Victorinox Travel Gear implements digital solution for NFC

Smart Phone platform for brand protection

A partnership between Victorinox, All 4 Labels Global Packaging Group, NXP and GoodsTAG has presented a cloud-based solution for the protection of global brands against counterfeit attacks. At a recent Brand Protection conference the concept was launched based on the ‘Smart Product Services Platform’ currently in use at Victorinox Travel Gear – the Victorinox division for luxury luggage.

From 2017 on, the creators of the legendary Swiss army knife will update the production processes of the ‘Travel Gear’ range to add a unique digital identity to all products in the form of a smart NFC label. This label makes it possible for anyone with a conventional smartphone, anywhere in the world, to identify, and authenticate each individual product as an original.

With this NFC-based digital ID solution for product authentication, Victorinox takes a position as an innovative leader in brand protection, product service and adding customer value.

As production and distribution processes become globalised, product and trademark protection is becoming a key challenge for brands in almost all industry sectors. Worldwide, brands lose an estimated 500 billion Euros each year due to counterfeit or unlicensed goods – and this number is increasing. This cloud-based solution allows brands like Victorinox to protect their brand identity throughout the distribution process, and beyond that, into product usage and recycling.

“The NFC solution fulfils all requirements to combat product piracy – for us, and for our customers. Now, thanks to source-tagging from the very first production stages of our luggage, anyone can use their smartphone to easily and unequivocally authenticate each individual product. This is of great importance for our reputation with both our sales partners and our customers,” says Carsten Kulcke, CEO of Victorinox Travel Gear.

Trademark protection is just the beginning – Victorinox stands for functionality and reliability, and Travel Gear is already planning further smart
Agfa selected for development and supply of Malta voting documents

Agfa has been successful in the development and delivery of the voting cards for the General Parliament Elections in Malta in June.

The innovative solution was jointly presented by the company and Attard & Co. Imaging to the Malta Electoral Commission, who selected it for the benefits resulting from using a synthetic card material and the inclusion of tamper proof security features.

Agfa’s PETix PPF effectively replaces laminated paper

Until recently, the production of the Maltese voting cards required the laminating of paper cards with printed security features and personalisation data. Agfa’s polyester-based PETix PPF solution delivers superior durability including water and tear resistance without the need for laminating. This considerable efficiency gain is complemented with great printable allowing the Maltese voting cards to feature multiple security prints designed with Agfa’s FORTUNA High Security Design software.

“Agfa is honoured by having been assigned the Malta voting card project,” said Marc Van Damme, VP Marketing and Sales Agfa Specialty Products. “Having delivered on promise even within an advanced deadline illustrates how Agfa’s competences in such divergent areas as film manufacturing as well as security print design and print management work in sync to serve customer needs.”

Agfa’s PETix portfolio of products includes a variety of bi-axially oriented polyester films used in applications in the security card market. Primary advantages are high thermal stability, mechanical strength, dimensional stability and chemical inerterness.

Benefits include ease of use in card manufacturing delivering cards with durability of 10+ years and tamper proof card constructions at affordable cost.

www.agfa.com

Blockchain and Internet of Things Consortium Progresses Towards Ecosystem

Earlier this year, a group of five enterprises and six startups gathered to start to advance the blockchain and Internet of Things ecosystem. Skuchain and Chronicled in collaboration with the members of this group have launched an IoT “thing” registration API supporting Ethereum, Quorum, and Hyperledger blockchain implementations.

The protocol allows users to register multiple kinds of weaker identities, including serial numbers, QR codes, and UPC code identities, and bind them to stronger cryptographic identities, which are immutably linked across both physical and digital worlds using blockchain technology.

Blockchain technology is driving a broader trend towards securing digital identities of people, organisations, and physical objects. Machines capable of cryptographically-secured transactions can prevent hacking, data breaches, and more of the problems that plague digital economies today.

Today’s launch of the common registration protocol brings industry and commerce legacy systems one step closer to secure interactions with cryptographic networks. This will fundamentally change the approaches to computing that underpin today’s IoT device identities, sensor data, and business logic.

In support of the protocol, members of the group are moving forward with several proof of concept (POC) projects at the intersection of blockchain and IoT. Not only does this demonstrate the broader commercial and industrial potential of this technology, it supports the blockchain and IoT ecosystems and advances progress in these sectors.

