

Advanced Materials Facilitating Nonlinear Spectral Enhancements Supporting Latent Fingerprint Detection and Acquisition

Disclosure Number

201002473

Technology Summary

This idea disclosure describes steps necessary to create materials and methods that facilitate non-linear amplification for enhanced latent fingerprint development. Novel, optically active dye - dielectrics and/or metal - dielectric materials can be used to selectively increase the descriptive signals emitted from properly illuminated latent human fingerprints. By increasing the signal that comes from the print ridge (where human skin contacted a surface and left its tell-tale cocktail of oils and salts), the contrast between the ridge and furrow improves and an image may be detected where no other technique would detect one.

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