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Optaglio integrates laser and e-beam for holograms creation

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Optaglio has introduced its first holograms created with a combination of technologies, applied separately so far. Combination of technologies should prevent counterfeiters from easy identification what measures were used for hologram creation. It is a part of long-term Optaglio effort to keep holograms the most secure anti-counterfeit technology available.

"It is no revolution. Some companies tried to combined laser and electron beam some ten years ago. The results were quite disappointing, but the technologies are much more advanced now," said Tomas Karensky, the Senior Research Manager in Optaglio. " We invited university experts to help us with the laser part because our primary focus is e-beam. The first results are more than satisfactory. Experts questioned were not able to identify precisely what technologies were used for master hologram creation.

Optaglio applies a combination of technologies to the design of its current holograms to enhance or change some visual illusions and features. In the next phase of the project, focused graphical design for combined holograms will be created. The psychological laboratory will also be included to ensure that unique hologram features correspond to user abilities to identify them. Such comprehensive protection elements should be available by the end of this year.

Optaglio was founded in 1994 by a group of scientists from Czech Academy of Science. It has always been more a research organisation than a traditional manufacturer. In 2015, all Optaglio 's research and development activities were concentrated into Optaglio Labs in Lochovice, Czech Republic. During the last year, technical research activities were supplemented by behaviour research laboratory and a systematic approach to hologram designing.