Among these projects, Cisco is exploring using the protocol to register device identities and associated data, whereas Bosch has completed work to register automobile odometer readings on the blockchain to prevent fraud. Startups are also working towards POCs.

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services using the NFC technology. “The platform, which forms the foundation of the solution, was quick and stable to deploy. It is easily scalable, and offers a range of exciting opportunities for implementing innovative digital product services for our global network of retail partners and our customers,” adds Carsten Kulcke.

The wide range of applications for NFC tags is facilitated largely by the fact that almost every modern smartphone already contains an NFC sensor. Currently, it is estimated that more than a billion NFC-enabled smartphones are in use. In 2018, two out of three smartphones are expected to be NFC-enabled.

“The combination of smart NFC labels from All4Labels with the cutting-edge chip technology from NXP opens a new chapter in the relationship between brands and consumers. Global product authentication and unique digital product IDs form the basis for numerous new mobile use cases for brands and retailers, and for customer communication. These use cases range from real time, personalised product information – both pre- and post-sale – to exclusive customer support or simple, user-friendly reorder services. These services are just a few examples — but all of these possibilities can be unlocked only by connecting directly with the original tagged product,” says CEO Adrian Tippenhauer, from All4Labels.

Oliver Schwarz of GoodsTAG added. “Digitally authorised branded products will become a media and service gateway for a direct, personal, and authentic customer dialog in future.”

Victorinox Travel Gear AG
Victorinox entered the international travel-gear market in 1999 with the American TRG Group as the licensee. As part of the company’s commitment to strengthen and expand its travel-gear business, Victorinox took over full responsibility for its travel-gear product division in August 2014 and established the new business unit, Victorinox Travel Gear AG, based at its headquarters in Switzerland. https://www.victorinox.com/travelgear

GoodsTAG GmbH, based in Berlin, provides software-as-a-service (SaaS) for global ID- and product relationship management. Their ‘Smart Product Services Platform’ offers brands, premium manufacturers, and their partners efficient integration and global implementation of mobile product services across the entire product lifecycle. With GoodsTAG, a product becomes a unique and authentic customer experience. The platform allows precise and secure control over the digital serialization of products during the production process, as well as easily configurable and mobile applications and services for product and marketing managers, retailers, and consumers. www.goodstag.com

NXP Semiconductors N.V. enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better, and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security and privacy, and smart connected solutions markets. www.nxp.com

All4Labels is one of the world’s leading manufacturers of adhesive labels and flexible packaging. Approximately 3,000 employees currently create state-of-the-art packaging solutions at 27 locations. The RAKO Group, member of All4Labels, is a leader in security and identification technologies, such as security holograms, RFID labels, and security systems. The combination of labelling and RFID technology makes RAKO a unique provider of integrated, intelligent product identification and product tracking solutions along the entire value chain in the industrial and consumer goods sectors. www.rako-group.com www.all4labels.com

Crane Currency appoints Doug Prince to its Board of Directors

Crane Currency, a rapidly growing global producer of currency products, has announced that Doug Prince, Chief Financial Officer of Crane Currency, has been appointed to its Board of Directors effective May 11, 2017.

“Doug's extensive financial and operational experience has been instrumental in supporting the rapid growth of the company,” said Stephen P. DeFalco, Chief Executive Officer of Crane Currency.

“His expertise in corporate finance has been a critical asset for the company as it has refinanced its debt, funded our expansion into Malta, and worked to improve the business acumen across the company. Doug's diverse experience and proven business know-how brings a valuable perspective to our board.” DeFalco continued.

Doug Prince joined the company in 2013 with over 30 years of experience in global finance and operations. Prior to Crane, Doug was the Chief Financial Officer at Northern Power Systems and at MDS, a $1.2B revenue NYSE company. Doug has held executive roles at PerkinElmer, Allied Signal, and General Electric. He is a Six Sigma Black Belt, and has a BS in Business Administration from the University of Kentucky.

Crane has been a global producer of currency products for more than 200 years and is entrusted by more than 50 central banks to play an integral role in the design and manufacture of their nations’ banknotes.

From the most traditional of cotton substrates to the most advanced micro-optic security elements and design, Crane is a responsive partner focused on delivering innovative products and solutions that meet client’s most demanding requirements.

www.cranecurrency.com
Infineon demonstrates first post-quantum cryptography on a contactless security chip

It is predicted that the (future) processing power of quantum computers will have the disruptive potential to break various currently used encryption algorithms. Infineon Technologies says it is ready to provide a smooth transition from today’s security protocols to next-generation post-quantum cryptography (PQC). The company has now successfully demonstrated the first PQC implementation on a commercially available contactless security chip, as used for electronic ID documents. This places Infineon in the pioneering position for encryption that withstands quantum computing power.

