trueface verifying picture originality



identity form card mobile payment

PIW25ENPORAS UNBRKL156WSG TRALSGNP56TR 32PR7VSAKTVP1



security since 1851



trueface verifying picture originality

The photo that identifies the bearer of a certain document can be counted as the most vulnerable, most attacked part of it. The counterfeiters have worked out numerous methods of tampering photos. TRUEFACE is the trademark of ANY Security Printing Company PLC's latest development aimed to deter criminals from altering the photo of the legal bearer of an IDcard.

This system based on the combination of mathematics, security elements and the traditional printing technology.

SIMPLE PRINCIPLE...

Before the personalization of the document a code has to be generated based on the photo of the document owner using a special algorithm. This code is further ciphered and then acts like a digital fingerprint of the photo during the personalisation process. This code is printed to the card later on in such a way that it is invisible to the human eye. Its visualisation requires a special reader. Since the code and the photo are linked to each other, it is virtually impossible to break the code that efficiently protects the photo from altering.

COMPLEX SOLUTION...

Although, the working principle seems to be simple, the complexity of realisation ensures the high security of TRUEFACE. The production process has three modules:

- FaceGen: creates the "basic vector space"
- FaceID: generates the code that identifies the photo
- FaceCheck: checks the validity of the photo

FaceGen

It's an autonomic program module that builds a multi-dimensional "basic vector space". This module processes multiplicity of facial images creating a "basic vector space" that characterises a certain population.

This "space" acts as an origo for the code generation process from the photo during the production and the control steps.

FaceID

Based on the original photo image and the "basic vector space" this module generates a unique identification code of the photo.



ANY Security Printing Company PLC Ms Nikoletta Sajó Head of International Sales Halom utca 5, Budapest 1102, Hungary Phone: +36 1 431 1317 Fax: +36 1 431 1300 E-mail: sajo@any.hu



FaceCheck

The control of the originality of the photo starts with reading the photo and the hidden code by using a special document reader. The reader decrypts the encrypted code and – at the same time – the program module generates a code-sequence from the photo by using a special algorithm and the "basic vector space". These two codes must match within a certain tolerance. If the codes are within the threshold values the photos are considered to be original. If the values exceed the predefined limits an exhaustive document examination is recommended.

FEATURES:

- Accuracy: above 99%
- Checking time: <2 sec
- Verification procedure: Off line (neither chip nor database needed)
- Security level: high

TECHNICAL SPECIFICATIONS OF CARD READER

OPTICAL SPECIFICATIONS

| Image sensor | 2048 × 1536 |
|-----------------------|-------------------------|
| Image resolution | 450 PPi |
| Image colour depth | 24 bits/pixels RGB |
| MECHANICAL DATA | |
| Size | 135 mm × 96 mm × 187 mm |
| | (5.3" × 3.8" × 7.3") |
| Window size | 89 mm x 54 mm |
| | (3.5" × 2.16") |
| Case | ABS plastic |
| Window glass | 4 mm tempered glass |
| Operating temperature | +5 °C to 45 °C |
| Operating humidity | 0–95% (non condensing) |
| Weight | 0.6 kg |
| No moving parts | \checkmark |
| OTHER SPECIFICATIONS | |
| Interface | USB 2.0 |
| Power source | from USB |

security since 1851

