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(54) **Title: SPLICE SWITCHER ANTISENSE OLIGONUCLEOTIDES WITH MODIFIED BACKBONE CHEMISTRIES**

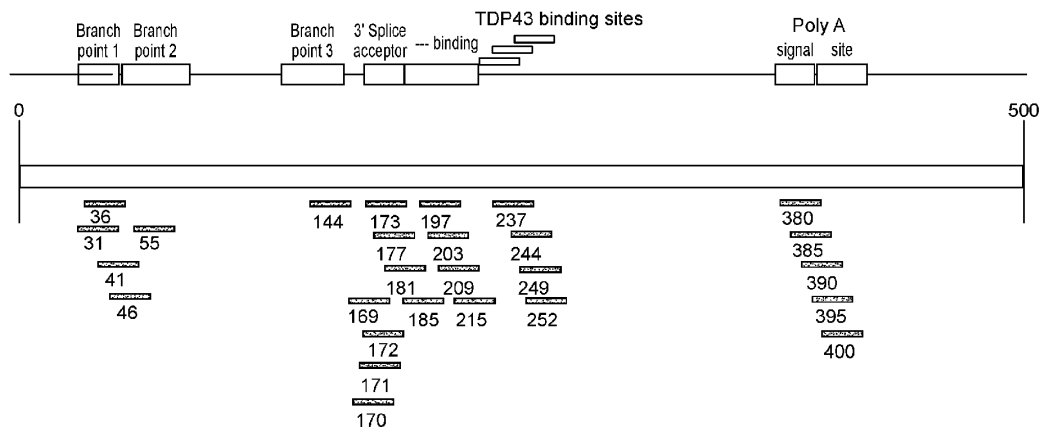


FIG. 1

(57) **Abstract:** Disclosed herein are oligonucleotides with one or more spacers or without a spacer. In various embodiments, STMN2, KCNQ2, UNC13A, or SMN2 oligonucleotides with spacer(s) reduce STMN2 transcripts with cryptic exons or reduce mis-spliced KCNQ2, UNC13A, or SMN2 transcripts and increase full length STMN2, KCNQ2, UNC13A, SMN transcripts, thereby imparting therapeutic efficacy against neurological diseases such as amyotrophic lateral sclerosis (ALS), frontotemporal dementia (FTD), Alzheimer's disease (AD) or spinal muscular atrophy (SMA).

[Continued on next page]

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