

Anti-counterfeiting and anti-piracy technology guide

<http://euipo.europa.eu/anti-counterfeiting-and-anti-piracy-technology-guide>

Complex Holograms

Complex holograms have the same visual appearance as traditional holograms but contain a variety of hidden information in the form of 'cryptograms'. This combination of visible and invisible security features increases the level of protection they provide.



Used for

- ✓ Authentication

Suitable for

- ✓ Very small products
- ✓ Small products
- ✓ Medium-sized products
- ✓ Large products

Goes on

- ✓ Product
- ✓ Packaging

Can be used for

- ✓ Physical products

Visibility

- ✓ Visible
- ✓ Invisible

Reading device needed

- ✓ Yes
- ✓ No

Connection to server

- ✓ No

Description

Complex holograms deliver two layers of authentication: visible and invisible. The traditional holographic image that is visible to the naked eye enables immediate authentication. Within that image there is information invisible to the naked eye, in the form of hidden or micro-text, or even encoded information (cryptograms), which can only be read using specific tools such as special lenses, microscopes, lasers or CD players.

Uses

As with traditional holograms, complex holograms have many possible areas of application and can be attached to various materials, although they are mainly used with paper and plastics.

Implementation

If you want to incorporate complex holograms into labels, you do not need to make any changes to your production process. However, if you want to print complex holograms directly onto the surface of your products, you will need to carry out a feasibility check and, if feasible, make the appropriate changes to your

production chain.

Cost

The costs associated with complex holograms vary according to the type, size and technique used to attach the hologram to the product, as well as the complexity of the solution chosen.

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