IQ Structures, a Czech research and production organisation, introduced a new way of application of holographic anti-counterfeit protection. It completely eliminates some of the most frequent attacks against documents. Moreover, it enables easier differentiation between a genuine hologram and a fake. This solution also saves the costs and speeds up the delivery time of documents.

From a technical point of view, the concept is based on adding a holographic layer between polycarbonate layers during the ID card lamination, without using adhesive. “Holographic wallpaper” therefore protects the entire area of the card. A national holographic wallpaper can be created, with a graphical pattern using national symbols. One national holographic wallpaper will protect all identity documents, such as ID card, passport and driving license.

Holographic wallpaper answers the most frequent challenges of polycarbonate documents protection.

HOLOGRAM REMOVAL. New IQ Structures´ product consists of thousands of tiny pieces. During lamination, melted polycarbonate flows through the hologram and a single homogeneous unit is created. Any attempt for its removal thus results in an irreversible disintegration of holograms.

ALTERING (FORGING) OF PARTICULAR INFORMATION. Holographic protection covers the entire card, including all data.

TARGETING INSUFFICIENTLY TRAINED GUARDS. It is much easier to learn visual effects if there is a single national holographic wallpaper on all documents.

Petr Franc, Director of Security Division in IQ Structures, says: “Design diversity is great for designers, but a nightmare for document supervisors.” And he adds: “If you have to work with five different documents, and there are four key security elements on each, you have to learn to identify 20 designs flawlessly. Who can manage it in a real life? A single national holographic wallpaper can enhance anti-counterfeit resistance radically. Provided it includes features that cannot be imitated. And it is what we can deliver, thanks to our mastering centre awarded by prestigious international prizes.”

Robert Dvorak, Business Development Director in IQ Structures: “Creating a new document is a lengthy process of preparation of holographic design, master and foil and integration of them in the polycarbonate document. Each document goes through this process separately and with a new design. Our solution enables to have on stock the holographic foil with a unique wallpaper holographic pattern tailor-made according to the national symbolism and use it for production of any document in any production lay-out within one country. Savings in cost and time are obvious, which was our target when developing this concept.”

Note to editors:
IQ Structures is a research and production company focused on optical nanotechnologies, especially strong in security, anti-counterfeit protection and lightening. Backed by 20-year experience, IQ Structures has built
extensive research capacities, owns several patents, and operates a manufacturing unit with a capacity to protect more than 100 million polycarbonate ID cards a year. It has been awarded several international prizes for excellence and scientific innovation, including recent double awards by International Holograms Manufacturing Association. The company is settled in Řež, close to Prague, the Czech Republic.