

Introduction

Morpho – The Art of Identification



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Safran group businesses



Aerospace



Defense



Security



**Morpho strengthens Safran's positioning
to capitalize on high growth security markets**



■ Main markets:

- Identity Documents
- Criminal justice
- Border control
- Access control
- Transport
- Gaming and betting

Morpho Identity Documents

References

The image features a world map with orange dots scattered across Europe, Africa, and Asia. Surrounding the map are ten sample passport images, each with its country name labeled above it. The passports shown are from the Netherlands, Ireland, Switzerland, Mauritania, Croatia, Albania, Finland, Slovakia, Kazachstan, and Romania. Each passport sample includes a photo, personal details, and machine-readable text.

Netherlands

Finland

Ireland

Slovakia

Switzerland

Kazachstan

Mauritania

Croatia

Albania

Romania

Morpho Identity Documents

References

ID Cards

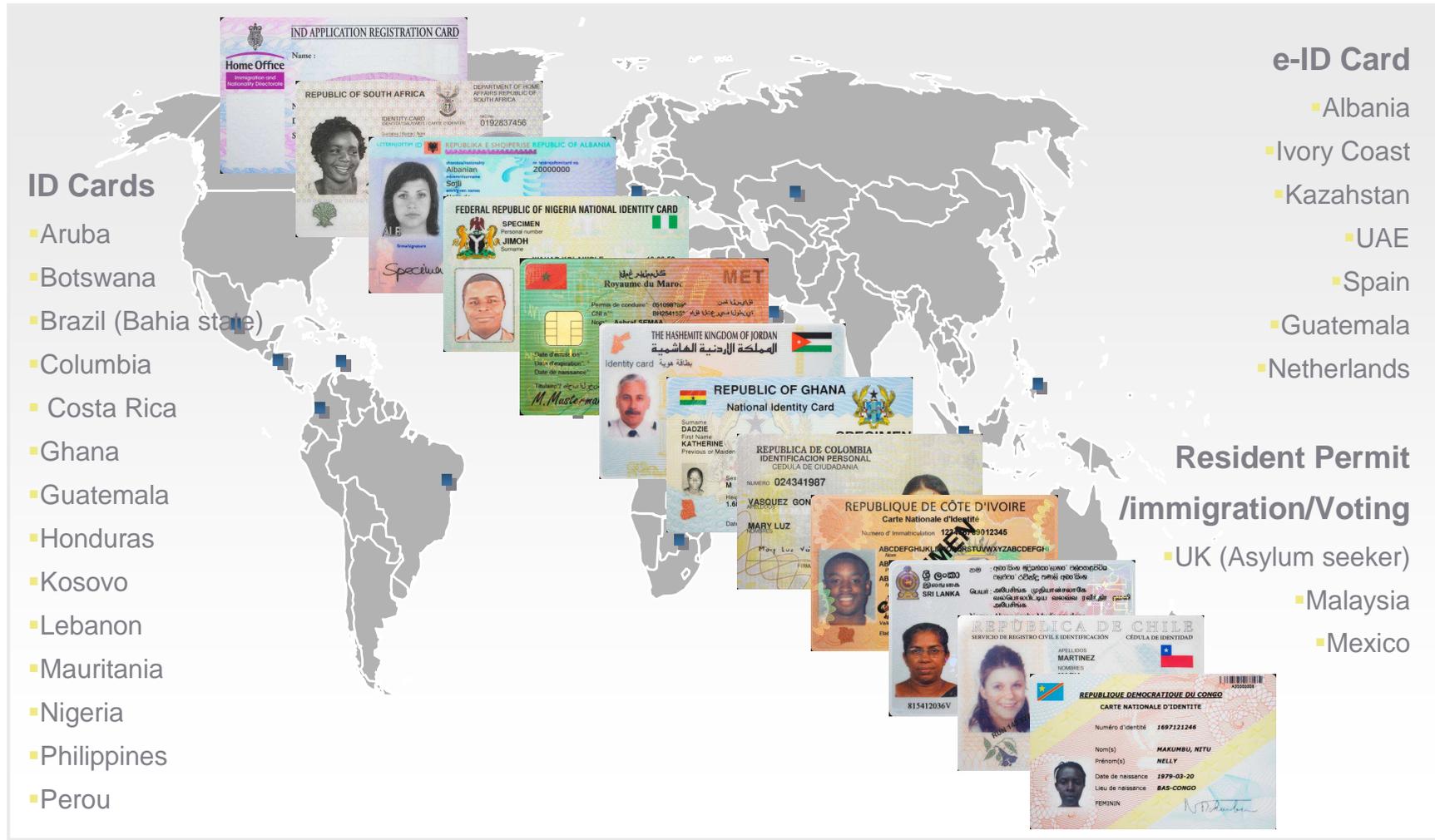
- Aruba
- Botswana
- Brazil (Bahia state)
- Columbia
- Costa Rica
- Ghana
- Guatemala
- Honduras
- Kosovo
- Lebanon
- Mauritania
- Nigeria
- Philippines
- Perou

