

EPIC Online Technology Meeting
on Special briefing Focusing on

Fake Drugs, Forensic Sciences and Anticounterfeiting

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Brand Protection/Anticounterfeiting Functions

- **Authentication:** Is it Genuine?
- **Identification:** Which batch, unique identifier, production site/date?
- **Tamper-Seal:** Is it the product supposed to be in this packaging?

B2C Markets

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- Focusing today on **the most challenging but the most powerful** brand protection:
 - **The controllers are the consumers!**
- Consumers are many, diverse, usually **without tools, training and with little time**
- But virtually each sold items is used by a **consumer/potential controller!**

Optical or Digital Security Features?

Optical Security Features can be controlled by a Digital tool like a smartphone..

Is it optical or digital? Where is the border between the two?

Who says if it is

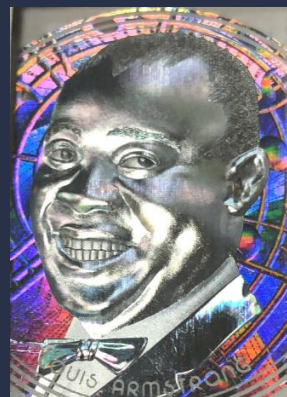


?

3

A brain or an algorithm on a processor?

Examples of Optical Security Features



Photographs and animation by Rudolf van Renesse



Advantages of Optical Security Features and Limitations

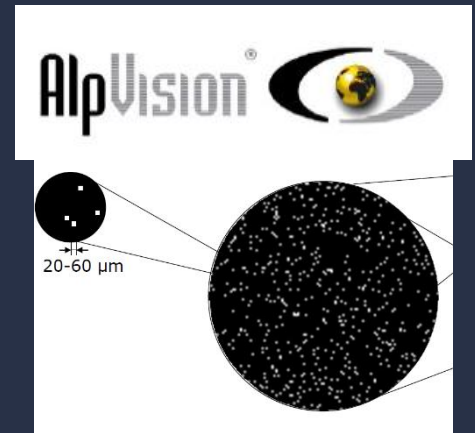
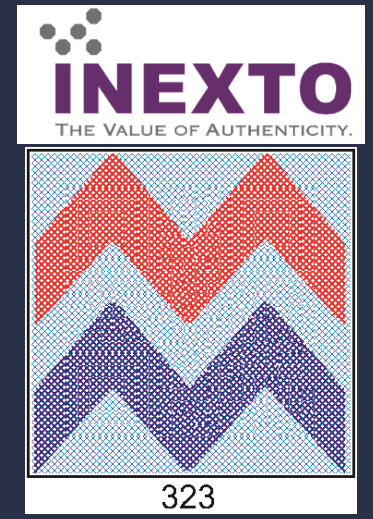
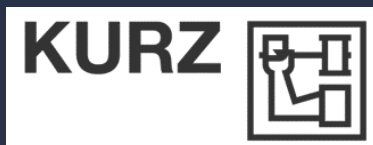
- ✓ Presence: Always visible
- ✓ First control in a glimpse
- ✓ Eye-catching
- ✓ Almost hand-free
- ✓ Self-explanatory
- ❖ Difficult light environment (dark, changing light)
- ❖ Mimicking (poor quality) is possible
- ❖ Variable and analog control: Maybe?
- ❖ Most people are not trained/aware

Best at authentication and integrity check (sealing)

Most consumer will not report a suspicion or a fake → Very thin data collection

Digital Security Features

Examples of Digital Security



Advantages of Digital Security Features and Limitations

- ✓ **Data collection:** when, where, what, who...)
- ✓ **Binary and statistically reproducible**
- ✓ **Anchor for consumer interaction and education**
- ✓ **Fast identification with online databases**
- ❖ **No presence:** disappear when smartphone is in the pocket
- ❖ **Digital control entry points are not secured**
- ❖ **Very few solutions are app-free**
- ❖ **Control rate are low without strong incentives**

Best for identification. Sometimes authentication and integrity check (sealing function)

Smartphone + app is powerful but difficult to deploy at consumer level (but easier than hardware)

Most robust solutions for B2C markets:
Combined Optical & Digital Security

How to Best Combine Digital and Optical Security

Digital and Optical must be inseparable,
as close to each other as possible

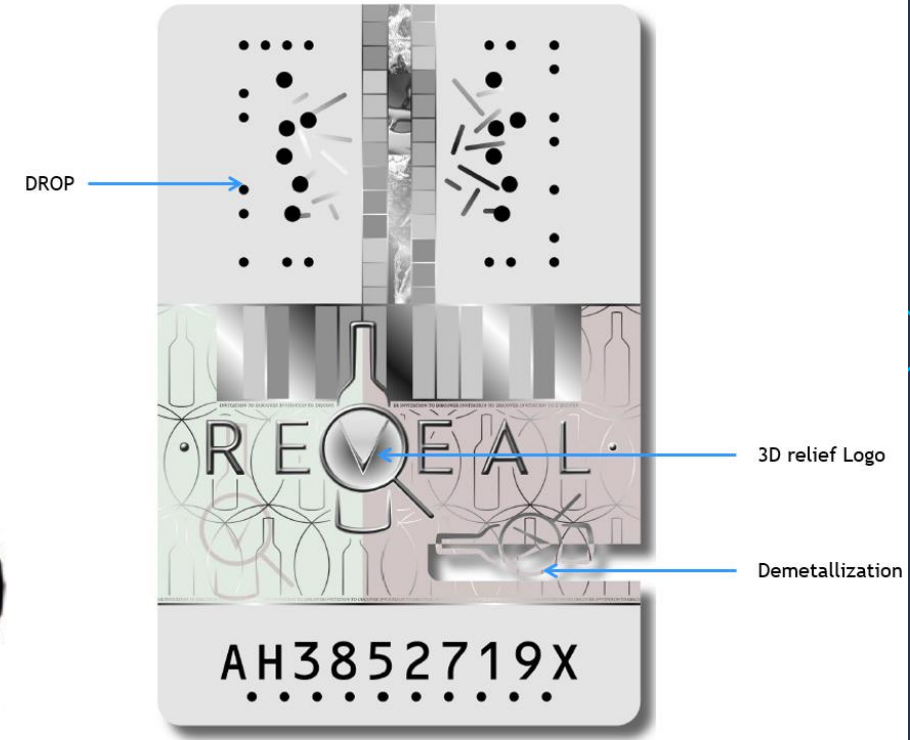
The optical features must secure the digital one,
especially its control entry point

The digital control, especially if optodigital, can comprise
a control of the optical features

Deployments are successful!

Counterfeiting metrics can go ↓ a lot, including in China

Example in brand protection:



✓ Authentication, Identification & Integrity check

CSEM SA is in anticounterfeiting since the eighties. Our experts can support your anticounterfeiting from consulting, up to feature/solution development if needed.

We want to see more Success Stories in Brand Protection!

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