

Testimony

By Elliot Klein

Before the
U.S. Election Assistance Commission

Comments on technological solutions for voting systems that ensure that voters with disabilities can vote in a private and independent manner.

Washington, D.C.

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Summary:

To proposed to the Commission a new method to transform voting in America for people with disabilities by combining the security and trust of U.S. Postal Mail with the convenience of a Smartphone. The Smart Stamp® system and methods help turn a mobile phone into a trustworthy electronic voting device.

My name is Elliot Klein. I am an independent inventor from New York City with a personal interest in new technological solutions for voting systems to ensure those with disabilities can vote in a private and independent manner.

As part of my independent inventor work, I created the Smart Stamp® as a U.S. Patent pending project to promote use of mobile phones on voter-verified First Class U.S. postal mail ballots with the intent of preserving privacy protections for elections in the United States. The project helps ensure voters with disabilities—and others—vote by using a new secure combination of postal mail and their mobile phones combined in a new way.

Cell phones are important for people with disabilities. In the last several years, cell phones, or Smartphones, have played an ever-increasing role in the lives of people with disabilities as they search for ways to stay involved in election process and find new ways to use this increasingly important tool. These mobile phones have opened up a new world of communication and convenience to voters with disabilities worldwide.

In fact, voting by Smartphone in certain foreign countries, for voters with and without disabilities, is soon to be implemented as a new option to cast “official” election votes. An article in “*Cellular-News*” notes “*Russia to Allow Parliamentary Voting by Mobile Phone*”, stating: “The Russian Parliamentary elections due in 2011 could use mobile phones for voting, the Central Elections Commission has announced. The Commission [Russian] is looking to develop a java based application which could be downloaded to phones to allow secure voting services.” The report did warn that the technology “would be significantly more secure than that used for realty TV voting services.”

My view is that the implementation of new Smart Stamp® technology in the U.S. should be furthered studied and fine-tuned with EAC guidance to create a new convenient and trustworthy way for voters with disabilities—particularly with mobility handicap related disabilities—to assist the States with interpreting and offering new statewide voter registration options to mobile phone devices using a secure combination of vote-by-mail and mobile phone device convenience provisions of HAVA.

It is my position that compliance with Section 303(a) of HAVA should include transparency, privacy, and security for voter registration information, while at the same time meeting the challenge of real-time authentication of voters during an election by enabling the use of mobile “Smartphone” devices to cast secure votes. By Smartphone I mean cell phones that have built-in cameras to read a special secure ID “stamp” affixed onto official U.S. Postal Election Mail, and other First Class election campaign mail, with secure internet connectivity also-built into the cell phone. The iPhone, Blackberry and virtually every new mobile phone in the U.S. fall into this category of handy mobile phones which also represent the lifeline tool and assistive device for disabled Americans.

Recently, *American Idol* reality TV show voting surpassed the highest total of voters for President. Reality is really stranger than fiction or at least *as strange...*because 66+ million votes, mostly from mobile device callers, were made to nominate their favorite Idol singer. That exceeded the total number of votes ever recorded during an election for U.S. President.

As a technology inventor, I got the big idea for EAC to implement while watching *American Idol* live on TV. I thought WOW, 80 million votes? And then I started thinking how to use the newly announced Microsoft® custom Tags (www.microsoft.com/tag) combined with RFID security technologies to help re-invent reliable and trustworthy voting using mobile phone and internet connected devices. Suddenly, the Scan 'n Vote "Smart Stamp" service concept for secure internet voting, combining the trust of U.S. postal mail with the convenience of Microsoft Tags, was born. I further realized just last week, when the Microsoft community voted this #1 as a design and mobile experience, and sharing their comments on Twitter and Facebook, that the concept represented not just a winning idea but a great new way for Americans with disabilities to vote.

In studying *American Idol* voting methods, one realizes this is primarily accomplished using mobile phone text messaging services that allow unlimited voting on any issue by mobile phone. “Txt” voting has proven to be unreliable and not trustworthy as multiple votes area allowed and there is no paper verifiable trail.

In sharp contrast, to add security and trustworthiness, my proposed technology platform combines the registration and linking features of the new Microsoft® Tag with the security of microchip tags applied onto envelopes or postcards to create a new voter service platform for the disabled. This service makes it easier to use cell phones to register to vote and cast official ballots. The Tag services also create entirely new ways to transform voting in America. With continued support from the Microsoft Tag community

and EAC guidance, we believe our platform can enable mobile voting to be a reality by 2012, or sooner.

In future, voters may bring Microsoft® custom Tag U.S. Postal mail postcards to polling locations where Tag code readers stand ready to securely snap by Smartphone camera, record or confirm voter/registration identity by embedded supplemental RFID tag code for rapid voting security and ballot verification processes. Applying the Microsoft code design lets any State create their own postal tag and mail materials encouraging votes or voter registration with instant Scan 'n Vote approach using Votertags™ apps for a new mobile experience with election campaign convenience, trustworthiness and reliability.

So what's this big idea for voting systems that ensure that voters with disabilities can vote in a private and independent manner?

