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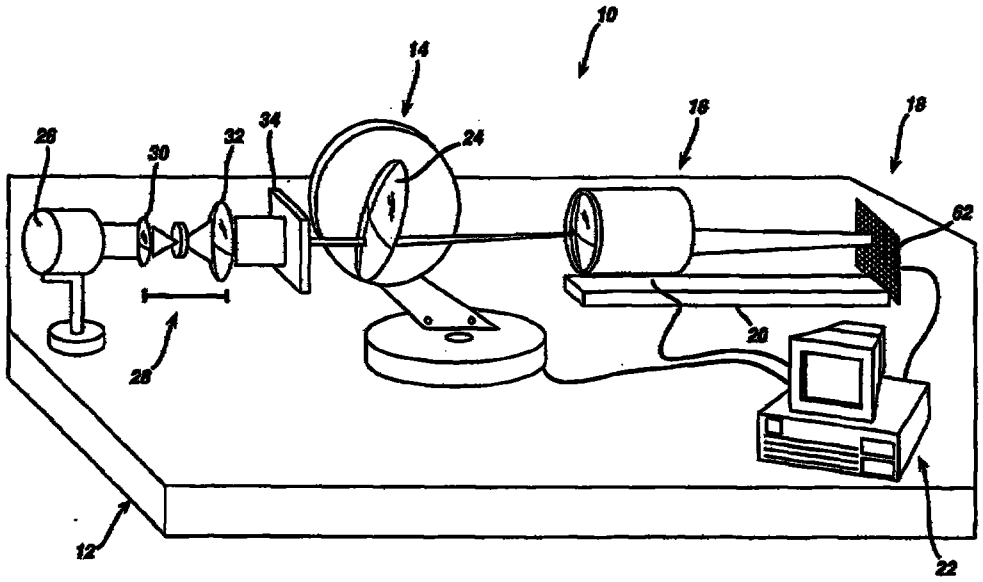
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(54) Title: IMAGE QUALITY MAPPER FOR PROGRESSIVE EYEGLASSES



(57) Abstract

An instrument and method for optical testing of an eyeglass lens, including progressive addition lenses, to obtain image quality measurements includes an illumination system for presenting a beam of light to a test lens, a test lens positioning system for rotating the test lens so that different areas on the lens are illuminated, a zoom lens for focusing the beam at a constant effective focal length, a detection system for recording and measuring image quality of the test lens, and an alignment boom for conveying the zoom lens and the detection system such that the optical axis remains aligned with the beam exiting the test lens. The instrument is fully automated and capable of obtaining measurements of the power, astigmatism, prism and modulation transfer function at various locations on the surface of the lens.