

The invention discloses a method for marking and authenticating a security article, such as a banknote, a document, a ticket, a foil, a thread, a label, a card, or a commercial good, so as to provide for an easy authentication of said article by a machine, such as a currency acceptor, a ticket validator, or a hand-held authentication device. According to the disclosed method, the security article carries a marking in the form of a user-defined design, wherein said marking comprises dyes or pigments belonging to an extended, or hyperchromic color space which is not reproducible by commercially available, 4-color desktop reproduction equipment. The authentication of said marking includes the mathematical transformation of the crude spectral information to statistically independent hyper-color coordinates, and the comparison of selected hyper-color coordinates with corresponding reference values.