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(57) Abstract :
 This invention provides a wearable sensor device for monitoring health of an infant using wireless sensor systems. A sensing module for gathering health data from a patient, the sensing module comprising: a body and an arm extending away from the body, and a pulse oximeter sensor disposed longitudinally upon the arm of the sensing module; a sock that is configured to removably hold the sensing module, the sock comprising: a pocket configured to removably hold at least a portion of the sensing module, and an alignment feature configured to guide the arm of the sensing module such that the pulse oximeter sensor disposed upon the arm is configured to be held in close contact with the patient; a processing unit configured to execute computer-readable instructions that when executed cause the wearable sensor system to: receive from the pulse oximeter sensor at least a blood-oxygen level of the patient; identify a particular alarm level based upon a health reading relating to the blood-oxygen level of the patient; elevate the particular alarm level to a higher alarm level based upon a reading received from an accelerometer that indicates an attribute of the patient other than blood-oxygen level, wherein the particular attribute comprises an indication that the patient is in a particular position; and trigger an alarm alert at the higher alarm level.