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(71) Applicant: **GENERATION BIO CO.** [US/US]; 301 Binney Street, 4th Floor, Cambridge, MA 02142 (US).

(72) Inventors: **KOTIN, Robert, Michael**; C/o Generation Bio Co., 301 Binney Street, 4th Floor, Cambridge, MA 02142 (US). **UCHER, Anna**; C/o Generation Bio Co., 301 Binney Street, 4th Floor, Cambridge, MA 02142 (US). **MALAKIAN, Ara, Karl**; C/o Generation Bio Co., 301 Binney Street, 4th Floor, Cambridge, MA 02142 (US).

(74) Agent: **CLARKE, Marcie, B.** et al.; McCarter & English, LLP, 265 Franklin Street, Boston, MA 02110 (US).

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(54) Title: MODULATION OF REP PROTEIN ACTIVITY IN CLOSED-ENDED DNA (CEDNA) PRODUCTION

(57) Abstract: Provided herein are methods for producing DNA vectors comprising incubating a population of cells harboring the vector polynucleotide encoding a heterologous nucleic acid operatively positioned between a first and a second AAV inverted terminal repeat DNA polynucleotide sequence (ITRs), with at least one of the ITRs having nucleotide sequences corresponding to AAV wild type ITR in the presence of only a single species of Rep protein having at least DNA binding and DNA nicking functionality, under conditions effective and for a time sufficient to induce production of the DNA within the cells and harvesting and isolating the resultant DNA with the ITRs from the cells.

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