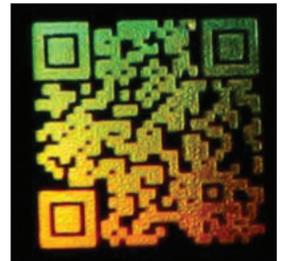




Mass Produced Individualized Anti-Counterfeit Hologram

To safeguard against the production of counterfeit products, particularly medicines, researchers at DIT have developed a new Anti-Counterfeit Hologram which improves product security through the ability to write unique text into each hologram. Although covert security features, identifiable with specialized equipment such as specific light sources, are useful; the largest market is in user verifiable security features that don't require specialist equipment to read. Holograms are an attractive security label because they are difficult to forge and are easily recognizable by the end user.



They are currently widely used on credit cards, cheques and high value items. However, because mass production of holograms is traditionally from a single 'master hologram' all security holograms for a particular product range are identical and any serialization is non holographic (e.g. printed serial numbers over the hologram surface in regular black ink). This technology addresses the gap in the market for individualized holograms which each contain a unique number or code that can be checked easily by the end user.

The end user simply checks the number against the serial number on the product and verifies that (1) the security hologram is present and (2) it is genuine. The product is a stand alone printed text or pattern which has the appearance of a transmission hologram (typically rainbow effect, but microtext within the printed text could be also incorporated if higher complexity is required). The unique characteristic of the product is that due to the holographic digital printing technique each product can be individualised at no additional price compared to similar hologram products.

Advantages

- Low cost method of making each security hologram unique
- Transparent hologram — doesn't take up space on package
- Potential for additional covert security features such as microtext and encryption keys
- Very difficult to counterfeit

Applications

- Product security and safety such as ensuring authenticity of medical devices and products
- Biodata security (e.g. passports) — secure holographic method of recording text and simple images on documents
- Enhanced brand security — makes products harder to counterfeit