“Demonstrating post-quantum cryptography on a contactless security chip puts Infineon in a leading position in this field,” said Stefan Hofschen, President of the Chip Card & Security Division of Infineon. “Our security solutions rely on trusted and standardised private and public key algorithms. To better respond to security threats that are yet to come, we continuously collaborate with the academic community, customers and partners. And we push for future standards that can be executed efficiently and securely on small and embedded devices.”

Quantum computer attacks on today’s cryptography are expected to become reality within the next 15 to 20 years. (remember that an e-passport lasts for ten years. So, any e-passport issued after say 2022 is theoretically vulnerable ED). Once available, quantum computers could solve certain calculations much faster than today’s computers, threatening even best currently known security algorithms such as RSA and ECC. Various internet standards such as Transport Layer Security (TLS), S/MIME or PGP/ GPG use cryptography based on RSA or ECC to protect data communication with smart cards, computers, servers or industrial control systems. Online banking on “https” sites or “instant messaging” encryption on mobile phones are well-known examples.

Chip memory size and computation time are key

Security experts at Infineon’s Munich headquarters and the Centre of Excellence for contactless technologies in Graz, Austria, have made a breakthrough in this field. They implemented a post-quantum key exchange scheme on a commercially available contactless smart card chip. Key exchange schemes are used to establish an encrypted channel between two parties. The deployed algorithm is a variant of “New Hope,” a quantum-resistant cryptosystem also explored successfully by Google on a development version of the Chrome browser.

“The phantom of the quantum computer is keeping academia and the IT industry on high alert,” said Thomas Pöppelmann from Infineon’s Chip Card & Security Division, who has been co-developing the New Hope algorithm. “At Infineon, we are proud to be the first to transfer PQC onto contactless smart cards. Our challenges comprised the small chip size and limited memory capacity to store and execute such a complex algorithm as well as the transaction speed.”

Thomas Pöppelmann and his co-researchers received the prestigious Facebook Internet Defence Prize 2016 for the development of New Hope.

In a world of quantum computers, PQC should provide a level of security that is comparable with what RSA and ECC provide today in the classical computing world. However, to withstand quantum calculation power, key lengths need to be longer than the usual 2048 bits of RSA or the 256 bits of ECC. Nevertheless, the researchers at Infineon were able to implement New Hope on a commercially available security chip without requiring additional memory space and hence a larger chip size.

Standardisation bodies are expected to agree on one or multiple PQC algorithms within the next few years before governments and industries mandate the migration. Infineon is actively participating in the development and standardisation process in order to enable a smooth transition and to address security challenges that may arise in the advent of quantum computers.

About quantum computers

A quantum computer uses “qubits” that can exist in any superposition rather than bits (0 or 1) in a conventional device. Consequently, certain calculations can be performed simultaneously and far faster than ever before, solving problems that would require unattainable amounts of conventional computing power today. With operations that are thousands of times faster, quantum computers offer new possibilities, for instance, for searching large databases, for chemical or physical simulations, and in material design, etc. However, this operating power may also allow the decoding of currently used encryption algorithms that are practically impossible to decode with technologies available today.

Change of ownership on the cards for Burall InfoSmart

BemroseBooth Paragon (BBP) has acquired Wisbech (UK)-based Burall InfoSmart, one of the few companies certified to produce ITSO smart cards in the UK. BBP is a supplier of both traditional magnetic, thermal and barcode tickets for the transport sector as well as developing a variety of smart products and services including RFID tags, smart cards and tickets, contact and contactless cards. ITSO is a non-profit organisation for the smart ticket industry, initially known as the Integrated Transport Smartcard Organisation.

The acquisition means BBP can launch ITSO approved smart products and services into this burgeoning sector as UK train operators transition from traditional to smart ticketing.
Randomised holograms

Security holograms are generally accepted as one of the strongest available anti-counterfeit protection measures. Imitation of advanced security holograms is impossible or close to impossible. However, holograms do not offer a means of identifying a particular document's authenticity. This limitation is based on the very basic principle of hologram production (mass production using the same master = all holograms in the batch are the same).

