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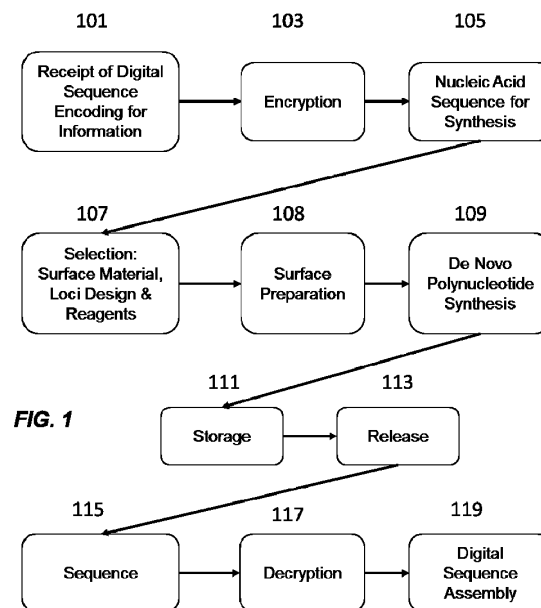
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(54) **Title:** NUCLEIC ACID BASED DATA STORAGE



(57) **Abstract:** Provided herein are compositions, devices, systems and methods for the generation and use of biomolecule-based information for storage. Additionally, devices described herein for de novo synthesis of nucleic acids encoding information related to the original source information may be rigid or flexible material. Further described herein are highly efficient methods for long term data storage with 100% accuracy in the retention of information. Also provided herein are methods and systems for efficient transfer of preselected polynucleotides from a storage structure for reading stored information.

[Continued on next page]

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