Tyfone Announces NFC Design Breakthrough and Associated Patents

Patented innovations lead to antenna integrated MicroSD with no external boosters and plastic card-like read distance

PORTLAND, Ore. — May 21, 2012 — Tyfone (www.tyfone.com), a mobile financial and security solutions provider, today announced the issuance of two U.S. Patents supporting a breakthrough design solution that is required to miniaturize a NFC antenna for use in mobile environments, including, but not limited to MicroSD cards, such as Tyfone's next generation SideTap™ NFC card. This latest design works with any smartcard secure element, across multiple mobile devices and on any NFC reader without the need for cumbersome external booster antennas or after-market battery covers.

Tyfone, with its growing portfolio of trailblazing intellectual property, continues to be the recognized global leader for innovation in bringing the power and independence of smartcard based secure elements and integrated NFC into MicroSD and other form factors. The newest design brings MicroSD with NFC on the same playing field as standard MicroSD cards, with the same yield and cost to manufacture. Tyfone's latest design not only elevates the NFC performance and user experience of self-contained MicroSD solutions to the desired commercialization standards, but also is equally applicable and beneficial to the miniaturization requirements of any NFC deployment form factor.

The two U.S. Patents supporting this new design are: US 7,954,716, entitled "Electronic Transaction Card Powered by Mobile Device" with an effective filing date of February 22, 2005; and US 7,961,101, entitled "Small RFID Card With Integrated Inductive Element" with an effective filing date of August 8, 2008. Tyfone previously announced a Taiwan patent supporting this advanced design: I336449 "Electronic Transaction Card," with an effective filing date of February 22, 2005.

> One of several independent claims from an issued patent reads – "A memory card compatible with a memory card slot in a mobile phone, the memory card including nonvolatile memory accessible by the mobile phone, and a point-of-sale interface to communicate with a point-of-sale terminal, wherein the point-of-sale interface receives power from the mobile phone."
>
> Other independent claims address form factors in addition to the mobile phones.

In accordance with Tyfone's patented inventions and new MicroSD design, the integrated miniature antenna does not need to draw power for the smartcard chip from the reader. Tyfone's cutting edge inventions mitigate the need for cumbersome external booster stickers or after-market battery covers, making the next generation SideTap NFC MicroSD solution extremely consumer friendly, compatible with multiple devices and operating systems. Tyfone's inventions work with any smartcard chip across multiple mobile device platforms and with any NFC reader.

"Since 2004, Tyfone along with its partners has been defining and developing a wide range of technology innovations to enable mobile commerce," said Prabhakar Tadepalli, chief operating officer of Tyfone. "Part of the payoff of our hard work is delivering these patented products to market and overcoming scaling challenges, eliminating the last barrier to global NFC implementation."

The next generation SideTap MicroSD design with integrated NFC antenna is available for manufacturing in high volumes and is compatible with existing MicroSD manufacturing processes with very high manufacturing yield. To empower the industry and advance the commercialization of these technologies, Tyfone is making these patents and the self-contained MicroSD solutions available for licensing. Interested parties are invited to register at http://www.tyfone.com/license. For those interested in commercialization of the self-contained MicroSD, performance data comparing it to other solutions will be made available after registration.

About Tyfone

Founded in 2004, Tyfone's corporate headquarters are in Portland, Oregon, and its Asia-Pacific headquarters are 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 comprise 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 http://www.tyfone.com.