To create a new method to transform voting in America for people with disabilities by combining the security and trust of U.S. Postal Mail with the convenience of a Smartphone. The Smart Stamp® system and methods help turn a mobile phone into a trustworthy electronic voting device.

Why Now?

Most postal mail already uses barcodes and RFID chips to speed up and track mailings. But with the help of cheap Smartphones in the hands of people with disabilities, and internet access, it is now possible to use the power of Microsoft Tag applied onto physical postal mailings, to securely cast one's vote from their mobile phone. The Scan 'n Vote method of applying a Microsoft custom Tag with Scan 'n Vote authentication and RFID code encryption and security technologies make it possible for the first time to cast official ballots as easy as they do for their favorite contestant on American Idol, with a secure one-time and paper-verifiable process. The idea is to develop a system to prove to election authority and mailers that the postal mail, combined with Microsoft Tag and RFID chip code can create a new way to improve voting processes in America. Until now, mobile devices and internet have played a role in every aspect of the connected digital information age, except voting in official elections. Now we can begin to change that by combining Microsoft Tag, encrypted RFID chip security codes and the power of the internet-connected Smartphone for real voter change in America by using Votertags™ with Smart Stamp® technology applied onto U.S. postal mail.

I have pioneered this new paper-verifiable method that allow individuals to conduct secure instant voting from Smartphones and other mobile devices by combining U.S. Postal mail with the internet by using Microsoft custom Tags and encrypted RFID tag technology applied onto sent ballot voting postal mail. Electronic voting machines that do not produce a paper record of every vote cast cannot be trusted. For the first time, Smart Stamp® technology enables trusted voting as simple as voting for a contestant on *American Idol*. We do this with the efficiency of mobile phone and internet, but the paper ballot remains the 'official' vote, which can then be certified by encrypting the RFID tag on a reply-mail voting postcard or ballot that can serve to easily confirm, re-count or re-verify voting if necessary for audit. The unique combination of Microsoft Tag for instant

voter access and election information combine with a server-based Smart Stamp RFID code registration server that links secure RFID code registration with Microsoft Tags and the security of postal mail to create a new reliable election campaign and voter system.

Before Smartphones, voting for candidates in official elections by the disabled required more secure forms of identification and processes to keep them trustworthy. In part, these legacy, antiquated processes served to limit people with disabilities from registering to vote or sometimes deciding to go out and vote based on the weather forecast outside.

Today, Smart Stamp technology can create an entirely new way to vote and be counted. It's an application that can revolutionize election voting in this increasing mobile communication device and digital age. It will make it simple, convenient and secure to register to vote or officially select and cast one's vote for a candidate or any public issue.

Smart Stamp opens a new and secure way for people, especially those with disabilities, to vote and be counted with mobile convenience. This new hybrid electronic voting application bridges physical postal election mail ballots with mobile devices for "official" election voting.

Mobile voting was No. 1 in a list of five mobile messaging predictions recently released by VeriSign, Inc., the U.S. leader in secure mobile authentication technologies. Mobile devices could be used for voting purposes in the United States by 2012, according to market predictions made by the Messaging and Mobile Media division of VeriSign, Inc., the trusted provider of Internet infrastructure services for the networked world.

Among its top five predictions, VeriSign expects: "Mobile government will become more popular as citizens seek real-time access to their elected officials." VeriSign's market predictions include and estimate of "10 percent of the population will interact with the government using mobile devices by 2012." " VeriSign further reports:

"The era of mobile government has arrived in the United States. Mobile devices provide an important communication channel between government and its citizens. We will see mobile voting trials emerging on the local level, as demonstrated in the United Kingdom, giving way to widespread use of the mobile channel as one of several unique voting methods to help increase voter turnout by 2016. By the end of President Obama's first term in 2012, use of SMS to exchange information and opinions, as well as promote accountability and transparency, will become mainstream, with at least 10 percent of the U.S. population using their mobile device to interact with government. Applications can include status information that can be pushed by the government or pulled by end-users, such as tax filings and refunds, driving tickets, library books, driver's license and passports." (Source: VeriSign, April 1, 2009, Company PR release)

Smart Stamp technology links encoded election mailing label tags with a smart phone device's camera phone to connect physical postal mail to the digital world. The Smart Stamp service enables the Smartphone device's camera to capture image of a special

“Smart Stamp” identification code that helps validate permission-based access to secure Web voter related ballot contents or election mail registration templates—even allowing for official voter registration or actual voting from the mobile phone device itself.

With Smart Stamp technology, disabled citizens can have a new option to use their phone device to read Smart Stamp service postcard or envelopes providing instant access to a wide variety of election voter information and actual voting on their device, without the need to physically visit a polling location. Voting or voter registration for any election is now possible with this secure and encryption-based application that allows for convenient and reliable voting for the people, by the people.

The Smart Stamp identifier, integrated into printed U.S. Mail envelope designs as a permanent one-time-use label with combination RFID transponder ID security chip, can be used as part of a postal mail voter postcard or envelope formats to tabulate votes. Smart Stamp technology can also incorporate an RFID label tag (or special RFID/EPC coded tag in addition to the visual indicia), read similar to EZ-Pass™ toll or wireless credit card chip by a contactless RFID reader device placed at a return vote mail reply office, other voter ballot drop-off station, or integrated into a future SmartPhone handheld device to add electronic RFID/Internet confirmations and processing support for local, State or national polling locations.

