

PROCESS FOR PLASMONIC-BASED HIGH RESOLUTION COLOR PRINTING

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ABSTRACT

A process for plasmonic-based high resolution color printing is provided. The process includes a) providing a nanostructured substrate surface having a reverse structure geometry comprised of nanopits and nanoposts on a support, and b) forming a conformal continuous metal coating over the nanostructured substrate surface to generate a continuous metal film, the continuous metal film defining nanostructures for the plasmonic-based high resolution color printing, wherein a periodicity of the nanostructures is equal to or less than a diffraction limit of visible light. A nanostructured metal film or metal-film coated support obtained by the process and a method for generating a color image are also provided.

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FIG. 3