

Device and Method to Assess Ocular Surface Health

Tech ID: 27607 / UC Case 2016-138-0

ABSTRACT

Researchers at the University of California, Davis have developed a diagnostic device and method to determine ocular surface health.

FULL DESCRIPTION

Dry Eye Diseases (DEDs) are an array of ocular surface diseases with symptoms that include: discomfort, visual disturbance and foreign-object sensations. Current methods of diagnosis provide information on the specific attributes of the DED but do not provide a definitive assessment of the state of the ocular surface. Therefore, there is a need for quantitative and innovative tools that characterize the health of the ocular surface to guide diagnosis and management of this common, yet poorly defined, group of ocular disorders.

Researchers at the University of California, Davis have developed a unique diagnostic device and method to determine health of the ocular surface of a patient's eyes and to diagnose DEDs. By measuring biophysical surface properties of the eye, such as the contact angle hysteresis which may be a relevant and distinctive characteristic, a clearer evaluation and diagnosis of dry eye may be obtained.

APPLICATIONS

- ▶ Determine ocular surface health

FEATURES/BENEFITS

- ▶ Diagnose Dry Eye Diseases
- ▶ Determine interdependence between tear film and cellular constituents of the ocular surface

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	11,013,403	05/25/2021	2016-138

CONTACT

Amir J. Kallas

ajkallas@ucdavis.edu

tel: .



INVENTORS

- ▶ Murphy, Christopher J.
- ▶ Raghunathan, Vijay K.
- ▶ Yanez-Soto, Bernando

OTHER INFORMATION

KEYWORDS

ocular surface, measurement, Dry Eye Diseases, DED, wettability

CATEGORIZED AS

- ▶ **Medical**
- ▶ Devices
- ▶ Diagnostics
- ▶ Screening

RELATED CASES

2016-138-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

▶ Novel Method for Performing Corneal Implant

▶ Glaucoma Blockbuster

University of California, Davis

Technology Transfer Office

1 Shields Avenue, Mrak Hall 4th Floor,

Davis, CA 95616

Tel:

530.754.8649

techtransfer@ucdavis.edu

[https://research.ucdavis.edu/technology-](https://research.ucdavis.edu/technology-transfer/)

[transfer/](https://research.ucdavis.edu/technology-transfer/)

Fax:

530.754.7620

© 2017 - 2021, The Regents of the University of

California

[Terms of use](#)

[Privacy Notice](#)