



TECHNOLOGY LICENSING OFFICE

4301 West Markham Street, #831

Little Rock, AR 72205

501.686.6696

email: nmgray@uams.edu

BV 2016-34 - *Waker System*

APPLICATION: System and Method for Alerting a Sleeping User of Medical Device Problem

SUMMARY: Numerous medical conditions require constant monitoring to prevent life-threatening, critical events. For example, approximately 5% of deaths among Type I diabetics present as “dead in bed” syndrome, where the patient dies of complications related to diabetes while sleeping. Monitoring glucose levels and alerting these patients to critical changes could reduce mortality. Another example is Congenital Central Hypoventilation Syndrome (CCHS), which can cause the patient to cease breathing while sleeping. Typical CCHS patients sleep with a ventilator that monitors blood oxygen saturation and exhaled carbon dioxide. To date, there has been no mechanism to alert the patient if any problems with ventilation arise.

The present invention is a system that receives input from a medical device that utilizes a standardized nurse-call port. The input from the nurse call port can be redirected into an output that alerts a sleeping patient to a critical event. By using the nurse-call port as an input source, many different devices can be utilized within the system without the need to reconfigure or reprogram the output device, which is used to wake the sleeping patient.

Patent application pending