Anti-theft RFID clothing

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Electronic anti-theft devices have been installed in vehicles cars for years -- such as the LoJack, which gained fame during countless TV commercials. Soon, similar technology will be used in the clothes you and your children wear.

A fashion designer in California is debuting sleepwear for small children that contains RFID -- Radio Frequency Identification -- tags, providing some peace of mind to parents, who might fear that their young ones may be abducted while they sleep.

Other clothing makers, including major brand names in the business, are eyeing RFID tags, too, and are expected to hide them unobtrusively in labels on their designer items, hoping to prevent counterfeiting of their expensive creations, experts told UPI's Wireless World.

"It's fascinating -- RFID is becoming so pervasive," said Mark Palmer, a vice president of Progress Software Corp. in Bedford, Mass., a developer of RFID-related technologies.

Palmer was quoted in the new book, "Inescapable Data: Harnessing the Power of Convergence (IBM Press, 2005)."

The new line of clothing, from Lauren Scott, a division of DST Media Inc., is poised to debut next spring. The clothing, including nightgowns, will be sold at Target stores and will include RFID technologies that parents can place in doorways and windows, which will trigger an alarm if children wearing the tagged clothes travel more than 30 feet.

The children's line of nightgowns and pajamas apparently is the first commercial application of RFID in clothing that has debuted so far, but others are expected soon, experts said.

"We've been contacted about this by retailers," said Tawnya Clark, vice president of sales and marketing at RSI ID Technologies in Chula Vista, Calif., a maker of RFID products. "They want to use RFID not only to track the clothes in the warehouse and during shipping. They want to track the clothes when they are bought by customers."

The reason, she said, is industry estimates put the figure at $15 billion for the amount of fraudulent returns of merchandise handled by retailers every year. Customers purchase designer jeans and then come back with a pair of knock-off jeans and attempt to exchange them, pocketing the difference in the price.

"Unless the store can say for sure that the item was purchased there, they may not in the future refund the money," Clark said. "This has been looked at as a customer service issue in the past, but is now being looked at as a fraud prevention issue."

Another developer, Checkpoint Systems Inc. in Thorofare, N.J., this week debuted new RFID tags and labels for clothing retailers, enabling them to authenticate the product if it is returned for a refund.

At Texas A&M University in College Station, administrators are sewing RFID tags into the clothes of the members of the Corps of Cadets there. The school's RFID2 Lab worked with the administrator of the military-style program and is incorporating passive HF 13.56 Megahertz read-write tags into the uniforms of 1,700 students.

Tagsys, in Doylestown, Pa., made the devices, which are 22 millimeters wide, pack 64 bits of memory and a 230 millimeter read range. An

MR-100 13.56 MHz reader is being used to read the tags and track the inventory. If a student walks off campus at the end of the year without returning the uniform, his or her identity can be easily determined by checking with the inventory database.

Many technology companies are expected to compete in the emerging RFID market -- and no clear winner can be predicted just yet.

"The market will be hotly contested," said Dennis Gaughan, director of research at AMR Research in Boston, an IT consultancy. "RFID is still in its formative years."