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OPTAGLIO SECURITY HOLOGRAMS EXCEED 5M DPI

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Pushing the boundaries of anti-counterfeiting technology, OPTAGLIO has announced it has exceeded 5 million dpi (dots per inch) resolution. The advance enhances visual based protections against counterfeiters, as such resolution is beyond the reach of potential attackers. Card producers are thus given a technological advantage which the business estimates is likely to sustain them for over ten years.

"This success is backed by long research. It is relatively easy to narrow stream of electrons, but it is necessary to deal also with particular technical and physical challenges such as proximity effect," said Dr Tomas Karenský, senior research manager in OPTAGLIO. "This technology upgrade enables us to create entirely new visual effects. It underlines critical role of hologram design so that new possibilities are used completely."

Czech-based OPTAGLIO, a global leader in high-resolution security holograms, was already a market leader working with a resolution of 2.5 million dpi, which is sufficient for placing a detailed map of the Moon on space of one square centimetre. With this resolution, OPTAGLIO has developed a portfolio of unique visual effects. "As far as we are informed, nobody has ever imitated 2.5M dpi security hologram. However, we understand the need

for further increasing the technological advantage. Typical life cycle of identity document is ten years. It is important to ensure that attackers will not be able to imitate security elements all along the life cycle."

Optaglio holograms are created with e-beam lithography. This technology works with electron beam instead of a laser. The electron beam can be narrowed and broadened to create special effects while keeping reasonable effectiveness.

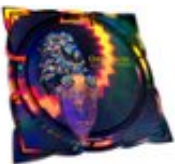


Five million dpi holograms were developed in OPTAGLIO Labs, the research centre situated in Lochovice, Czech Republic. This centre was established in 2015 to unify and consolidate various research and development activities. In 1994, Optaglio originated from Czech Academy of Science and has kept its scientific spirit until now, which resulted in a range of patents and breakthrough innovations. OPTAGLIO Labs focus on both product innovation and material research.

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