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(57) Abstract :

A portable assessment device (100) for diagnosing ocular surface health of eyes is disclosed. The portable assessment device (100) comprises an image acquisition unit (106) configured to capture a set of images of eyes associated with a user, a temperature sensor (107) configured to monitor temperature of an ocular surface of the eyes and a body of the user, a humidity sensor (108) configured to monitor humidity in a predefined area around the eyes and ambient environment, an evaporation sensor (109) configured to monitor evaporation rate of the ocular surface of the eyes, and a control unit (110) that is configured to analyze the captured images of the ocular eyes to determine the blinking rate of the user, further analyze the monitored temperature, the monitored humidity, and the monitored evaporation rate to determine lubrication status of the eyes of the user, and generate real-time therapeutic responses for the user, based on the determined blinking rate and the lubrication status.

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