# Anti-counterfeiting and anti-piracy technology guide

https://euipo.europa.eu/anti-counterfeiting-and-anti-piracy-technology-guide

## Encrypted Images

This technology works by incorporating encrypted information into photographs or the background of documents. The encrypted information, which is printed in encoded format, is not detectable by the naked eye. It only becomes visible when viewed through a special decoding lens (special viewer) or laboratory equipment (usually a scanner or video camera connected to a computer equipped with specific image processing software).



**Used for**

- Authentication

**Suitable for**

- Very small products
- Small products
- Medium-sized products

**Goes on**

- Product
- Packaging

**Can be used for**

- Physical products

**Visibility**

- Invisible

**Reading device needed**

- Yes

**Connection to server**

- Yes

### Description

This technology requires a specific image encryption device to encrypt all or part of the data in an image. A marker algorithm indicates an area of the encrypted data, which is later saved (ideally) on a server. The encrypted image is then used as a marker on the product. An image decoder application takes the information from the server to decrypt the image.

### Uses

Encrypted images are mostly applied to documents, cheques, paper valuables and travel documents. On passports, for example, personal information, such as the holder’s name or passport number, can be incorporated into the holder’s photograph; alternatively/additionally, the name of the country can be incorporated into the background of the pages.

### Implementation

If you want to use encrypted images, you will need to install the dedicated software programs required to generate them and adapt your production, printing and/or packaging process accordingly.

### Cost

The costs associated with encrypted images vary according to how and where they are used. That said, they are generally in line with the costs of printing traditional images.

*The information contained in this site is of **general** informational nature and does not constitute legal, consulting or any other **professional advice or guidance**. The information contained in this site is provided on an 'as is' basis with **no guarantee of completeness**, accuracy, usefulness or timeliness and without any **warranties** of any kind whatsoever, express or implied, including but not limited to warranties of performance, merchantability and fitness for a particular purpose. The use of the information is at the user's own risk and the EUIPO does **not guarantee any specific results** or outcomes based on the use of the information provided on this website. The search results are **not presented in any order of recommendation** . This website contains links to **other third-party websites**. Such links, which are free and publicly available, are only for the convenience of the user or browser; the EUIPO does **not recommend, endorse**, warrant, or assume liability of the content or practices of these third-party sites. The EUIPO may update, modify, or remove any information on this website without prior notice. It is the user's responsibility to stay informed of any changes.*