Hologram

Holograms with enhanced security

Lepton id has developed a Hologram label that has enhanced security features. The enhanced security features are a combination several features described below.

A Hologram may contain all the usual holographic features such as 2D and 3D images, optical properties that are dependent on angle of viewing and lighting, in addition to a variety of security items like latent images, micro-printing, and tamper evident features. The tamper evident features include circle destruct, total release, VOID, or a custom logo. Lepton-id has added additional security features in combination with the standard holographic effects to enhance the security of the hologram. Additionally, we can add a company logo in the form of a latent image.

a) Addition of taggants:
Lepton-id has added its taggant technology to a Standard Hologram. The presence of the taggant in the hologram can be detected by the VI1170 and/or the VL6300 security scanning devices.
The presence of the taggant in no way effects the optical characteristics of the hologram so the brilliant effects of the hologram remain intact. For example when the hologram is scanned by the VL1170 an audible and or vibration indicates the presence of the taggant. The proprietary taggants used in the application operate

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outside the visible spectrum and are extremely difficult to detect by any visual means.

b) Addition of laser etching:

We can add laser etch a variety of security features into the hologram. An example of that would be the addition of standard linear barcode or 2D barcodes. These two items are shown in figure 2A below. Please note that the hologram can be etched with a series of unique numbers. Additionally, we can add a laser etched micro-printing to the hologram and these numbers may or may not be the same as those of the hologram itself.

An example of a very secure hologram labels we would have all of the following on one label:

1) Tamper evident feature similar to VOID
2) Metalized hologram
3) Customized holographic image with holographic micro-printing and a latent image
4) Additional of optical taggant embedded in the hologram
5) Laser etched barcode (example QR code) with unique numbering.
6) Laser etched micro printing to match hologram micro-printing.
7) Track and Trace Capability (coming soon)

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