

Morpho

The Art of Identification



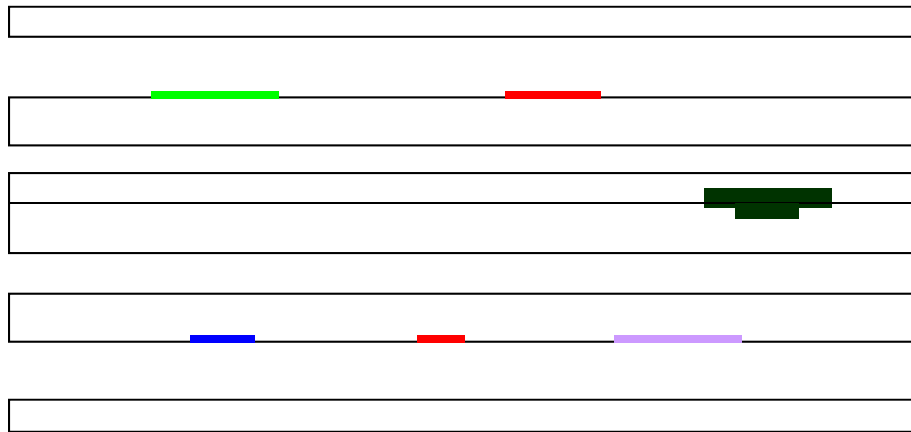
by Herman Hemels
Sales Manager ID Documents

Morpho ePassport



100% Polycarbonate datapage

Security Philosophy



Transparent top foil

White top foil with print

Inlay with chip

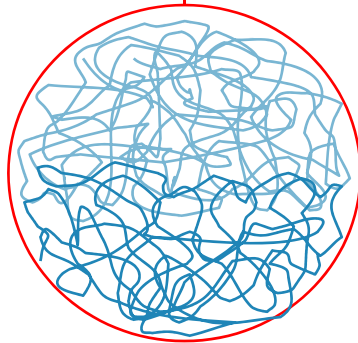
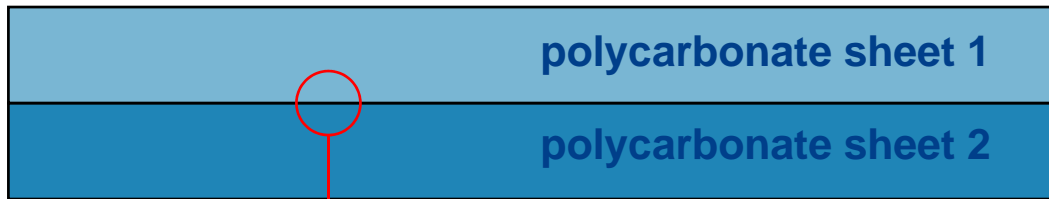
White back foil with print

Transparent back foil



Polymer sheets melt together during lamination

Security Philosophy



entanglement of the polymer molecules during lamination

Binding

Security Philosophy

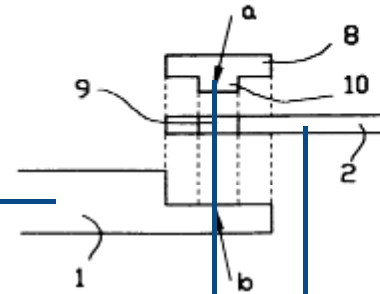
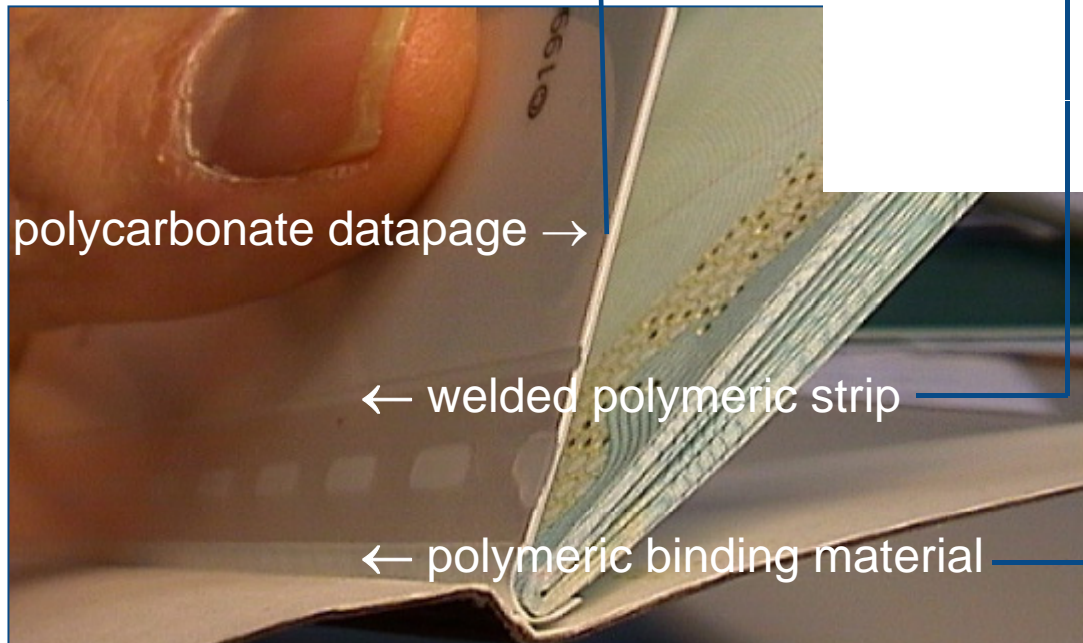