e-ID Card

- Albania
- Ivory Coast
- Kazahstan
- UAE
- Spain
- Guatemala
- Netherlands

Resident Permit /immigration/Voting

- UK (Asylum seeker)
- Malaysia
- Mexico



We help to set the standard

- Chairman ISO/IEC JTC1 SC 17 WG3 taskforce 2, “ICAO Doc 9303 and ISO/IEC 7501 Editorial Drafting”
- Chairman ISO/IEC JTC1 SC 17 WG3 taskforce 5 “Data structure and security scheme for MRTDs” Project editor ICAO technical report
- Project editor ICAO PKI technical report
- Project editor ICAO Supplement to Doc 9303
- Member of ISO delegation at ICAO TAG on MRTDs
- Member of ISO delegation at ICAO NTWG
- Member ISO/IEC JTC1 SC17 WG3 Task force 1, “New technologies”
- Member ISO/IEC JTC1 SC17 WG3 Task force 4, “Test Methodology”
- Member of Brussels Interoperability Group (BIG)
- Member of the UNODC (United Nations Office on Drugs and Crime)



Quality and compliancy requirements

- ICAO Doc 9303, part 1, machine-readable passports, fifth edition, 2003;
- ISO/IEC 7810, Identification cards – physical characteristics, 1995;
- ICAO NTWG, introducing biometric machine-readable travel documents, technical report, May 21, 2004;
- ISO/IEC published standard 19794-2,4,5, formats for biometric data exchange;
- ISO/IEC published standard 14443, identification cards;
- ICAO NTWG, development of logical data structure - LDS for auxiliary technology capacity enhancements, technical report;
- ICAO NTWG, PKI for machine-readable travel documents offering read-only access, technical report, v 1.1;
- ICAO NTWG, Amendment to Doc 9303 – ePassports;
- ISO/IEC 7816-4, Identification cards – cards with integrated circuits – part 4: Organisation, protecting and commands for transfer;
- Access control for machine-readable travel documents, preliminary proposal, 2004;
- ANSE/NIST-ITL 1 -2000 standard "Format of Data for Exchange of Information Concerning Fingerprints, Face, Scars and Tattoos"; FBI: Wavelet Scalar Quantization (WSQ) (biometric data volume compression);
- CWA 14890-1:2004, Application interface for smart cards used as devices for safe creation of electronic signature;
- ISO/IEC 7501-1 :1997, Machine readable passports;
- ISO 1073-2: 1976, Alphanumeric character sets for optical recognition - Part 2: Character set OCR-B -shapes and dimensions of the printed image;
- ISO 1831: 1980, Printing specifications for optical character recognition,
- ISO 8601: 1988, Data elements and interchange formats – Information interchange; Representation of dates and times;
- ISO 3166: 1993, Codes of representation of names and countries.

A travel document...

- Issued by a national government to certify the identity of its owner at borders
- Authenticity can be checked everywhere
- Compliant with international standards



which needs to be secure!

- Trustworthy information
- Unique and forgery-proof
- 95% of ID verifications is based on first line security features



