



# INDIVIDUALLY MARKED DIGITAL MEDIA

## CUSTOMER-FRIENDLY COPYRIGHT PROTECTION BY DIGITAL WATERMARKING

### Distinguishable Copies

Digital watermarking can be used to permanently embed information into digital media such as images, movies or songs. These watermarks can be regarded as unperceivable and nonremovable stamps added to the media.

Through this technology it is possible to distinguish between individual copies of an original copy. Without watermarking, each digital copy of an original is an exact reproduction of the original and all copies are identical. If one of these copies is found, for example in an illegal file-sharing network, the source of this illegal copy cannot be identified.

### Advantages

Digital watermarking allows the identification of single copies of an original media file, for example, by embedding a transaction code or a simple continuous number into each copy. Whenever a copy is found, the watermark can be retrieved and the source can be identified by the embedded individual information. This works for images, video, and audio data. But also for almost all other types of digital data watermarking algorithms can be designed. The watermarks survive format conversion, editing, and copies made by microphone recordings in the case of audio data, or printing and scanning in the case of images.

With digital watermarking restrictive protection solutions are not necessary to secure digital media. The customer is free to use and consume the media data he has bought in any way and on any device he likes. But if he passes the content into illegal environments and copies are found, he can be identified. This discourages misuse of the media files without reducing the usability for honest customers.

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### Applications

Digital watermarking can be applied in various scenarios, for example in online shop systems. Here digital media files can be individually marked at the time the customer decides to buy and download them. Another application is the individual marking of review copies sent to journalists, enabling the tracing of any pre-sales copies to their origin.

Contact us. We would be pleased to inform you about protecting your digital media.

