



International Hologram Manufacturers Association

# The Next Frontier for Security Images

High Security Printing EMEA 2024



# Introduction



## HOLOGRAM **IMAGE** REGISTER

- What is the **Hologram Image Register (HIR)**?
- What is its **purpose** and **value** to our industry?
- How is it **managed**?
- What is the **next generation**?
- **Why?**



# What is the Hologram Image Register (HIR)

- The IHMA - launched in 1993 and today represents and promotes the interests of over 80 of the world's leading hologram companies.
- Strict code of practice conferring, integrity, credibility, reliability and security.
- Although the hologram market and applications is broad and varied, over 80% of IHMA members are from the optical security / anti-counterfeit industry.
- One of the first actions of the IHMA was to establish a members register of security images for use in global markets.
- A record of the manufacturer, application, the design & image detail and copyright ownership.
- A secure database that can be interrogated to help identify fraudulent attempts to copy holograms and a means to safeguard copyright and intellectual property.

# Managing the HIR

- At its launch in 1993, the IHMA asked the Counterfeit Intelligence Bureau (CIB) to manage the system and they have continued to provide a very professional service ever since.
- Formed in 1985, the CIB are a specialised bureau within Commercial Crime Services, the anti-crime arm of the International Chamber of Commerce.
- With a global membership, the CIB provide prevention and enforcement support for businesses, police and customs authorities.
- Ideally placed to provide the experience and security to host and manage the HIR.





# The Hologram Image Register

- Now in its 30<sup>th</sup> year.
- 11,000 security images registered to date using a highly secure online portal.
- A history of success over the years helping to identify counterfeit attempts and inadvertent copying of existing images.
- Promotes legitimacy and credibility of manufacture to the customer.
- Registration an increasing requirement by government departments and security printers.
- Available to law enforcement agencies to check for provenance of any design



# The Hologram Image Register

## So why change it?

Today, technologies associated with security solutions have evolved, and holograms used in the 1980s and early 1990s have developed into far more sophisticated security images.

- Holograms are better classified under the term DOVID (Diffractive Optically Variable Imaging Device) along with sophisticated technologies such as Kinegrams and E-Beam originated images.
- New technologies are often referred to as holograms, including those based on micro-lens arrays, micro-mirrors and plasmonics, which are clearly not holographic.





# The Security Image Register



Security Image Register

*Managed by Counterfeiting Intelligence Bureau*

Non-holographic images are registered today, but many companies are still not using the register. Studies to understand why revealed one of the main reasons given for not making use of it was “we don’t make holograms”.

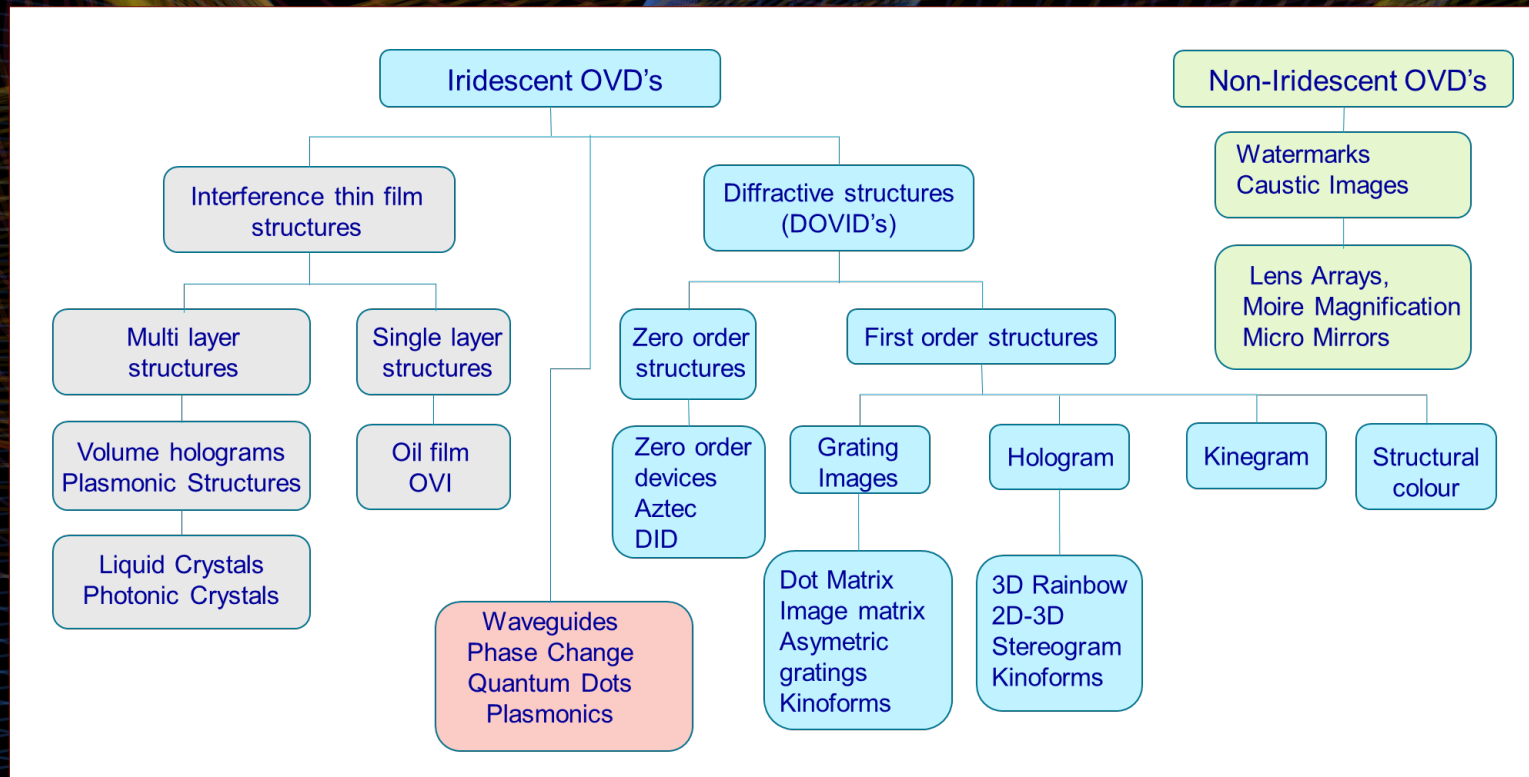
To address this, the IHMA have completed a restructuring of the Image Register.