Optaglio's researchers have found a holographic solution that uses material biometrics as a feature to enable each particular document's identification. It is based on micro-holograms, extremely small metallic particles of regular shape with a holographic surface. Seen by a naked eye, micro-holograms look like metallic dust. Under higher resolution, a complete hologram can be found on each "grain".

The Optaglio OVImage product is based on the random scattering of micro-holograms into a defined area of a protected document such as ID card, passport, banknote, tax stamp etc. Micro-holograms are hot stamped on paper or sealed into plastic. Afterward, the distribution of the micro-holograms on a particular document is recorded into a database to enable positive identification of the document in future.

"Once a document has been created, even we in Optaglio cannot imitate it," explains Igor Jermolajev, the research manager at the company. Anti-counterfeit protection is normally based on reliable recognition of a protective element. With OVImage you can go even further. You can exactly identify from which passport the removed (or) abused element originated.

Personal documents all have their serial numbers but these can be tampered with. Identification based on an element that cannot be imitated brings a radical improvement in protection and forensic examination.

www.optaglio.com

OT & Morpho join forces in deal that complements security and biometric objectives

Oberthur Technologies (OT) and Safran Identity & Security (Morpho) are joining forces to create a world leader in digital security & identification technologies with the ambition to empower citizens and consumers alike to interact, pay, connect, commute, travel and even vote safely in ways that are now possible in a connected world.

Last September, Safran announced that it had entered into exclusive negotiations with Advent International, the owner of Oberthur Technologies since 2011, to sell its identity and security activities and the transaction was finalised on 31st May 2017.

With a mix of complementary activities addressing the specific needs of five major industries (Financial services, Telecom, Identity, Security and IoT), OT-Morpho has an extensive global presence and a unique technological expertise (Biometrics, Authentication, Digital security, Data and video analytics).

With close to €3 billion in revenues, OT-Morpho employs more than 14,000 people worldwide, nearly 2,000 of whom work in the field of R&D.

"We are truly excited about combining OT and Morpho, two highly complementary leading companies. This merger will bring something completely new to the market, with trusted identities at the core of our solutions. As our physical and digital, civil and commercial lifestyles converge, OT-Morpho stands precisely at that crossroads to leverage the best in digital security and identity technologies, including biometrics, to offer customized solutions to its clients," declared Didier Lamouche, CEO of OT-Morpho.

Temporarily designated by the name "OT-Morpho", the company will unveil its new name in September of this year.

Canadian provinces award new contract for secure driver's license cards and issuance

Gemalto has won four contracts to provide a new, highly-secure polycarbonate driver's license in New Brunswick, Newfoundland and Labrador, Nova Scotia and Prince Edward Island. The Atlantic Provinces sought a provider with a strong position as an innovative partner capable of producing laser-engraved polycarbonate in Canada, in order to bring their residents better identity protection through a more secure driver's license.

Gemalto will provide its 'Premium' polycarbonate product and help transition the provinces from an over-the-counter issuance process to secure central issuance. This not only enables the enhancement of the credential with the advanced, fraud and tamper-resistant security features only possible through central issuance, but also creates a more efficient process for Registry of Motor Vehicle operators by eliminating on-site printing.

In addition to the credential issuance itself, Gemalto will also implement a comprehensive enrollment solution that will include photo capture, digital signature pad, and a facial biometrics recognition system compliant with the latest International Civil Aviation Organization (ICAO) standards.

"The Atlantic Provinces had a strong, unified vision of what we wanted to achieve as a result of this contract and provider evaluation process," said Paula Biggar, Minister of Transportation, Infrastructure and Energy for Prince Edward Island. "We selected Gemalto because their broad experience and security capabilities can improve what we are doing today, and their innovations in technology will help us achieve what we want to do in the coming years."

Download Gemalto’s whitepaper on Polycarbonate and Identity Documents. At: www.gemalto.com/govt
ITSA highlights fundamental Codentify flaws in fight to combat illicit tobacco trade

Recommendations include the adoption of a material based security solution such as a government issued, security tax stamp

The international tax stamp industry has issued a strongly worded warning that the digital serialised coding technology being promoted by the tobacco industry to worldwide governments is seriously flawed and would never comply with international regulations.

In a recent positioning statement from the International Tax Stamp Association (ITSA), the global trade body for the tax stamp industry says that Codentify®, the main tobacco industry-operated track and trace product coding system, fundamentally fails to deliver the protective measures stipulated by the WHO FCTC Protocol¹ and the EU Tobacco Products Directive².

