



## News Release

### **SecureRF's National Science Foundation Grant for Secure RFID Tags Has Been Extended**

#### *Security on RFID Tags Will Benefit Pharmaceutical and Other Industries*

**WESTPORT, CT, August 7, 2008** –SecureRF Corporation announced that the National Science Foundation (NSF) has extended their Small Business Innovation Research (SBIR) grant to develop a secure radio frequency identification (RFID) tag for the Pharmaceutical supply chain. SecureRF, developer of the world's first linear-based security methods, was granted additional funds to create security protocols for UHF passive RFID tags that will protect prescription drugs in the pharmaceutical industry. The company is partnering with the National Council for Prescription Drug Programs, Inc. (NCPDP) and a major US pharmaceutical distributor in their development effort.

“We have found that no one in the pharmaceutical industry has had fruitful discussions about what is needed in an RFID tag from a security perspective,” said Louis Parks, SecureRF's CEO. “Many people think of securing the pharmaceutical supply chain as encrypting data, when in fact many different security tools should be used in different combinations. The security protocol that is appropriate for particular pharmaceutical applications such as anti-diversion, e-pedigree, track-and-trace and cold chain management will vary and must be balanced against the apparent and real risks.”

In Phase IB, SecureRF will focus on usage delivery so that the resulting RFID system will meet the confidentiality, integrity, availability, authentication and other security needs of potential pharmaceutical industry customers. The technical funding of this Phase IB supplement will be used to design, develop and validate the appropriate security functions resulting in Use Cases that will be used to design secure protocols that will guide SecureRF in their Phase II tag development work. The resulting UHF passive tag will comply with EPCglobal, Class 1, Gen 2 protocols, have ultra low power requirements and yet allow secure cryptography to run on the chip itself, an industry innovation.

The United States pharmaceutical industry had \$286.5 billion in total sales in 2007 and has seen a growing number of counterfeit drug cases each year. To protect patient safety and mitigate these threats the FDA is urging the industry to adopt RFID technology but a large exposure remains if the security of the data on the tag can not be ensured. The technology developed in this project will also be applicable to high value asset tracking, contactless payment systems, Defense and Homeland Security including border security, and Near Field Communications.

SecureRF's team of world-leading mathematician/cryptographers have developed a public key cryptography security protocol, known as the Algebraic Eraser™, which is thousands of times smaller and faster than any other cryptographic function. In Phase I of the grant, SecureRF proved the

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feasibility of placing the Algebraic Eraser security protocol on a passive, UHF RFID tag. The SBIR project is under the direction of SecureRF's Chief Scientist, Dr. Iris L. Anshel.

This work is supported by the National Science Foundation under Grant No. 074072 as part of the 2007 SBIR/STTR Solicitation (NSF 07-551). The award abstract can be viewed at <http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0740472>.

### **About SecureRF**

SecureRF Corporation provides secure radio frequency identification (RFID) solutions for high value asset tracking, monitoring and anti-counterfeiting applications in the pharmaceutical, food, defense, homeland security and other sectors. The company's technology, based on a breakthrough in cryptography that is lightweight yet highly secure, provides authentication and data protection security for RFID tags that meet both EPCglobal and ISO standards. SecureRF's LIME Tag™ is a secure, battery-assisted, passive RFID tag with optional sensors that provide cold chain management functionality. SecureRF solutions can also be licensed as a software toolkit, a core, or a chip, addressing a wide range of applications and environments. More information about SecureRF can be found on its Web site at [www.SecureRF.com](http://www.SecureRF.com). SecureRF's insights into RFID Security can be found on its blog at [www.SecureRF.com/RFID-Security-blog/](http://www.SecureRF.com/RFID-Security-blog/).

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### Editors Note:

Passive RFID tags do not have batteries and are powered only by reflecting back radio waves from the reader. They can not run complex circuits or encryption algorithms that require a significant amount of processing power. This has prevented strong protection of tag data and identity leaving passive RFID tags vulnerable to many forms of commercial and consumer abuse such as unauthorized reading, copying, or tracking.

Battery-assisted passive RFID tags, also known as semi-active tags, communicate using the same backscatter technique as passive tags and use a battery to run the circuitry on the microchip or an onboard sensor. The inclusion of a battery provides more computing power to implement security than what is currently available on a passive RFID tag.

IMS Health Reports Global Prescription Sales Grew 6.4 Percent in 2007, to \$712 Billion, [http://www.imshealth.com/ims/portal/front/articleC/0,2777,6599\\_3665\\_83763126,00.html](http://www.imshealth.com/ims/portal/front/articleC/0,2777,6599_3665_83763126,00.html)

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