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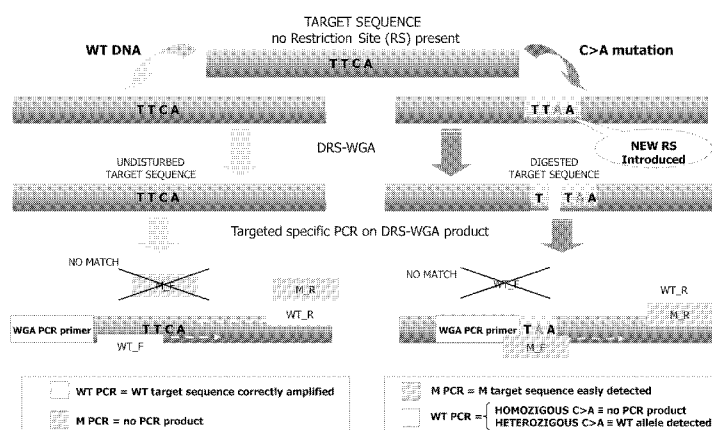


FIG. 4A

(57) **Abstract:** The present invention relates to a method for detecting a first and/or a second target DNA sequence from a DNA library, differing in that a mutation generates/eliminates a restriction site for a restriction endonuclease, comprising the steps of: (a) providing the DNA library, in which each of the DNA sequences comprises a first sequence segment, a second sequence segment of genomic DNA as cleaved by the restriction endonuclease, and a third sequence segment reverse complementary to the union of said first sequence segment and 5' overhang, if any, of the restriction endonuclease; (b) amplifying the library of DNA sequences by PCR using: a first reverse primer which hybridises to the 3' end region of the second sequence segment of the first or second target sequence positive strand; a second forward primer which hybridises to the 3' end region of the second sequence segment of the first target sequence antipositive strand; a third forward primer comprising a first portion hybridising to the 5' end region of the third sequence segment of the second target sequence antipositive strand and a second portion hybridising to the 3' end region of the second sequence segment of the second target sequence antipositive strand, wherein the first portion of the third forward primer has a length from 20% to 80% with respect to the total length of the third forward primer; (c) detecting DNA sequences amplified in step (b).