In particular, ITSA highlights key control and security issues that disqualify the use of Codentify as a legitimate and secure track and trace solution under these policies, which are designed to introduce effective traceability and authentication measures to help curb the illicit trade in tobacco products.

For example, Article 8 of the WHO FCTC Protocol requires that an acceptable track and trace solution must be under the control of the government and that duties may not be performed or delegated to the tobacco industry.

ITSA points out that the tobacco industry, contravening this requirement, developed the Codentify system, consisting of digital codes generated by the tobacco manufacturers themselves.

It also argues that Inexto, a newly formed Swiss company to whom ownership of Codentify was transferred in June 2016, relies on a business model based on almost complete dependence on the world’s four largest manufacturers, who grouped together to form the Digital Coding and Tracking Association (DCTA).

In security terms, ITSA warns that the digital codes generated by Codentify can be easily duplicated (or ‘cloned’) and passed off as originals on a counterfeit or genuine pack. The codes are also produced by relatively unsecured commercially available equipment and lack any physical high security features capable of protecting the authenticity of genuine identifier numbers.

A spokesperson for ITSA said: “We strongly believe that any governance model for a secure track and trace system designed to control a particular industry should not be based on trusting that industry, because the underlying conflict of interest means that industry will likely find ways to circumvent those controls. This has already been the case in the tobacco industry. The tobacco industry originally invented Codentify in response to obligations imposed on it by the EU. It was slow to deploy and did so selectively and without consistency”.

The ITSA has issued a strongly worded warning that the digital serialised coding technology being promoted by the tobacco industry to worldwide governments is seriously flawed

The spokesperson at ITSA continued. “In our view, this demonstrates a fundamental lack of will to put in place an effective system and there remains no evidence to suggest that the industry wishes to see effective and independent controls put in place. For example, Codentify is not available to smaller manufacturers, reinforcing the oligopoly in the sector that favours the dominant players in the market.”

To overcome these inherent drawbacks with the Codentify system, ITSA recommends a potential solution for a secure and effective track and trace programme that combines a serialised unique identifier with material-based security features.

Under its proposal, an identifier would be integrated into a tax stamp provided by a party that is independent of the tobacco industry – such as a government security printer.

Many tax stamps now carry unique identifiers – typically as 2D barcodes – with the potential to comply with the tracking requirements of the FCTC
Many tax stamps carry 2D codes

CTI Ink set to Illuminate August 2017 Solar Eclipse

First-Ever Use of Thermochromic Inks on a U.S. Postal Service Stamp

Normally, a thumb is used to affix a postage stamp to an envelope. However, with the new postage stamp unveiled by the U.S. Postal Service (USPS) commemorating a solar eclipse, a thumb or finger does double-duty in transforming to/from an image of the moon crossing the sun’s path. The stamp marks the occasion of the August 21, 2017 solar eclipse during its 90-minute journey across the United States from Oregon to South Carolina. The last time a solar eclipse was visible in the U.S. was 1979. And it was 99 years ago that the area of totality stretched across the entire United States.

Clearly such a special occasion warranted an equally special stamp, and Chromatic Technologies Inc. (CTI) rose to the occasion. The unique thermochromic (temperature-activated, colour-changing) inks of CTI allow a single stamp to display two images of the sun’s corona during a total solar eclipse (dark).

When a thumb or finger at 84° F. or higher is placed on the stamp for few seconds, the lunar surface appears. The lunar surface image reverts to its original dark image when cooled to 77° F. and below. Room or outdoor temperatures of 84° F. or higher will also activate the stamp’s unique image capabilities. The stamps will change indefinitely between the two images when heat is applied. Since thermochromic inks are susceptible to UV light and should be kept out of direct sunlight to preserve this special effect, a special envelope to hold and protect the stamp pane is being offered by the USPS to philatelists for a nominal fee.

Stamp collectors, (philatelists) trace their origins back to the 1840’s. Today’s philatelists can take comfort knowing their prized stamp collections with the first-ever thermo-chromic stamps will retain their ‘magic’ for generations of collectors’ families.

The innovative technology from CTI is the same process that major worldwide brands such as MolsonCoors, Frito-Lay and Coca-Cola have used since CTI’s start in 1993. The thermo-chromic inks are uniquely formulated for use in screen printing, but CTI has the same technology for use in flexographic, gravure and offset-printing processes: the major printing processes found everywhere today. The thermo-chromic inks are available in multiple colours (and at various activation temperatures), and can also be adapted to change colour when exposed to sunlight (photochromic inks).

