

(54) Title of the invention : DEVICE AND METHOD FOR DETECTING RIGID GAS PERMEABLE CONTACT LENS FITTING

(57) Abstract :

The present invention discloses a novel system and method for detecting the fitting parameters of rigid gas permeable (RGP) contact lenses, enabling precise and efficient lens fitting in optometric practices. The system comprises a device (10) attachable to a slit lamp biomicroscope through a slit lamp adapter (12), featuring a sensor module (14) with corneal topography sensors, tear film stability sensors, and lens centration sensors. The captured quantitative data is processed by a data processing unit (16) within the device (10) using advanced algorithms, generating real-time analysis and personalized recommendations. The system further integrates a display unit (18) to present comprehensive and user-friendly data, empowering eye care practitioners in their decision-making process. With its ergonomic design, affordability, and reduced chair time for patients, the system enhances the accuracy and convenience of RGP contact lens fitting.

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