

1 ABSTRACT OF THE DISCLOSURE

 An arrangement for measuring desired
parameters of a contact lens by optical sectioning which
comprises a support fixture on which a contact lens is
5 positioned. The support fixture includes a container in
which a pedestal is positioned, and the container is
filled with a saline solution. The contact lens is
placed on the pedestal completely immersed in the saline
solution. A line of light is generated and directed by
10 imaging and shaping optical elements over the edge of
the container and through a selected diameter of the
contact lens. An imaging camera detects and image of
the light scattered at the surfaces of the contact lens
at the selected diameter, which is captured by a frame
15 grabber and is digitally stored for subsequent image
processing and determination of the desired parameters
of the contact lens. The analysis provides at least
four basic parameters of the contact lens including the
diameter (D), front radius of curvature (FC), back
20 radius of curvature (BC), and center thickness (CT), and
can also provide the lenticular curve radius, the
peripheral curve radius, the sagittal height, aspherical
forms and deviations of the several measured curvatures,
and the power of the lens.

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This Sheet Has Been Replaced



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