

City engineer hopes 'smart' idea pays off

Story and photo by Chris Malette

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Smart cards.
Smart phones.
Smart idea.

Gene Pellerin says if you combine the first two innovations, the smart idea is bound to follow.

Pellerin, a 55-year-old Belleville electrical engineer and telecommunications consultant, has patented an idea he believes will "fundamentally change the way we use telephones."

It's a bold statement, admits Pellerin, but nothing at all of a boast as he describes his plans to begin developing a "smart card, designed to work with smart phones and, eventually, personal computers..."

Pellerin has secured an American patent on Cyber Card and is in the process of finalizing the Canadian patent for a system that permits multi-faceted telephone access banking, computer commands e-mail and a myriad other functions possible with the use of an ATM style card and a properly equipped telephone.

"What this card does is marry the technologies of smart cards, as are now in a limited way used for ATMs with that of smart phones that provide an ATM style screen for various functions," said Pellerin. "With the proper hardware and software in the phone and a micro-chip properly programmed for your specific needs and security PIN (personal identification number) code, you'll be able to do banking, access your home computer, bank accounts, business computers — anything computerized — through the phone."

Smart phones, which have been on the market for about a year, already feature ATM style banking features for banks on-

line in Toronto and London. But Pellerin says the micro-chip feature of the smart card and the information it contains expands its uses and provides better security for the user.

Pellerin already does business "with Fortune 50 businesses across North America" from his Belleville business base and said the idea for the smart-card and smart-phone combination came from messages he was receiving from clients.

"As a result of the telecommunications security work we had been doing for our clients, we found there was a lack of a proper tool for a user to securely use their own individual system. Cyber card was the answer. It became clear there was nothing like it on the market, yet the concept is one that you'd think was simple enough that someone had to have already come up with it."

In fact, the seemingly simple notion had not entered the shrewd minds of research and development types at any of the world's telecommunications giants until Pellerin got the idea patented last month.

"One of the executives from a company we are working with to develop the card technology said it was amazing that his company had 400 highly-paid R&D people who hadn't come up with this before," smiled Pellerin, a former Canadian Armed Forces electrical engineer and employee of Northern Telecom in Belleville.

The smart card will introduce the "convergence of two existing and fairly new technologies — smart cards and computers" and will probably be widely used for a variety of personal and business telecommunications functions within the next several years.

"The micro-chip is personalized and therefore offers the most

secure form of access to telecommunications," said Pellerin. In a time when a computer geek in his basement can crack Pentagon missile codes, such technology is a hot commodity, he suggests.

"We're now in the process of taking it off the drawing board and onto the work bench," said Pellerin in an interview with The Intelligencer.

The market, he said, is huge for the Cyber Card.

"Consider that, with cellular phones, there are now about 500 million phones in use in North America, that describes the size of the market here alone."

Pellerin says the Cyber Card is "a concept whose time has come, now that smart phones have been on the market for about a year, now," but admits he has been lucky in developing the technology and patenting it before any of the telecom giants.

"We were lucky," he shrugs, "but our definition of luck is when preparation meets opportunity."

He is beginning some of the research and development for Cyber Card in Belleville and some at a private laboratory in Ottawa. A tentative deal is in the works with one of the aforementioned telecommunications giants — the identity of which Pellerin says he can't reveal just yet. He hopes to soon have a joint announcement of a deal to licence and manufacture the Cyber Card technology through the telecommunications firm.

"Some people wonder how in heck we came up with this idea in little, off the track Belleville. But, where did Alexander Graham Bell come up with the telephone? Little, off the track Brantford."