Security Philosophy - 1st line security features

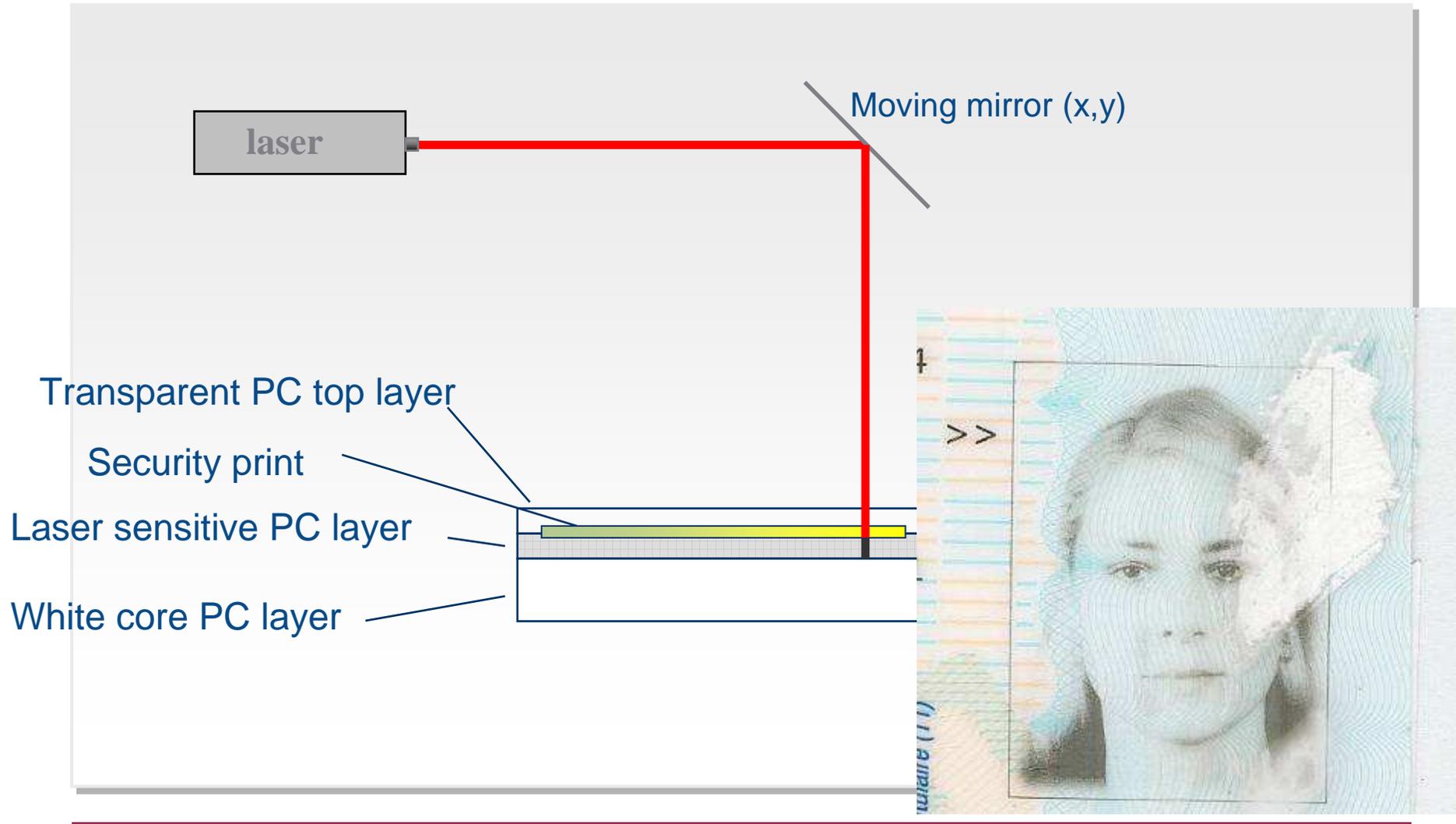
Security Philosophy

- Strong data carrier
- 1st line security features
 - a few
 - easy to check
 - very strong