It now includes all optical security technologies that fall within the general term OVD – Optically Variable Devices.

The register is far more applicable and relevant to the broader industry.

And the HIR has been re-named as the Security Image Register (SIR).





- Guide to OVD classification – reference only.
- Classification based on image variance / invariance and therefore divided into iridescent and non-iridescent technologies.
- Colour change - the dominant variable effect in holograms and many other optical security technologies.
- Non-colour variability is classified under non-iridescence.

**Iridescence defined as:- “The property of certain surfaces that appear to change colour as the angle of view or the angle of illumination changes”.**

All base technologies in this chart are now included in the Security Image Register process and as new technologies emerge, they will be added. Integrated solutions are very much the future in security print, and so encoded image effects and integration with digital and smart phone applications are also included.





ICC-CCS  
Security Image Register

Design Check Registration General

Submit Save As Draft Cancel

Create Design Check

Warranties and Indemnity Copyright Information Design Primary Visual Features Secondary Visual Features

Close Examination Features

Primary Visual Feature 1

1 Primary OVD Technology

Select OVD Technology...

DOVID  
Lenses  
Plasmonic's  
Photonic Crystals  
Print  
Reflection  
Polarization

3 Primary Visual Feature Category

Select Category...

Click To Add Another Primary Visual Feature

Back Next

- Screenshot of the new OVD data entry point.
- Selections here will open additions menus to provide a large range of detailed OVD technologies.

**This image register is open to all optical security technologies, all manufacturers and industry suppliers.**

**SIR**





**Copyright ownership is a common theme of conflict between manufacturers, but it is also at the heart of the Security Image Register.**

1. Understanding the basic rights and ownership of copyright within an OVD design and its manufacture, plays a key role in the integrity of their use as a security product.
2. Failure to understand these basic rights leads to the inadvertent creation of counterfeit OVDs, legal and costly battles over ownership, incurring additional licensing costs, revenue loss and provides clear opportunities for counterfeiters.

**Registering security images with the SIR can help avoid all these issues and protect your copyright.**

**SIR**





Manufacturers need to be aware that international copyright law is based on the premise that copyright automatically vests in the originator or creator of an original work.

This falls within agreed standards set out in the Berne Convention, standards which each countries copyright laws are required to meet.

At the heart of many of copyright conflicts are the same issues which can be summarised in two points.

1. If, as a customer, you pay for an OVD / hologram, you do not automatically own the copyright on the design or the master image, even if it contains your, or your end customer's, copyrighted logo or artwork. It's surprising how many senior managers in large companies still do not understand this point. As a customer, you can only own copyright if you provided the full security image design or alternatively agree in writing with the OVD manufacturer to re-assign copyright.
2. The second point is that if an OVD / hologram or design already exists you cannot replicate it without the written approval of the hologram copyright owner, NOT the customer. Unless re-assigned, the original design and image copyright will **always** reside with the originating company.





# Using the Security Image Register

- Each IHMA member will allocate one or two people only for secure access to the SIR portal online.
- It is their task to submit proposed designs by providing information to the portal.
- The CIB will then use that input to interrogate the highly secure database.
- Each IHMA member can only submit their images for registration. They have no access to the database, only their own current and historical records. This ensures total security of members information.
- When the checks have completed, the member will be advised by the issue of a reference clearance notification and can then proceed to manufacture and full registration.
- Alternatively, if the design or an element of the design (e.g., a logo) already exists on the database, a warning notification will be issued. Information is provided on how to proceed if a warning is issued.



