Wireless CO₂ Monitor to Prevent Sudden Infant Death Syndrome (SIDS)

Tech ID: UTA 07-37

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TECHNOLOGY NEED
According to centers for Disease Control and Prevention, about 3500 babies die unexpectedly each year in the United States. Sudden Infant Death Syndrome (SIDS) and accidental suffocation while sleeping, are common causes of unexpected deaths. Current monitoring systems are invasive and cause discomfort to infants. Moreover, they are not highly effective. Thus, there is a need for developing a device which is comfortable and more effective in preventing SIDS.

INVENTION DESCRIPTION/SOLUTION
Present technology makes use of wireless CO₂ sensors placed in an array to detect changes in CO₂ concentration, this detection acts as an early warning to prevent SIDS. The data from sensors is used to activate an alarm. Integrated RFID’s can be used for monitoring multiple infants simultaneous in the nursing room. This technique is highly effective in preventing SIDS and is comfortable as it uses noninvasive wireless sensors.

APPLICATIONS
- For preventing deaths caused by SIDS
- Health monitoring of patients with respiratory diseases
- In medical research
- In homecare equipment

KEY BENEFITS
- Wireless sensing
- Highly comfortable and effective
- Using integrated RFID’s multiple patients can be monitored

STAGE OF DEVELOPMENT
Prototyped

INTELLECTUAL PROPERTY STATUS
Non-provisional (US7961093B2)