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Diaper-Embedded Transponder for Monitoring Urinary Tract Infection

An autonomous, self-powered, diaper-embedded transponder provides accurate and timely information via a wireless link for early detection and screening of urinary tract infections in patients and infants.

Urinary tract infections account for more than 8.1 million visits to physicians' offices per year. If not identified and treated early, urinary tract infections can be a major source of additional disease. To identify urinary tract infections, urine collection and lab urinalysis are two methods currently used; however, there is no existing method that uses a diaper-embedded sensor for patients and infants.

Researchers at Purdue University have developed a diaper-embedded transponder for early detection/screening of urinary tract infections. Once activated by urine, the transponder measures and transmits the information via a wireless link to the caregiver. The transponder is autonomous, self-powered, and it provides accurate and timely information.

Advantages:

-Diaper embedded

-Autonomous and self-powered

-Provides accurate and timely information

Potential Applications:

-Nursing homes

-Hospitals

-Nurseries

TRL: 4

Intellectual Property:

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Category
Biotechnology & Life Sciences/Biomarker Discovery & Diagnostics

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