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(57) Abstract

Methods and apparatus are provided that implement digital signing and/or encryption for the electronic transmission, storage, and retrieval of authenticated documents and that enable the establishment of the identity of the originator of an electronic document and of the integrity of the information contained in such a document. Together these provide irrevocable proof of authenticity of the document. The methods and apparatus make it possible to provide "paper–less" commercial transactions, such as real estate transactions and the financial transactions secured by real estate. A Certification Authority provides tools for initializing and managing the cryptographic material required to sign and seal electronic documents. An Authentication Center provides "third party" verification that a document is executed and transmitted by the document's originator. The methods and apparatus eliminate the need for "hard copies" of original documents as well as hard copy storage. Retrieval of an authenticated document from the Authentication Center may be done by any number of authorized parties at any time by on–line capability.