FIG. 4a

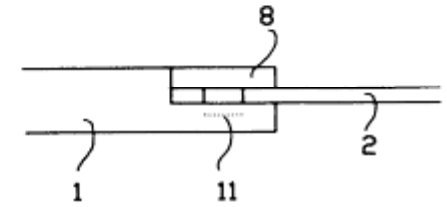
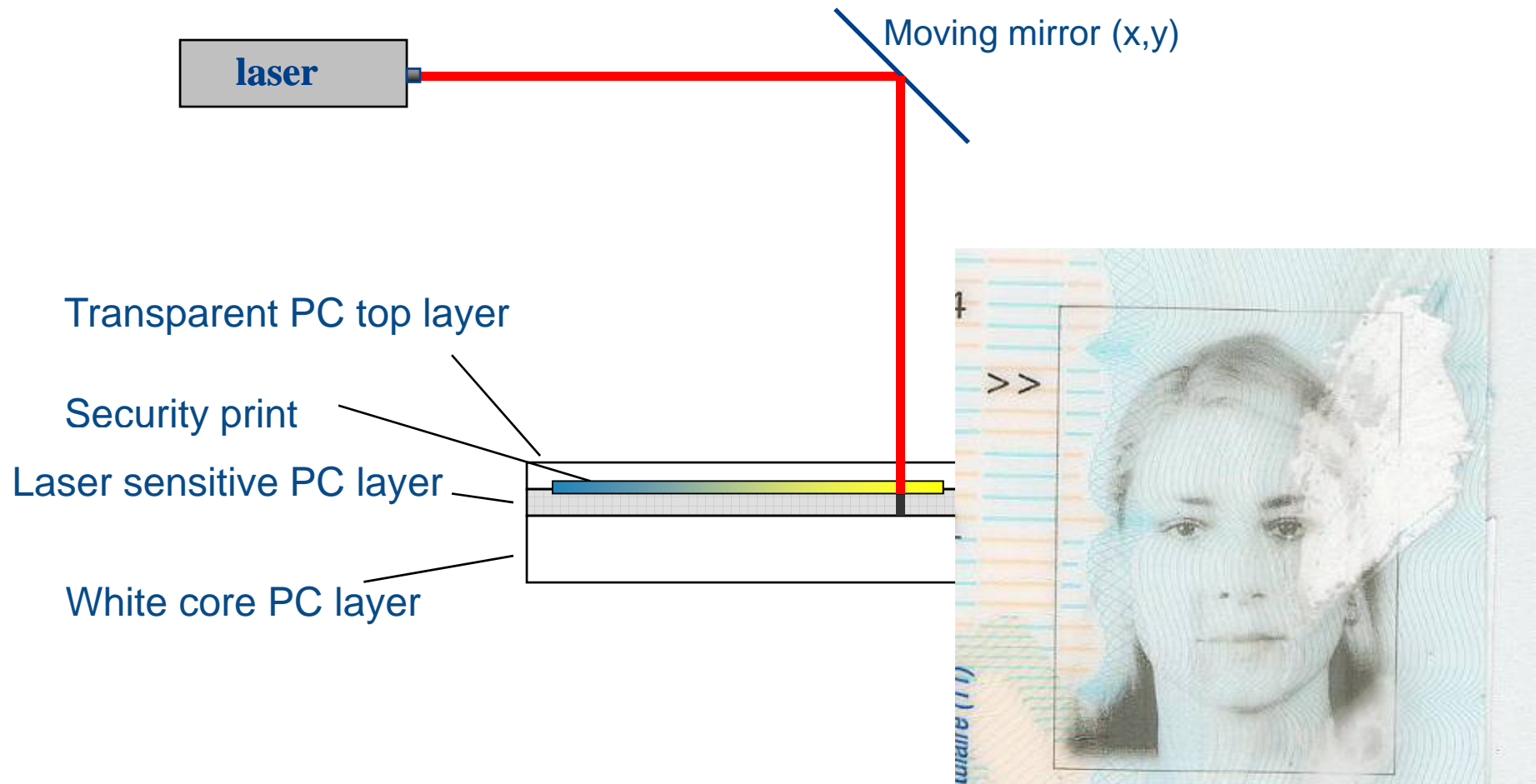


