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(54) Title: METHODS OF NUCLEIC ACID AMPLIFICATION AND SEQUENCING

(57) Abstract

Methods for amplification and sequencing of at least one nucleic acid comprising the following steps: (1) forming at least one nucleic acid template comprising the nucleic acid(s) to be amplified or sequenced, wherein said nucleic acid(s) contains at the 5' end an oligonucleotide sequence Y and at the 3' end an oligonucleotide sequence Z and, in addition, the nucleic acid(s) carry at the 5' end a means for attaching the nucleic acid(s) to a solid support; (2) mixing said nucleic acid template(s) with one or more colony primers X, which can hybridize to the oligonucleotide sequence Z and carries at the 5' end a means for attaching the colony primers to a solid support, in the presence of a solid support so that the 5' ends of both the nucleic acid template and the colony primers bind to the solid support; (3) performing one or more nucleic acid amplification reactions on the bound template(s), so that nucleic acid colonies are generated and optionally, performing at least one step of sequence determination of one or more of the nucleic acid colonies generated. Solid supports, kits and apparatus for use in these methods.