

Infant Sleep Pod (OTT1306)

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UWM Current Dangers within Infant Sleep Environments

Problems/Unmet Needs:

- Parents sleep with infants
 - Without using a dedicated infant sleep environment

• Existing co-sleeper products

- Do not fully protect the infant's air space
- Offer only modest passive protection from overlay
- Well-intentioned parents will occasionally sleep on a couch, recliner, or sofa
 - These are more dangerous than adult beds



American Academy of Pediatrics (AAP) states:

The safest place for an infant to sleep is a firm, flat, dedicated, separate space free of blankets, toys or other objects

-No co-sleepers recommended due to lack of data regarding safety compared to cribs or bassinets



- Who co-sleeps?
 - 60% parents
 - Will sleep with infant at some point in first year whether intentional or unintentional
 - 50% of parents will not admit co-sleeping to physician
 - Bed-sharing most common in two types of families:
 - Mid to upper middle-class and low-income
- Safety and closeness are parent priorities
 - Current market products lack the latest in design and technology to improve safety
- **Common Fallacy: Babies sleep in a single** place at night
- Competitive products can capitalize on this ©UWMRF 2017





The Inventor Dr. Jennifer Doering, a registered nurse, has invented a sleeping environment system designed to control risk of death from overlay, suffocation, entrapment through <u>passive and active</u> protections.



UWM Enhancing Performance over Existing Products

- Passive Protections
- Bridge structure protects air space over head and torso
 - Directional (narrower at feet) encourages correct placement of baby in Pod to maximize protections
 - Seed shape will tend to right itself naturally
 - Portability to protect infant in many environments

Active Protections

- Alerting gives parents means of protecting child from dangers even while they are asleep or in another room
 - Detects: Tilt beyond set threshold, Blankets, Pillows, Overlay (bridge deformation)
- Early warning system Pod alerts *before* it falls off the bed



Intellectual Property

- U.S Utility Patent 9,554,659
- U.S Design Patent D711152
- U.S Utility Patent Pending 20140173822 A1

Partnering

• We are looking for a partner for the development, manufacturing, and distribution of the final product for commercialization.



Market Potential

Applications



(Mother and I-SleepPod)



(Mother and I-SleepPod in Bed)

<u>Market</u>

- U.S. juvenile products industry is a \$17.8 billion market
- With the numerous recalls on various infant sleep devices and cribs in recent years, many parents are particularly aware of and interested in the safety
- The I-SleepPod will provide a novel and safe alternative for parents and their infants



- Sensors designed for target 6 month battery life
 - Can build in re-charge capacity
- Inter-planar relationship between bridge & base sensors
 - Offers superior detection of danger from tipping and falling
- Pod alarming before it actually falls off surface
- Infrared blanket/pillow detector
- Detection delay adjustable to minimize false positives and environmental infrared (e.g., TVs in living rooms etc.)
- Multi-level lights and alarming frequency
 - Minimize consumer learning needs and literacy level
- Blue tooth and video capabilities
- Temperature sensor guide rescuer in a fire



(Video Demonstration of the I-SleepPod Sensor Technology)



(Video Demonstration of the I-SleepPod $\,$ Infrared Blanket Detector)



- The Pod provides parents peace of mind they are being the best parents possible
 - Keep your baby close <u>and</u> safe
 - Sleep is a state of altered consciousness
 - Even well-meaning parents cannot get past this fact
 - However, technology can help
- Parents using Pod may sleep better
 - Reduces need for sleep disturbance from hyper-vigilance
 - Better sleep = \downarrow fatigue = \uparrow energy/mood = happier and healthier



- Determine new American Academy of Pediatrics (AAP) Standards
 - Build the data through testing to demonstrate safety

Partnering

- We need a partner interested in creating a new type of product that fits with the needs of technology minded parents
- This product is the future of safe co-sleeping with infants



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