AUTHENTICITY VERIFICATION METHODS, PRODUCTS AND APPARATUSES

Abstract

A method and apparatus for determining a digital signature from an article made of paper, cardboard, plastic or many other material types. A coherent light source directs a beam to illuminate the article and a detector arrangement collects data points from light scattered from many different parts of the article to collect a large number of independent data points, typically 500 or more. By collecting a large number of independent signal contributions specific to many different parts of the article, a digital signature can be computed that is unique to the area of the article that has been scanned. This measurement can be repeated whenever required to test authenticity of the article. Using this method, it has been discovered that it is essentially pointless to go to the effort and expense of making specially prepared tokens, since unique characteristics are measurable a in a straightforward manner from a wide variety of every day articles.

[Fig. 1]