Covert Markers for Anti-Counterfeit Brand Management – Security that Sticks

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It's import to know the real thing. Authentication of goods is critical to risk mitigation. Chances are that if your product has value it will be counterfeited. The global counterfeiting problem has grown to over $1.3 trillion dollars and touches nearly every market and aspect of commercial product management. Target products include electronics, pharmaceuticals, luxury goods, building materials and engineered parts for automotive and commercial machinery. Supply chain vulnerability is the weak link. Knock-off products are common to the market and as one would imagine they damage brand image, erode consumer confidence and in many cases impose unexpected liability to the brand owner. The question in every brand owner's mind is "how do I stay ahead of the criminal intent?"

Packaging has several options for incorporating anti-counterfeit technology, the most obvious is security labeling. But with access to high tech printing technologies trust alone in the label is a risk. Most brand owners adopt a "layered" approach to package security combining multiple anti-counterfeiting technologies. A number of affordable anti-counterfeit technologies provide options for brand management and authentication.

These technologies include overt, covert and forensic approaches to authentication. Overt technologies are non-destructive and visible to the human eye and include the common examples of labels, bar codes and holograms. In contrast, forensic technologies involve some form of laboratory manipulation that is often destructive in analysis.

®mark technology is covert. Covert technologies are "invisible" to the human eye. Resolution in human vision is limited to 90µ. Particles smaller than 90µ cannot be seen by the unaided eye. Therefore anything below 90µ requires optical magnification that can be as simple as a 50X hand lens.

®mark technology is a versatile information centric covert micro-particle referred to as a micro tag having a form factor similar to a coin. The ®mark micro tag approximates the diameter of the cross-section of a human hair. The face of the ®mark contains content relevant information that is brand owner specific. Figure 1 is an example of ®mark micro tags.

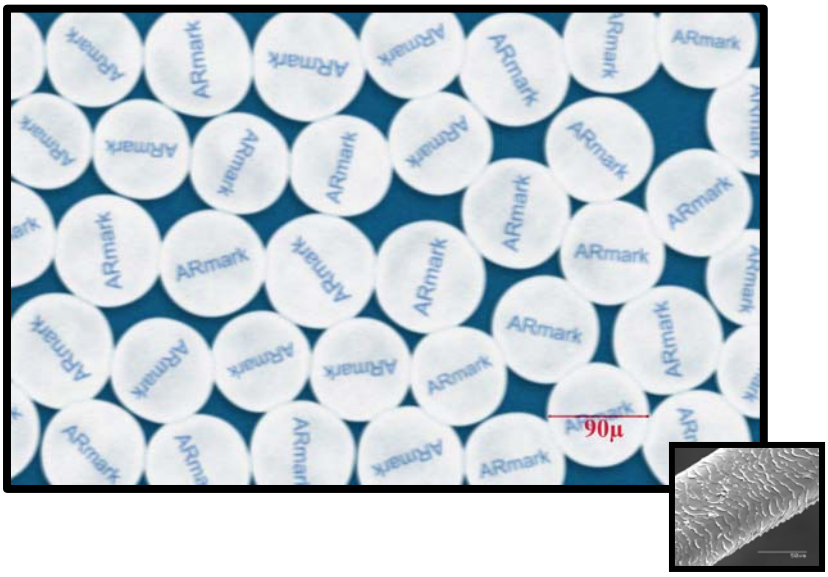

Figure 1 above shows an array of ®mark micro tags. The insert in the lower right hand corner is a scanning electron micrograph of a human hair for size relationship. ®mark micro tag markers are custom designed to contain brand owner specific information that may include logos, trademarks, part numbers or other information important to the brand owner.

This presentation will demonstrate the power of providing brand owner specific relevant information for product protection using ®mark technology. By combining microtag technology with standard security features the brand owner can create packaging that can be self authenticated.

®mark microtag technology is the only authentication technology that can be manufactured with food grade materials that allows “on-food” contact.

The key counterfeit markets - electronics, pharmaceuticals, medical, automotive components, and luxury goods – all have one thing in common: Adhesives. Adhesives are a common element in the assembly, labeling, packaging and/or shipment of these goods. ®mark microtag technology can be incorporated into various adhesive technologies and adhesive coated products to help protect and authenticate your product. ®mark microtag technology is available in a wide array of base polymers that are resistant to heat, solvent, UV radiation, and lamination pressures. They have successfully been incorporated into adhesives and applied to various substrates using spray, dip, curtain, flood coat, knife over roll coat, gravure, reverse roll, and extrusion.