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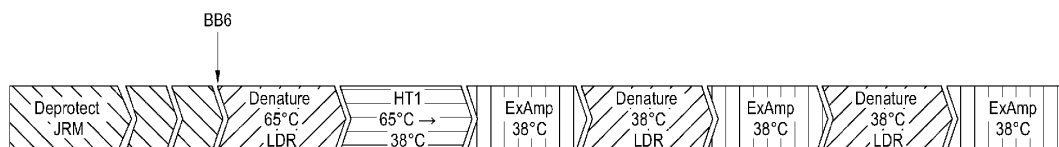


FIG. 1

(57) Abstract: The present invention relates to improvements in methods of high throughput nucleic acid sequencing, and in particular to improvements to methods of carrying out extension reactions during pairwise sequencing. The present invention relates to a method for carrying out a strand resynthesis extension reaction during pairwise sequencing, wherein said strand resynthesis extension reaction is carried out between a first sequencing read and a second sequencing read, and wherein said strand resynthesis extension reaction extends one or more immobilised primers to copy a first template strand to generate a second immobilised template strand; characterised in that the strand resynthesis extension reaction is carried out using a non-thermostable strand displacement polymerase at a temperature of less than 55 °C, preferably at 38 °C.



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