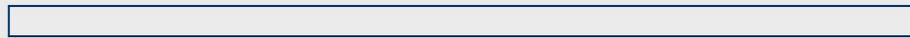
Laser engraving in polycarbonate

Strong Data Carrier



100% Polycarbonate datapage

Strong Data Carrier



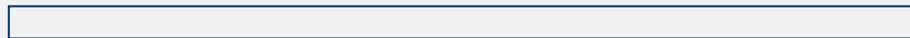
Transparent top foil



White top foil with print



White back foil with print

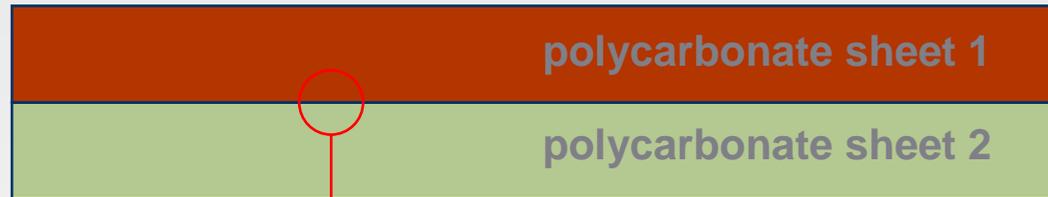


Transparent back foil



Polymer sheets melt together during lamination

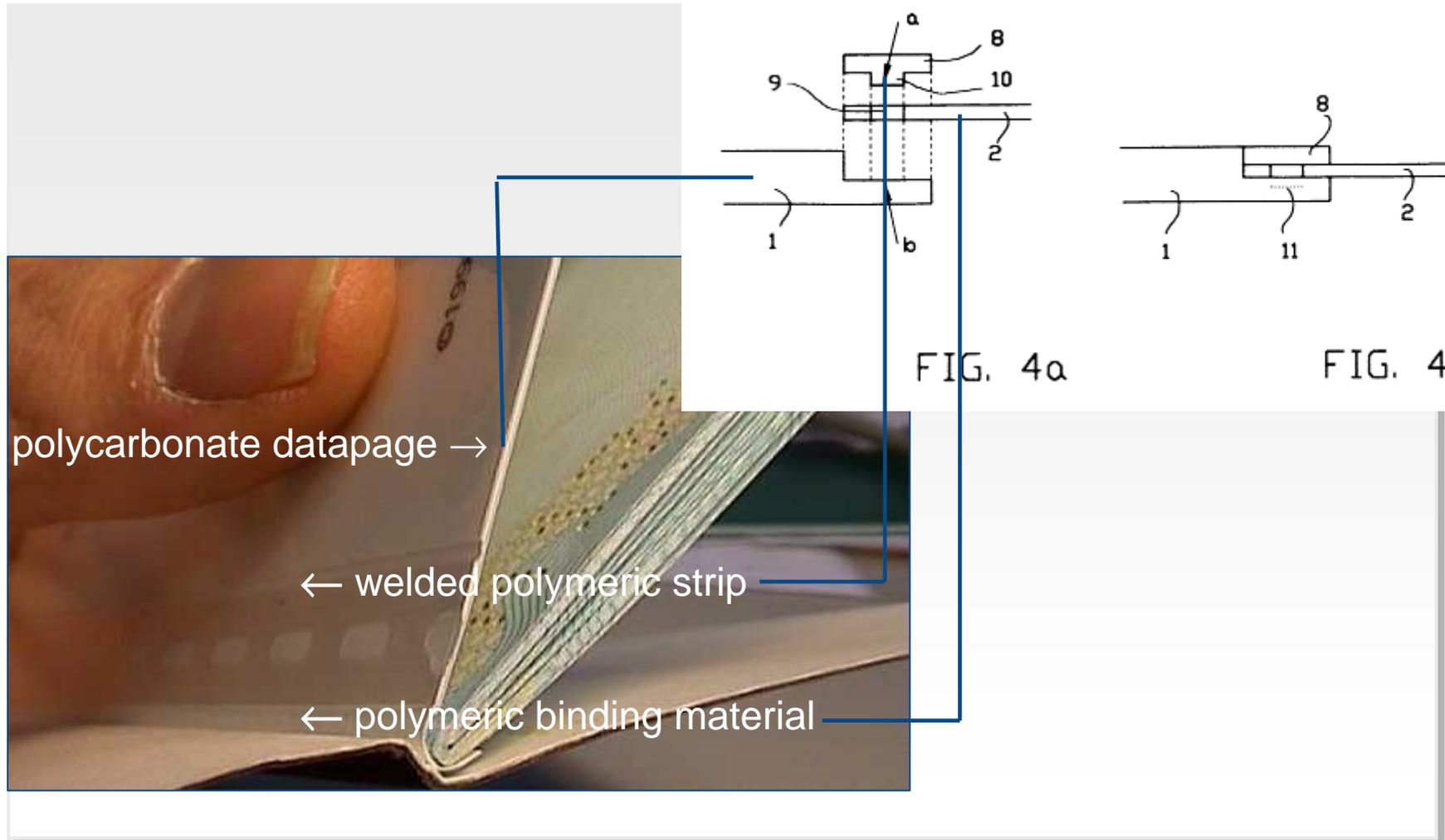
Strong Data Carrier



entanglement of the polymer molecules during lamination

