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(71) Applicant: **QUANTUM DIGITAL SOLUTIONS CORPORATION** [US/US]; 4551 Glencoe Avenue, Suite 340, Marina Del Rey, California 90292 (US).

(72) Inventors: **JOHNSON, William C.**; 4551 Glencoe Avenue, Suite 340, Marina Del Rey, California 90292 (US). **ISPIRYAN, Karen**; 1241 5th Street, Santa Monica, California 90401 (US). **KHACHATRYAN, Gurgen**; 4143 Via Marina #816, Marina Del Rey, California 90292 (US).

(74) Agent: **SCHALDENBRAND, Michael A.** et al.; Rmck Law Group, PLC, P.O. Box 210280, Auburn Hills, Michigan 48321 (US).

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(54) Title: CYPHERGENICS-ENABLED DIGITAL ECOSYSTEMS AND CYPHERGENICS-ENABLED DIGITAL SIGNATURES

(57) Abstract: In some embodiments, a method for encrypting a file includes receiving a file comprising file data and file metadata; retrieving a genomic differentiation object and genomic regulation instructions that define a set of operations that modify the genomic differentiation object; modifying the genomic differentiation object into a modified genomic differentiation object based on the genomic regulation instructions; extracting a sequence of bits from a predetermined set of bit locations of the file metadata; generating a genomic engagement factor based on the modified genomic differentiation object and the extracted sequence; and encrypting at least one portion of the file data using the genomic engagement factor.



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