensitive to manage glaucoma and keratoconus. However, to date, clinical grading is not without problems, since it is prone to false positives and false negatives, it misses most cases of subclinical and early stages and there is real lack of critical characteristics in current imaging techniques for an evidence-based medicine in these ocular diseases: objective, quantitative, non-invasive, three-dimensions and dynamic.

DESCRIPTION OF THE INVENTION

Researchers propose an alternative that allows to extract accurately information from the corneal surface dynamically, the mechanical properties of the cornea in its entirety and, finally, to determine the intraocular pressure. This new medical device allows an early diagnosis, management and personalized treatment of glaucoma and keratoconus.

TECHNOLOGY KEYWORDS

Cornea, Deformation, Biomechanics, Vibration, Intraocular pressure.

IPR STATUS

Patent application number: U201930475.

Applicants: IIS-FJD, UPM.

TYPE AND ROLE OF PARTNER

Looking for commercial partners interested in licensing.

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