



Tashkent, April 8th, 2014

H O L O G R A M . I N D U S T R I E S

Innovative Optical Security Solutions

Corporate Profile

A strong company background

- More than 30 years of expertise
- 300+ staff
- Turnover 2013: over 50 millions Euro, double digit growth rate
- Headquarters in France
- High Security factories in France and USA
- Subsidiaries in USA, Germany, Poland, Mexico, Netherlands
- 100 countries clients

Corporate Organization

A world leader in anti-counterfeiting technologies

H O L O G R A M ■ I N D U S T R I E S
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 KEESING
Technologies



Optical Division



Digital Division



Branded Products



Fiduciary Documents



People ID



Digital Contents

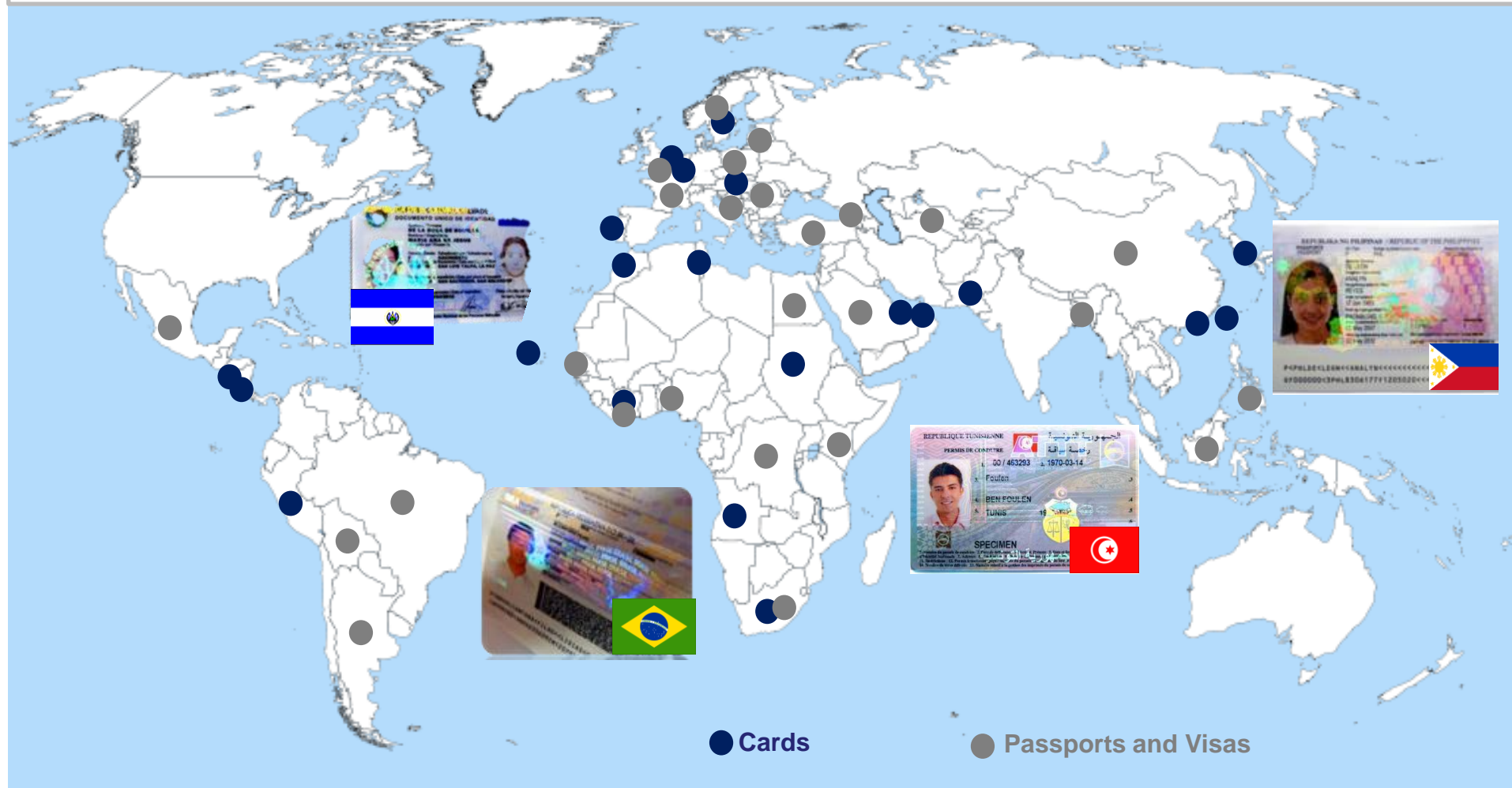


Vehicle ID

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International References ID & Travel Documents