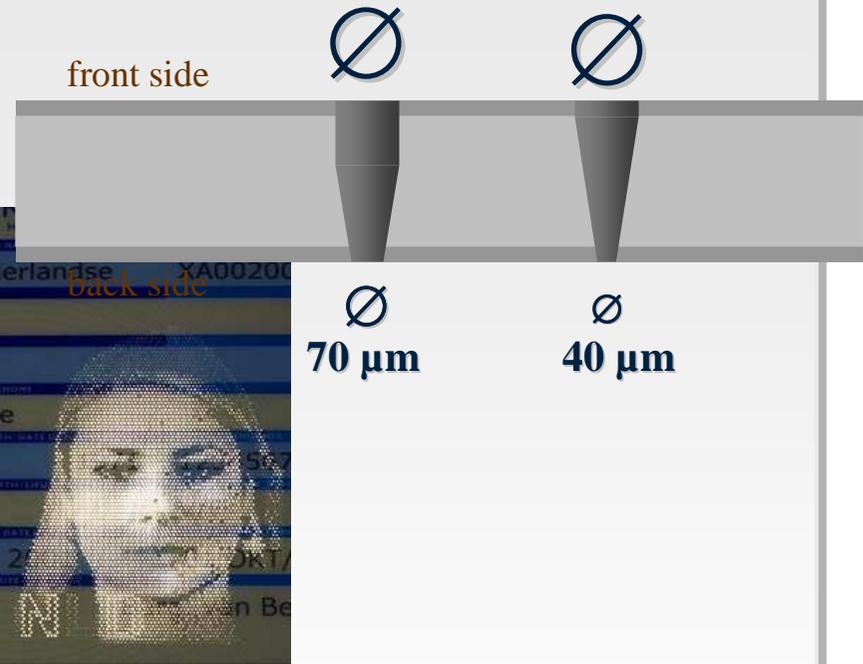
Security Philosophy - Binding

Strong Data Carrier



Imageperf/TLI

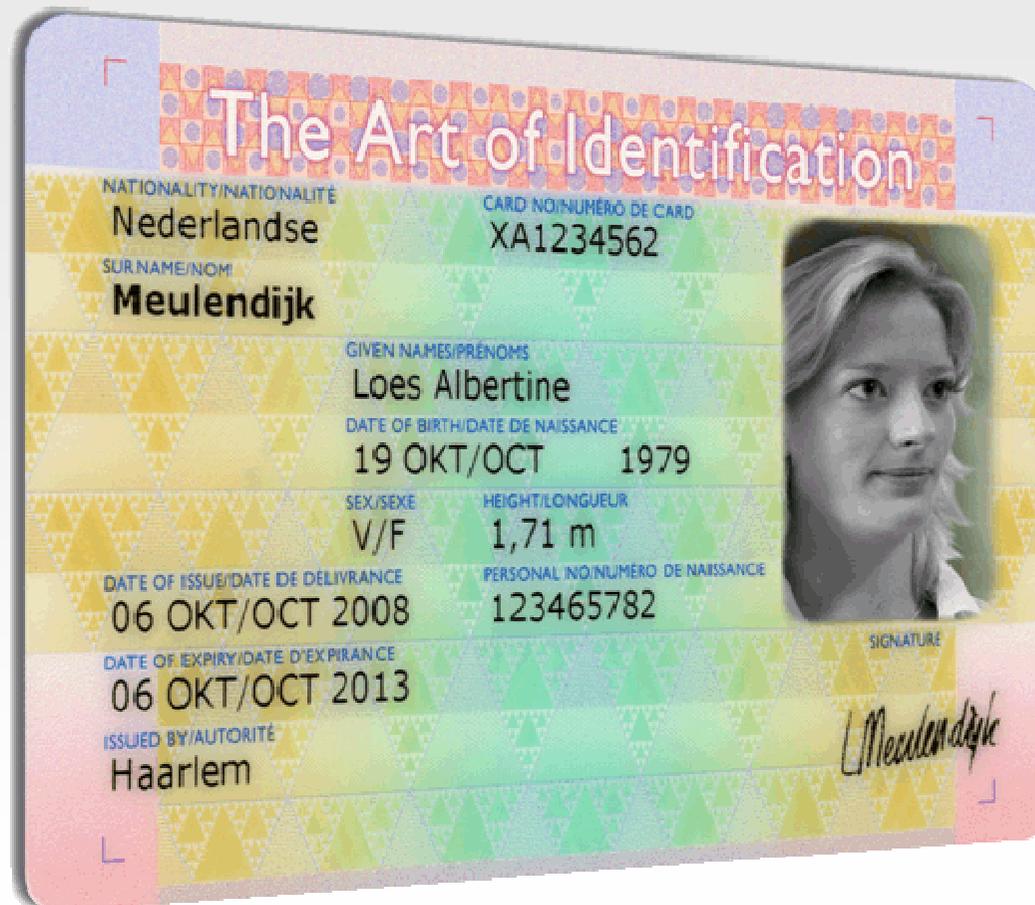
First line security feature



ImagePerf/TLI is a repetition of the photograph as a perforated image and patented by Morpho. Introduced in 2001; it is used in 13 documents in 9 countries, by Morpho and others under license

3D Photo ID

First line security feature



3D photo ID a security feature which speaks for itself!

End

Questions