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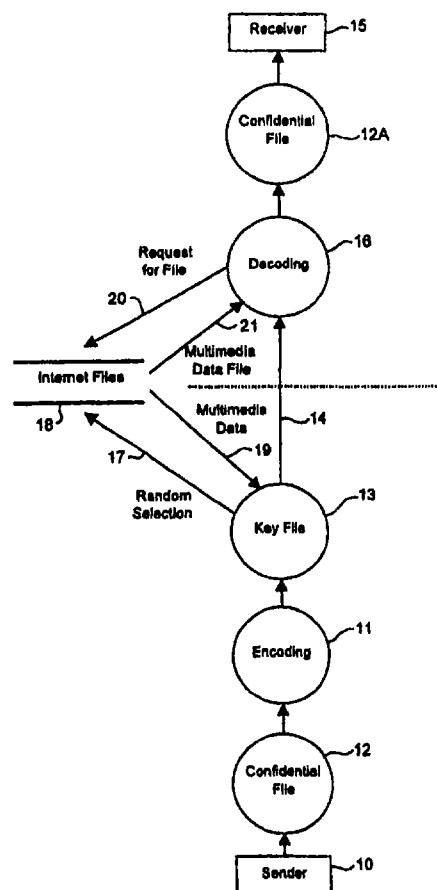
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(54) Title: METHODS OF DIGITAL STEGANOGRAPHY FOR MULTIMEDIA DATA

(57) Abstract

A lossless steganographic encoding method for secure transmission or storage of multimedia data. Primary data, such as text, image, video, audio or other digital data, is utilised in a steganographic process to encode secondary data, such as text, image, video, audio or other digital data. The primary data includes a plurality of first data elements and the secondary data includes a plurality of second data elements. For each second data element an operation is performed with a first data element so as to generate a key element as a result of the operation. The key elements may then be securely transmitted and/or stored. In preferred embodiments of the method, the primary data may be rearranged according to a predefined or random manner, or it may be resized so as to match the size of the secondary data. A complementary decoding method is disclosed, and a method of generating a pseudo-random number sequence, which may be used in the steganographic and decoding methods, is also disclosed.



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