Similar thermo-chromic inks have been used successfully on metal beverage cans, glass and plastic bottle labels, folding cartons and flexible packaging.
The Ecuadorian Government has again chosen NXP’s SmartMX2 secure microcontroller for the country’s new multi-purpose contactless citizen ID card. This extends the successful cooperation initiated in 2012 with the IGM (Instituto Geográfico Militar) for Ecuador’s electronic passport program and continues with a new electronic ID card implementation, enabling all the country’s secure electronic ID documents to be produced in Ecuador.

Ecuador’s eID card program, based on NXP’s SmartMX2 and JCOP Operating System, is one of the largest and most ambitious programs of its kind in Latin America. In addition to the identification function, the new multi-purpose eID cards will enable citizens to use them as travel documents, perform electronic signature operations and access social welfare services provided by the Ecuadorian government.

The new eID cards are based on the same SmartMX microcontroller as used for the electronic passports to ensure secure and truly interoperable identification and border crossing. While these identity solutions are typically manufactured abroad and imported, Ecuador’s national ambition is to be autonomous and technologically independent, maximising the local added value.

The strong cooperation between IGM and NXP, with the support of its specialised distributor AdvantiDe, have enabled Ecuador as one of the very few countries worldwide, to acquire the capabilities to manufacture and issue such complex identity documents.

“Collaborating with NXP and AdvantiDe to roll out eID cards and ePassports has marked a milestone for the country to provide more security and convenience to our fellow citizens,” said William Aragón, director of the Instituto Geográfico Militar del Ecuador. “Smart governance is the future of public service. It provides more efficiency and transforms the way government services are delivered by creating stronger links between the administration and the citizens. We’re pleased to continue our partnership with NXP, a trusted solution provider for our secure ID solutions.”

“We are proud of our long-standing relationship with the IGM and are committed to our business partner NXP Semiconductors to continue collaborating for the success of these Identification projects in Ecuador,” said Alejandro Placitelli, sales director Latin America at AdvantiDe.

“This announcement is a testament to our successful collaboration with the government of Ecuador to protect their citizens’ identities,” said Stefan Barbu, head of Americas secure identification business at NXP. “Our SmartMX microcontroller family continues to gain traction with over 120 countries using it for their eGovernment solutions. SmartMX features more than 100 security mechanisms combined with the highest level of performance to securely store personal data.”

The JCOP Operating System used in Ecuador is the most widely spread independent, open smartcard operating system for governmental applications in the market. It is also the most complete solution addressing all market segments and applications independent of the form factor, while at the same time meeting highest security and certification standards. The card can be used for conventional citizenship while offering an array of new embedded social and economic applications. Personal data and biometric features, such as the card holder’s photo and fingerprints, are stored securely on the SmartMX chip in digital form. These new cards will also help reduce congestion and process time for renewals, as well as decrease fraud and counterfeiting while increasing security and enhancing a range of government applications.

About the SmartMX MCU Family

SmartMX MCU, the platform of choice for highly secure and fast data transactions, is a proven solution for contact, contactless and dual interface applications with over 6 billion ICs sold.

Serving banks all over the world, NXP’s SmartMX MCU secures transactions on over one-third of the chip-based payment cards in circulation. Used in many sovereign electronic documents such as ePassports, citizen cards, national ID cards, driving licenses, social security cards and, health cards, SmartMX-based services protect citizens from identity theft and reduce fraud via the products’ world-class security features.

The SmartMX family is also the preferred technology for the secure element of NFC-enabled phones.
New Publication Available

Brand Protection, Security Labelling and Packaging

A short overview of this publication can be seen on the Amazon Bookstore where a purchase can be made

ISBN 978-1-910507-11-7
Paperback £98.57

Introduction to Security Printing / 2nd Edition
Richard D. Warner & Dr. Richard M. Adams

Are your documents secure?

