Title (en)
METHODS FOR CHARACTERIZATION OF NUCLEIC ACID MOLECULES

Title (de)
VERFAHREN ZUR CHARAKTERISIERUNG VON NUKLEINSÄUREMOLEKÜLEN

Title (fr)
PROCEDES DE CARACTERISATION DE MOLECULES D'ACIDE NUCLEIQUE

Publication
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Application
EP 02747942 A 20020621

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Abstract (en)
[origin: WO03000920A2] To probe the characteristics of a target nucleic acid molecule or a population of target nucleic acid molecules, a local cross-sectional area, local charge, or local chemistry of a molecule is modified. The modified nucleic acid is contacted with a substrate that includes a detector that is responsive to the modification in the local cross-sectional area, local charge, or local chemistry of the nucleic acid molecule. The modified nucleic acid molecule traverses a defined and preferably molecular dimensioned volume on the substrate so that nucleotides of the modified nucleic acid molecule interact with the detector in sequential order, whereby data correlating with the cross-sectional area, local charge, or local chemistry of the nucleic acid molecule are obtained. The nucleic acid molecule may be modified in a number of locations along the molecule's length. Because the individual nucleotides of the nucleic acid molecule interact with the detector in sequential order, information regarding the location and composition of a plurality of modified sites along a single molecule can be obtained.

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