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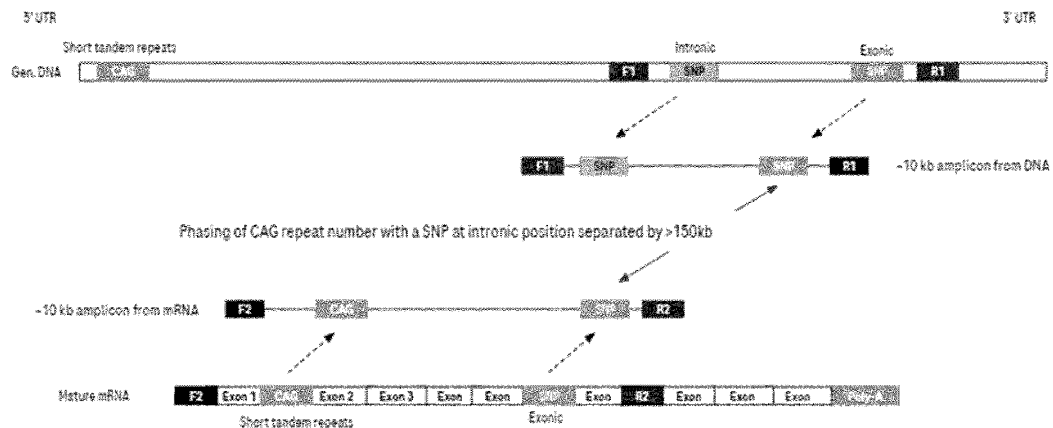
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(54) Title: NOVEL ASSAY FOR PHASING OF DISTANT GENOMIC LOCI WITH ZYGOSITY RESOLUTION VIA LONG-READ
SEQUENCING HYBRID DATA ANALYSIS

FIG. 2



(57) Abstract: The present invention describes a novel method for pre-clinical or clinical biomarker characterization, for example in the field of neuroscience (e.g. Huntington's disease). The methods and kits disclosed may be used as a companion diagnostic tool, where identification of two or more paired loci are needed to provide essential information for a safe and efficient stratification of a patient with a specific therapy or drug treatment. More particularly, the method allows for accurate assignment of the spatial relationship of a single nucleotide polymorphism (SNP) with a short-tandem repeat (STR) or another SNP from a highly distant region in a genome at a hetero/homozygosity resolution.

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