Introduction to Security Printing, Second Edition gives readers an in-depth look at what is currently available in new digital printing technologies and explores how they can be used effectively to convert digitally printed products into security documents, labels, and packages. The book also covers new advancements in analog security printing solutions and technologies for high-tech/high-volume security printing, as well investigating what’s on the horizon for new RFID technology applications. This second edition also contains an extensive appendix containing valuable information from the first edition. Here are some of the topics addressed:

- Currency
- Consumer product goods
- Digital solutions
- Technical issues

Currently, the book is priced at $60.50 for members of Printing Industries of America and $82.50 for non-members, and the following URL goes to a page on the PIA online store where the book can be purchased: http://prnt.in/secureprint2

EAST MIDLANDS PACKAGING SOCIETY

PRESENTS

PACK TO THE FUTURE '17

Trent Building (Senate Chamber), Nottingham University Campus, Wednesday 26th July 2017

3D Printing, Challenges of BREXIT, Pack Design and Trends, Latest Technology in Anti-Counterfeiting, Why do Packaging innovations usually fail to excite? Recyclability, Sustainability and New Material trends and much more ........

For further information contact: helen.borste@benchmark-consulting.co.uk
PV Nano Cell and Merck Enter Cooperation for Development of Applications Utilising Conductive Ink

PV Nano Cell Ltd., an innovative producer of conductive digital inks, is reportedly entering a cooperation with Merck, a leading science and technology company, to develop diverse technology applications for single-crystalline metal particles.

PV Nano Cell has developed high-performance Sicrys™ conductive inks based on single-crystalline sub-micron particles of silver and copper. Merck will explore the use of Sicrys™ single-crystal metal particles with different, unique and patented technologies and applications.

"We are excited to be working with Merck on their projects to further broaden the use of our Sicrys™ family of materials in mass production applications. Merck’s decision to explore applications of Sicrys™ within their various technologies is another example of the growing market demand for our technologies," said Dr. Fernando de la Vega, CEO of PV Nano Cell Ltd.

"PV Nano Cell will provide the expertise and specific formulations of Sicrys™ to support Merck's focus on measuring the inks' performance in different applications for various markets," stated Marc Feiglin, Head of Technology Scouting and Partnerships at Merck in Israel.

Merck is a leading science and technology company in healthcare, life science and performance materials. Around 50,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2016, Merck generated sales of € 15 billion in 66 countries.

PV Nano Cell has developed innovative conductive inks for use in solar photovoltaics (PV) and printed electronics (PE) applications. PV Nano Cell's Sicrys™ ink family is a single-crystal, nanometric silver conductive ink delivering enhanced performance.

Sicrys™ is also available in copper-based form, delivering all of the product's properties and advantages with improved cost efficiency. Sicrys™ silver conductive inks are used all over the world in a range of inkjet printing applications, including photovoltaics, printed circuit boards, antennas, sensors, touchscreens and other applications. www.PVNanoCell.com

NEW REPORT PUBLISHED 2017

Connected Packaging & Labels
A multi-billion $$$ Dollar opportunity
Business & Market Opportunities in 2016 with forecasts to 2021 & 2026

This Report is focused on ‘Connected Packaging & Labels’ that primarily fall within the Machine to Pack (M2Pa) and People to pack (P2Pa) communication elements of the Retail IoT space. It also covers packaged goods in the Pharmaceutical market, including prescription medicines, medical blood bags & pre-filled syringes.

The Report reviews the factors & trends; such as premiumisation & the advent of multi-functional sensor platforms that are creating a compelling ROI in 'Early Adopter' market verticals and product categories.

The factors driving the demand for 'Connected Packaging' & Labels by brand owners, retailers and consumers are reviewed and the scale of the business opportunities being created quantified. It is based on Vandagraf's own research, market knowledge and industry contacts, as well as drawing on published industry market data.

Together these factors will create a 'virtuous circle' of benefits leading to greatly increasing sales volumes of devices (and these increasing sales volumes will drive down unit device costs further). This combination of factors is evolving to become the cornerstone for a multi-billion $$$ Dollar opportunity for:

- Solution providers (RFID inlay makers, as well as hardware & software developers)

- Packaging & Label industries
- Brand owners

This Report therefore aims to provide readers with:

- Sound arguments to show that viable applications exist for multi-functional 'radio-electronic' devices that we refer to generically as 'IoT Sensor Platforms'
- A strong basis for justifying addition capital investment in the R&D needed to achieve the required cost and performance gains
- A solid, in-depth analysis of existing and future developments in the industry.
- Detailed analyses of related activities across a number of vertical markets identified as being Early Adopters.
- Market Size Estimates for 2016 with forecast to 2021 & 2026 (With annual demand for 'radio-electronic' devices climbing to the 10s of billions in the coming years).

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