# WATERMARKING BASED IMAGE AUTHENTICATION USING FEATURE AMPLIFICATION (FriAmPO1)

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**Abstract:**
In a typical content and watermarking based image authentication approach, a feature is extracted from the given image, and then to be embedded back into the image using a watermarking method. Since the entropy of the feature might be higher than the capacity of the watermarking scheme, or the feature is represented in a continuous domain, it has to be further quantized before embedding. The lost of information during quantization potentially degrades the overall performance of the authentication scheme. This paper propose a simple but effective approach that avoids the feature quantization by additive feature: the feature is firstly added into the image before watermark embedding, and latterly sub−tracted from the watermarked image. In our experi−ments, the proposed approach obtains larger achiev−able robustness/sensitivity region and has a smaller fuzzy region of authenticity than the typical approach.