100 Countries trust us ...



Optical Technologies

Optical and holographic sciences

- Surface relief microstructures and buried nanostructures

 - Holographic gratings

 - Rainbow and animated elements

 - Non sinusoidal gratings

 - Achromatic images

 - Contrast inversion effects

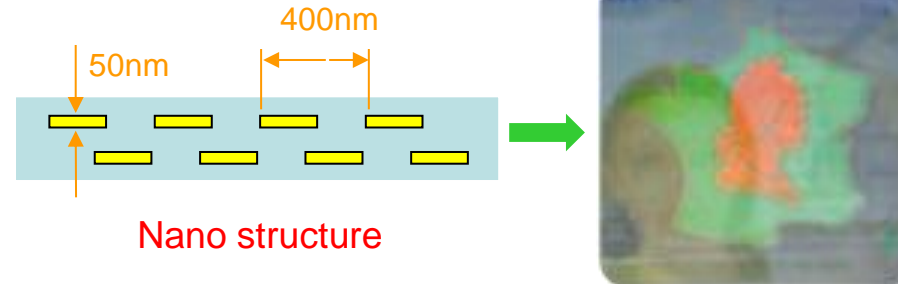
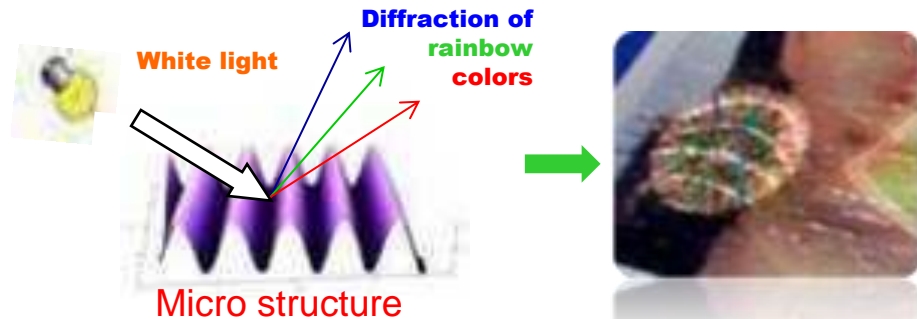
 - Buried nanostructures

 - Color permutation

- Volume holograms

 - Mastering and duplication

- Plasmon based holograms



Traditional Hologram : Alphagram

Alphagram™

- Animated elements & advantages:
 - A continuous animation when tilted up/down
 - Morphing
 - When the optical image is tilted left/right, one image is transformed to the other in a continuous motion
 - Very bright and high definition image
 - Achromatic, positive/negative control



Metallized Alphagram™

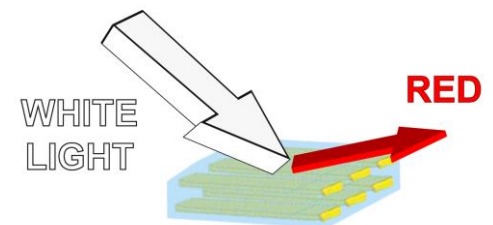
- combining metal and transparent areas
 - Specific design highly recognizable
 - High brightness
 - High bonding to the substrate
 - Resistant to water immersion



Zero Order Device : DID

DID[®] Zero Order technology

- Specifications and advantages:
 - Image in two diffractive colors visible at direct reflection angle
 - Spectacular 2 colors permutation when rotating 90°
 - Excellent visibility in diffuse light
 - Simple and easy to memorize and communicate
 - Impossible to copy with inks, metal varnishes, liquid crystals...
 - Impossible to copy with the traditional holographic techniques



HoloID™: Photopolymer volume hologram

HOLO ID

Photopolymer volume hologram

- A personalized hologram
 - Photographic definition of the image
- Very high brightness
 - Brighter than embossed (HRI) holograms
 - Efficiency > 90%
 - Do not affect at all the data readability
- New optical security elements available
 - Colored animations
 - Very effective 3D image elements
 - Possibility of selecting the colors

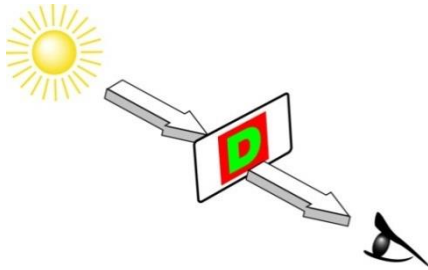


Transmission & Reflexion : Plasmogram™

Creating images using different plasmonic structures

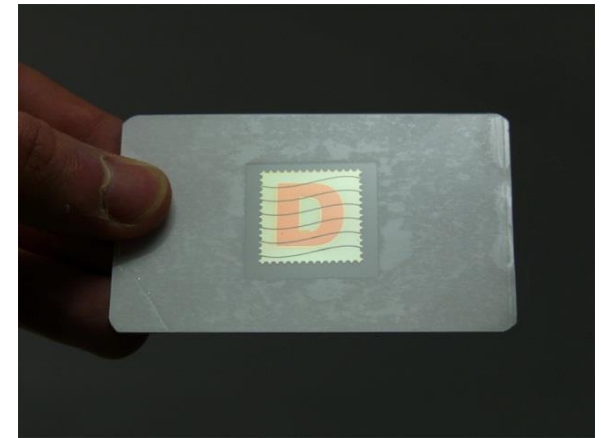
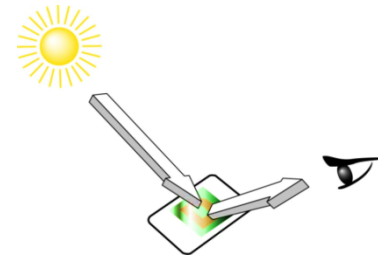
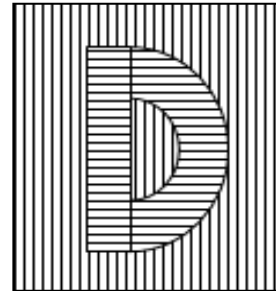
■ View by transmission

- Transparent / 2 colors image



■ View by reflection

- Metallic aspect
- Deam pastel refected color
- Diffractive rainbow image

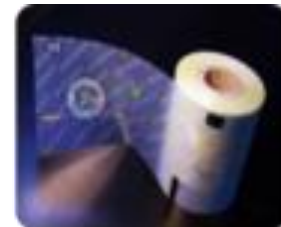


SECURITY SOLUTION FOR TRAVEL DOCUMENTS

Passport & Data Page

OPTOSEAL®

- Two main personalization systems
 - Direct printing
 - Variable data directly printed on the passport
 - Inkjet printing
 - In line or modular personalization unit
 - Also adapted to stitched-in Kugler or Uno
 - Retransfer
 - Variable data printed on the holographic laminate
 - Reverse laser printing
 - Modular personalization unit





Thank you for your attention

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