Privacy-protected electronic content is accessed by data security templates and protocols using an Internet connected Smartphone device after the mailing parties agree to share, exchange or update content with a secure and privacy-protected identity. For privacy protection, data is not stored in the envelope’s codes but accessed by Smartphone device Web connection only after security privacy permissions with a coded RFID label designs, combined with printed “Smart Stamp” indicia-style non-removable labels are pre-affixed to a return ballot mail postcard or envelope, or integrated with sent mailings, that can then be authenticated between mailing or authorized official State voting parties.

Privacy protection and secure access are the key benefits of Smart Stamp for Electronic Voting Technology. By affixing Smart Stamp services to First Class Mail, voter gets legal privacy protection and Federal protection benefits under the U.S. “Privacy Act” for Election Mail sent in the United States. This method brings new value to physical mail where the parties have pre-agreed, by contract, to share and exchange private data related to physically sent mailings. By applying Smart Stamp technology and disability voter convenience services, a new secure federated access processes around mailed election mail can be created for Americans with disabilities in a way that hasn’t been done before.

Smart Stamp service process does not require direct U.S. Postal Services involvement or permissions and is anticipated to run completely independent from U.S.P.S.

For the first time, this application adds mobile device convenience to re-invent antiquated voting processes and offers a new option to make any and every official election for members of our Country with disabilities, to make it simple and secure to vote and be counted.

Additional details on the Smart Stamp technology application for disabled voters can be found in my submitted written testimony and online at www.smartstamp.net.

I am available to work more closely with the EAC in its work to draft voluntary guidance to states on technological solutions for voting systems that ensure voters with disabilities can vote in a private and independent manner statewide-centralized voter registration databases.

In addition, these same Smart Stamp technology methods can bring the EAC an entirely new way for State voters to securely and instantly cast their ballots, or register to vote, using mobile phone devices. That is why today, I invite and suggest EAC to study this new innovation. I pledge to make myself available to assist the Commission in its review and request that my Smart Stamp® invention be further evaluated by EAC initially to assist the disabled, with the potential to eventually extend beyond just a disabled voter solution and into a new national model for re-inventing voting in America.

Please take a look at my submitted written testimony to learn more about Smart Stamp with the goal of providing guidance and direction that can help enable me to bring my inventive solution to people with disabilities as part of an experimental market test.

In conclusion, the most important lesson to take from these comments is that there is a new solution being proposed to the Commission to transform voting in America for people with disabilities by combining the security and trust of U.S. Postal Mail with the convenience of a Smartphone. The Smart Stamp® methods help turn a mobile phone—the most important communication device of disabled Americans—into a trustworthy electronic voting device. For this reason, policymakers and election administrators should be aware and begin today to further study, fine-tune, and then begin implementation tests.

Thank you.

For information on Microsoft® Tag see:

<https://ws.tag.microsoft.com/customtag/vote/TagSlapsWinner.aspx>

For more information on Smart Stamp see: <http://www.smartstamp.net>

For more information on U.S. Patent see: <http://www.uspto.gov> and search application

[20060010086 Data append method for sent postal mail](#)

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Smart Stamp is a U.S. Registered Trademark; Votertags is pending U.S. service mark.

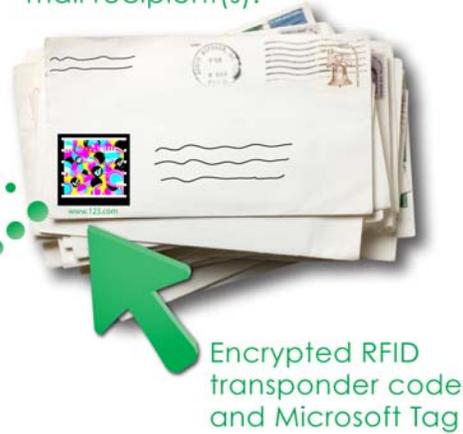
Data Append Method for Sent Postal Mail

Supplemental content related to sent mail is accessed by mail recipient using internet connected device (PC or Smartphone).

Sent postal mail with Microsoft Tag and encrypted RFID code affixed and linked to envelope, postcard or package under standards for private access by mail recipient(s).*

Multimedia Webpages:

- Photo
- Video
- Text
- Payment
- Music



Mail recipient reads encrypted RFID code on sent postal mail with internet connected device.

RFID Decryption Process



Receiver of sent mail indicates Yes/No agreement terms accepted by mail recipient to access supplemental content or to certify voting.

Sender of mail registers content to be viewed by mail recipient with secure, private permission-based access over the internet. Content access is determined by mail sender who registers photo, text, video, payment or music files for internet access (or denial) based upon registration permissions and encrypted RFID transponder code methods.

*The privacy of U.S. Mail is protected under Privacy Act by long-standing framework of federal statutes and regulations.