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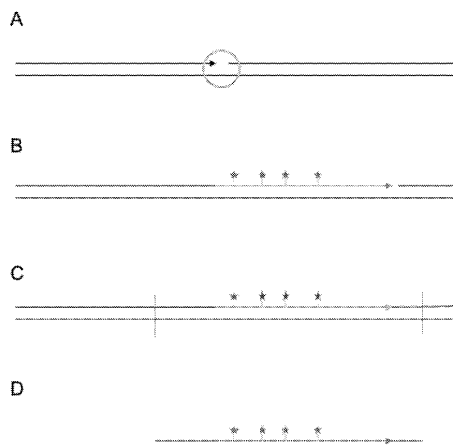
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(54) Title: NEW POLYMERASE AND USE THEREOF

Figure 1



(57) Abstract: The disclosure relates to a recombinant DNA dependent DNA polymerase having 5'-3' exonuclease activity and lacking 3'-5' exonuclease activity, wherein said polymerase is capable of extending DNA polymerisation from a single mismatched base pair and has an error rate of at least 1:1000. The disclosure further relates to a nucleic acid molecule encoding the recombinant DNA dependent DNA polymerase, a method for synthesizing double stranded DNA (dsDNA), a method for obtaining the position of a single strand break in a template dsDNA molecule, a method to introduce mutations in DNA of bacterial or eukaryotic cells, or organisms.

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