

## LogoDot<sup>™</sup>/NaNOcopy<sup>™</sup> Screening

Patented Graphics Technology for Document Personalization and to Protect Against Unauthorized Color Copying and Scanning

## LogoDot<sup>TM</sup> - Halftone Dots that Contain Microscopic Images

With Amgraf's LogoDot technology, you can convert a corporate logo, a photograph, or a key word or phrase into a unique halftone dot matrix to replace the round dots typically used in normal halftone printing. As the halftone image gets lighter and darker, LogoDots shrink and grow just like conventional dots. The difference is that each dot contains a recognizable image that can be seen when examined with a magnifying glass.

Embedding a corporate logo into the halftone dot is the ultimate in "personalization". LogoDots can be used for any printing purpose, from postage stamps to billboards. Multiple LogoDot designs and sizes (frequencies) can be used within a single document. Dot angle and dot color (separation) can also be controlled.

Unlike conventional halftone dots, LogoDots are almost impossible to photocopy or scan, resulting in easily detectable copies. In addition, because LogoDots tend to "fill-in" when photocopied, they appear darker on the copy than on the original. This phenomenon is often utilized to produce self-canceling "Void" backgrounds on security documents.





The LogoDot and NaNOcopy technologies are available for immediate license to reputable companies. Please visit our website for licensing terms and conditions.

NaNOcopy is protected by U.S. Patent Number 6,692,030 issued Feb. 17, 2004 LogoDot is protected by U.S. Patent Number 7,196,822 issued Mar. 27, 2007

## **Protecting Documents with NanoStructures**

NaNOcopy was developed to protect a document from being copied with a color photocopier or scanner. Widely considered one of the most effective void pantograph technologies available today, NaNOcopy utilizes microalphanumeric characters and shapes to create an encrypted message that cannot be digitally replicated or re-printed. To view and verify the encrypted nanostructures on an original document, one simply uses a magnifying glass. The nanostructures degrade and plug with toner or ink as the copy is produced. What then appears on a color copy is a pronounced copy/void warning message.

The anti-copy or "copy-evident" technique can be designed into any secure document. The encrypted message can also be used to trace a document's origin that is courtenforceable. Whether it's simple anti-copy office paper, titles, transcripts, or checks, any negotiable document is an ideal candidate for NaNOcopy protection.







Original NaNOcopy Structures

Color Copy





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