

# Tyfone Continues to Build Patent Portfolio with Issuance of Fourth Patent for its Mobile Secure Transaction Platform

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Latest patents cover critical technologies in electronic wallet authentication and mobile contactless NFC payments

PORTLAND, Ore. – December 13, 2010 – Tyfone ([www.tyfone.com](http://www.tyfone.com)), a global provider of unified mobile secure transaction infrastructure for mobile banking, mobile identity management, and mobile contactless NFC payments, announced the award of its second patent this year for the company's innovative mobile electronic wallet technology. Tyfone has four issued and several pending patents.

This newest patent, US 7,805,615, entitled "Asymmetric cryptography with user authentication," has an effective filing date of July 15, 2005.

Tyfone's u4ia<sup>®</sup> (pronounced euphoria) Mobile Secure Transaction platform, addresses today's business need for high assurance identity authentication and secure access to electronic wallet information even if the mobile phone is not connected to the network at the time of transaction. Apart from secure wallet information access benefits, the algorithm authenticates a user without the pitfalls of password hacking because there is no local storage of direct hashed password or password in the clear.

The significance of this authentication is best explained with an example – say you are underground in a train station and need to unlock your mobile wallet to tap-and-pay on the turnstile; you can do so securely even when there is low or no network connectivity for the mobile phone. And if you happened to lose your mobile phone, your password cannot be easily compromised.

"The need for authenticating users for access to data involved in financial transactions is obvious and cannot be overstated," said Jim Reavis, founder of the data security firm Reavis Consulting Group and executive director of the Cloud Security Alliance. "The vast majority of people are not security experts, nor do they pay as much attention as they should when it comes to secure authentication. For the mobile secure transaction marketplace to grow and thrive, it requires companies, such as Tyfone, to develop secure methods that can be easily deployed for consumers by stakeholders such as financial institutions, carriers, device manufacturers and retailers."

Just a few weeks ago Tyfone also announced the issuance of patent, US 7,828,214, entitled "Mobile phone with electronic transaction card" having an effective filing date of February 22, 2005. Tyfone's patented technology enables the use of a mobile phone having a memory card slot and a memory card compatible with the memory card slot to transmit transaction data to a reader device. The memory card includes circuitry used to produce a time-varying magnetic field that enables a contactless transaction. The circuitry used to produce a time-varying magnetic field may include smartcard circuitry.

"A well known law in Physics, called Faraday's law describes how a time-varying magnetic field creates an electric field," said Prof. Pramod Chandra (PCP) Bhatt, faculty emeritus of Indian Institute of Technology Delhi. He added, "Electromagnetic waves manifest a form of duality between electric and magnetic fields – advancing in tandem in time and space. Radio waves and microwaves emitted are one form of electromagnetic waves in specific frequency band referred to as radio frequency or RF." This time-varying magnetic field based relationship is one of the key

operating principles behind RF identification (RFID) and contactless NFC.

In the growing mobile marketplace, Tyfone's patents, u4ia® (pronounced euphoria) mobile secure transaction platform, and SideTap™ memory card product enable any commerce stakeholder to bring immediate scale and security to all mobile transactions – both online and offline at point-of-sale.

“Tyfone has been deliberate in comprehending the mobile transaction evolution and recognizes that security and neutral secure elements are necessary for sustainable success,” says Dr. Siva G. Narendra, Tyfone's chief technology officer and co-founder, “Stakeholders understand that the key to success is ensuring a positive user experience. Likewise, deployments are only as good as the security implementation behind them and the comfort consumers have in it. Our issued and pending patents augment this viewpoint and we have a portfolio that enables robust implementations and one that encourages the notion of neutrality in mobile transactions.”

AboutTyfone: Founded in 2004, Tyfone's corporate headquarters are in Portland, Oregon, and its Asia-Pacific headquarters in Bangalore, India. Tyfone connects money and mobility via a highly secure, scalable and flexible mobile financial services solution tailored to meet the evolving needs of consumers, financial institutions, mobile network operators, transportation companies, and retailers. Operating in any standard memory card slot, Tyfone's u4ia® platform and its companion SideTap™ memory card is the world's first patented, neutral, and comprehensive memory card-based payments solution for mobile contactless payments. Tyfone and its partners enable a suite of services including Mobile Banking, Mobile Identity Management, Mobile Remote Payments, Mobile Retail Services, and Mobile Contactless Payments. For more information visit [www.tyfone.com](http://www.tyfone.com).

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