## Security Image Register (SIR)

*Operated by the Counterfeiting Intelligence Bureau (CIB) on behalf of the International Hologram Manufacturers Association (IHMA)*

### SECURITY IMAGE CLEARANCE NOTICE

To:

FAO:

This Bureau is in receipt of your recent design check application to register the following Security image/s. This is to certify that the SIR database was searched for a match with the image/s submitted and no matching security image was discovered. The details of your application/s have been recorded, and the following Clearance Number is issued:

Security Image Title:  
Clearance number:

Date of issue:

When you have completed the manufacture of this OVD, please register it via the portal and send a sample to this Bureau to the address detailed below.

Kind regards,

Counterfeiting Intelligence Bureau



Security Image Register  
Managed by Counterfeiting Intelligence Bureau

## *Certificate of Security Image Registration*

*This is to certify that the Security image known as*

*has been entered on the  
IHMA's Security Image Register as made by*

*Member number*

*for*

*The Security Image Registration Number is*

Signed for the ICC Counterfeiting Intelligence Bureau, Cinnabar Wharf, 26 Wapping High Street, London, E1W 1NG, UK  
Telephone: +44 (0)20 7423 6960 email: cib@icc-ccs.org  
Operators of the Security Image Register for the

Date

SIR



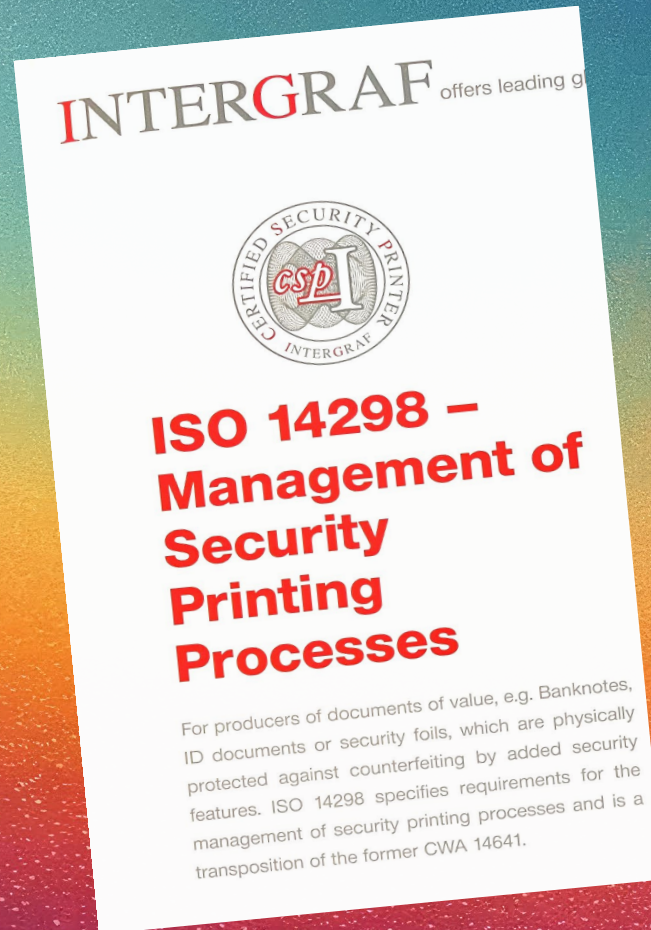


## The importance and value of the SIR Design Check

- It identifies where the copyrights reside – that includes any original artwork provided by the customer and used in the design. It includes the final design itself and the master OVD, as that can include proprietary origination methods and technologies. Manufacturing master and materials copyright are also included.
- It records your design, the optical security technologies used and a physical description of the proposed security image.
- It ensures the design is owned by the manufacturer and no other similar image exists OR it identifies a potential conflict.
- A record of that copyright is maintained in the SIR database and each member has access to all their historical records and no access to any other members data.



A database of security images such as the HIR / SIR is unique and its value to the security process is reflected in that it is now a requirement as part of the ISO 14298 Management of Security Print Process.



Within the Security Foil Design section, part of the requirements state:

- All requests for new security foil images shall be verified as unique using a database of security foils. If a duplicate is detected, it must be reconciled to verify if a counterfeit is being requested.
- All new security foil images shall be registered using a database of security foils.
- Currently the SIR is the only existing database of security Images





## SUMMARY

- The SIR broadens the use for all OVD security technologies, applications, and to all manufacturers of optical security products to safeguard OVD copyright and underpin their use in authentication and security printing.
- The use of the register is free to all IHMA members, but non-members can register their security images at a reasonable cost.
- Furthermore, IHMA membership is now open to all manufacturers of secure OVDs, which will be more cost-effective for those companies registering multiple images
- Updates will continue The more the industry uses this and adds to the database, the greater the value to us all.





Security Image Register

*Managed by Counterfeiting Intelligence Bureau*

**Thank  
you**