Abstract:

Contact Lens inspection in a plastic shell

An inspection system and method to detect the presence or absence of ophthalmic lenses in a plastic shell just before the seal is applied comprising a high resolution imaging device suitably integrated with an optical module; a UV illumination module suitably mounted below the ophthalmic lens holder; a Visible LED based Top lighting module suitably mounted on Top of the Ophthalmic lens holder; the inspection system which captures images of the lens immersed in a saline solution in a the plastic shell; analyzing the image and determining the characteristics of the lens perimeter and the optical center; making a decision to reject the inspected item if the analyzed image indicates the presence of a flipped, multiple and folded lens or the absence of the lens; making a decision to accept the inspected item, if the analyzed image indicates the presence of a single lens positioned in the correct orientation.

Fig. 1