FIG. 4b

Laser engraving in polycarbonate

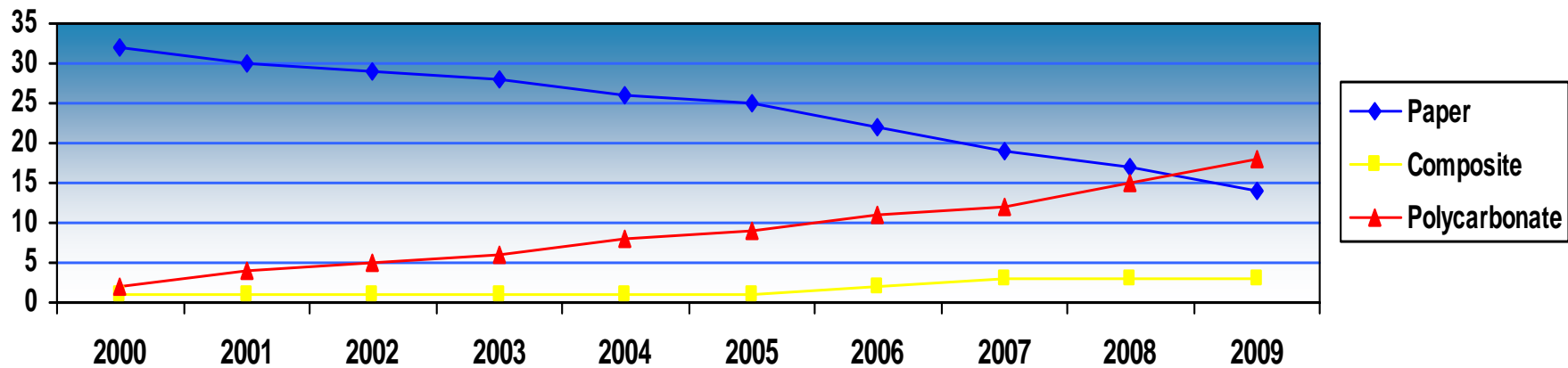
Security Philosophy



EU+ polycarbonate datapages 2000 -2009

Security Philosophy

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Paper based	32	30	29	28	26	25	22	19	17	14
Others	1	1	1	1	1	1	2	3	3	3
Poly carbonate	2	4	5	6	8	9	11	14	15	18
Total	35	35	35	35	35	35	35	35	35	35



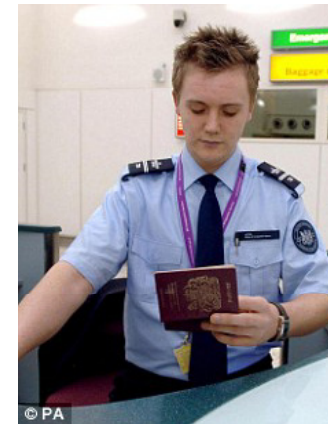
A travel document...

