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(54) Title: COMPOSITIONS AND METHODS OF REDUCING CONVERSION OF PHOSPHOROTHIOATE BONDS

(57) Abstract: In some embodiments, the present disclosure is directed to compositions and methods of reducing conversion of phosphorothioate bonds during the synthesis and storage of oligonucleotides. In some related embodiments, the present disclosure is directed to compositions and methods of reducing conversion of thio-NTPs. In some embodiments, the methods or compositions of the present disclosure find use in reducing phosphorothioate to phosphodiester impurities in an oligonucleotide or therapeutic oligonucleotide.