

fighting fakers

COUNTERFEITING IS AN INCREASINGLY-SIGNIFICANT PROBLEM ACROSS A NUMBER OF SECTORS, WHETHER IT'S - FOR INSTANCE - LUXURY GOODS AND COSMETICS, TOBACCO, OR CLOTHING

by Andrew Gilbert, business development director, Ingenia Technology



Gilbert: 'LSA can be a perfect complement to other, existing, security technologies and coding systems'

There are many examples of the growing sophistication and reach of counterfeiting operations.

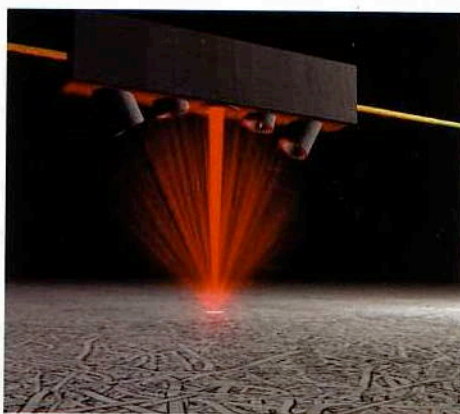
These include the thousands of fake football shirts seized in Britain during the World Cup, and the many billions of fake cigarettes made every year.

For brand managers, this poses a significant challenge.

Not only does the booming counterfeit market undercut their profits - (immigration minister Damian Green said after the football shirt seizure that smugglers undercut honest businesses by an estimated £11 billion a year) - but it also means that there's huge potential for damage to be done to consumers and their brand reputation.

Clearly, the packaging that a product comes in is crucial - whether you're trying to ensure that the products are genuine, or trying to copy them. For genuine suppliers and brand managers, the drive is to include features on the packaging that make copying difficult, or preferably impossible, to ensure that their authentic products reach consumers.

To do this, there are a range of anti-counterfeiting measures on the market that brands can currently deploy. These can either be overt measures such as barcodes, holograms, or RFID (radio-frequency identification) tags, or covert techniques like employing special inks or watermarks.



Laser surface authentication uses a low-power unit to scan microscopic variations in packaging materials, in order to generate an item-level identification code

FEATURES ADDED

However, the majority of these overt and covert anti-counterfeit technologies rely on adding physical features to an item, or product, that are secure only because the genuine manufacturer can do something that the counterfeiter can't.

Whether it's because the technique is too difficult (holograms), the materials hard to obtain (colour-shifting inks), or the information secret (encryption), the security feature is valuable only as long as the counterfeiter's knowledge and resources don't equal those of the legitimate source.

Unfortunately, history has shown that the counterfeiters are smart and motivated; if a method exists to produce a security feature, then the counterfeiters can replicate it.

Ingenia Technology is pioneering a radically-different approach to authentication technologies. This company's security doesn't rely on any feature or taggant that has to be added to an item or product; it utilises the unique features already present in every object.

Whether it's the particular orientation of paper fibres or the microscopic imperfections (many times smaller than a human hair) in plastic surfaces, these naturally-occurring random variations are present in nearly everything we use.

Ingenia's patented Laser Surface Authentication (LSA) system employs a low-power laser to scan over these microscopic variations, and use them to generate a code or signature.

Just like a human fingerprint, the particular 3D variations of any surface are unique and so is the LSA signature; and just like a human fingerprint, finding the signature of a product or package allows you to know exactly which product you have.

NO SPECIAL REQUISITES

Unlike traditional security features, LSA doesn't require a specialised manufacturing step (in most cases, the sensor can be retrofitted into existing production methods) or consumables of any kind.

The genuine manufacturer of an LSA-authenticated product or packaging doesn't have to invent a new process that only provides a couple of years' breathing space before the counterfeiters replicate it.

Instead, the manufacturer uses features that are present in its product already - also meaning there's no impact on the package design requirements - while the counterfeiter is forced to do something that even the original producer can't - control the shape of the entire surface with micron precision.

LSA is a new technique to add to the armoury of anti-counterfeiting; it's important to remember when fighting counterfeiters that there are no 'silver bullets'.

LSA is no more a standalone cure-all than any of the other anti-counterfeiting options available to brand managers and packaging suppliers.

'A PERFECT COMPLEMENT'

However, it can be a perfect complement to other security technologies and coding systems, creating a multi-layered solution to fight the fakers.

For brand managers and packaging suppliers, this approach will be critical to overcoming the threat to their businesses that counterfeit goods represent - making their products harder to copy at every stage of the supply chain.



Field scanner reads in intrinsic 'fingerprint' to check companies' products at every stage of the supply chain