- 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



1st line security features

Security Philosophy

a few,
easy to check,
very strong,
1st line security features



first, second and third line security features

Integrated Kinegram

First line security features

the OVD is inserted under the top foil and therefore protected against abrasion and.....
integrated with personal data and security design



Relief and MLI/CLI

First line security features



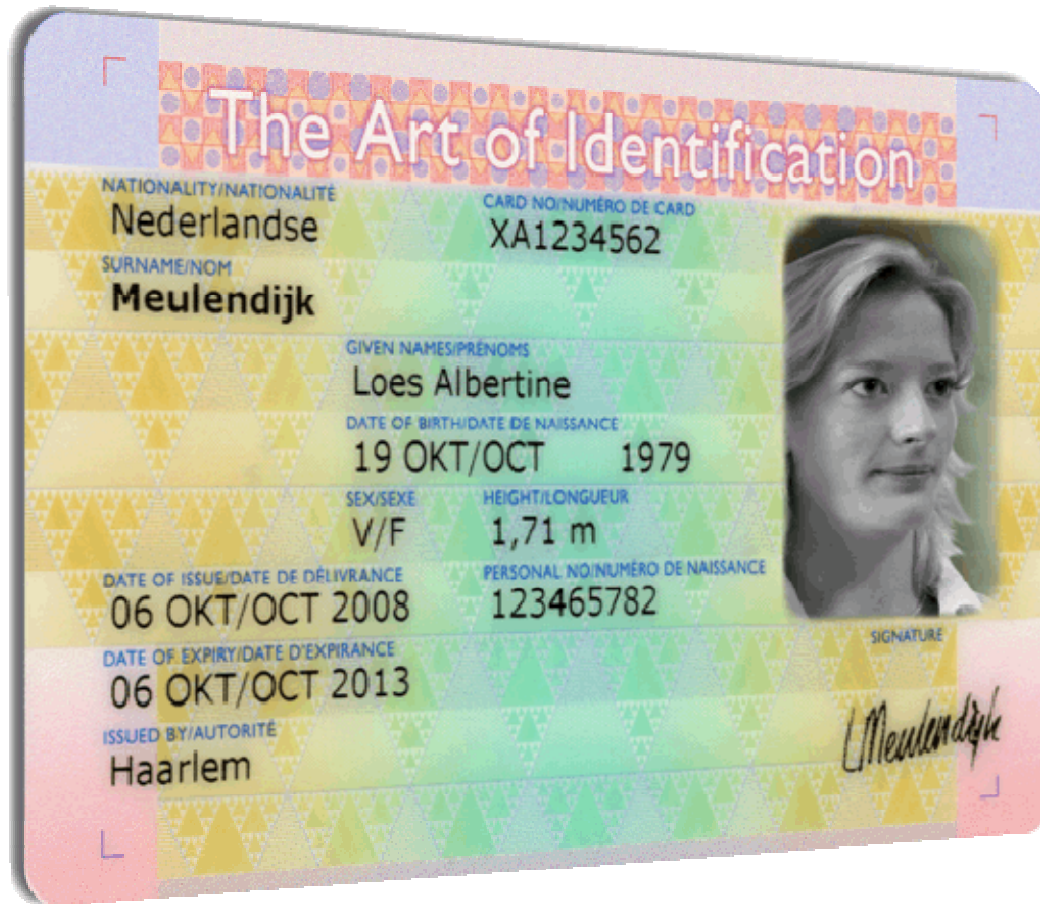
MLI/CLI



Tactile

3D Photo ID

First line security features



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

Safran group businesses

Morpho



Aerospace



Defense



Security (= Morpho)



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



■ Main markets:

- Identity Documents
- Criminal justice
- Border control
- Access control
- Detection
- Transport

Morpho facts & figures

Morpho

Figures

- Revenues:
 - over 1,000 M€ in 2010 with 30% growth rate
- Global team:
 - More than 7,200 employees
 - In over 30 countries
- More than 450 government agencies equipped worldwide
- Integrated solutions deployed over 100 countries
- Over 35 years of experience in biometric innovation
- More than 20 subsidiaries and branches worldwide

■ No. 1 Worldwide

No. 1 worldwide:

ID documents including biometric features

No. 1 worldwide:

Automated fingerprint identification systems (AFIS)

No. 1 worldwide:

Explosive Detection Systems (EDS)

■ World leaderships:

Trace equipment

Smart Cards

Gaming terminals



References Morpho ePassports

Morpho

Netherlands



Ireland



Switzerland



Mauritania



Croatia



Albania



Finland



Slovakia



Kazachstan



Romania



End

Thank you