

ABSTRACT

ELECTRONIC OPHTHALMIC LENS WITH EYE CLOSED SENSOR WITH OPEN EYE PROMPT AND DATA LOGGING

An eyelid position sensor system for an ophthalmic lens comprising an electronic system is described herein for determining at least one of drowsiness or sleep onset of the wearer. The eyelid position sensor system is part of an electronic system incorporated into the ophthalmic lens. The electronic system in at least one embodiment includes a power source, power management circuitry, one or more sensors, clock generation circuitry, control algorithms and circuitry, and an alert mechanism. The eyelid position sensor system is utilized to determine eyelid position and use this information to determine if the wearer is asleep or awake.

Figure 1