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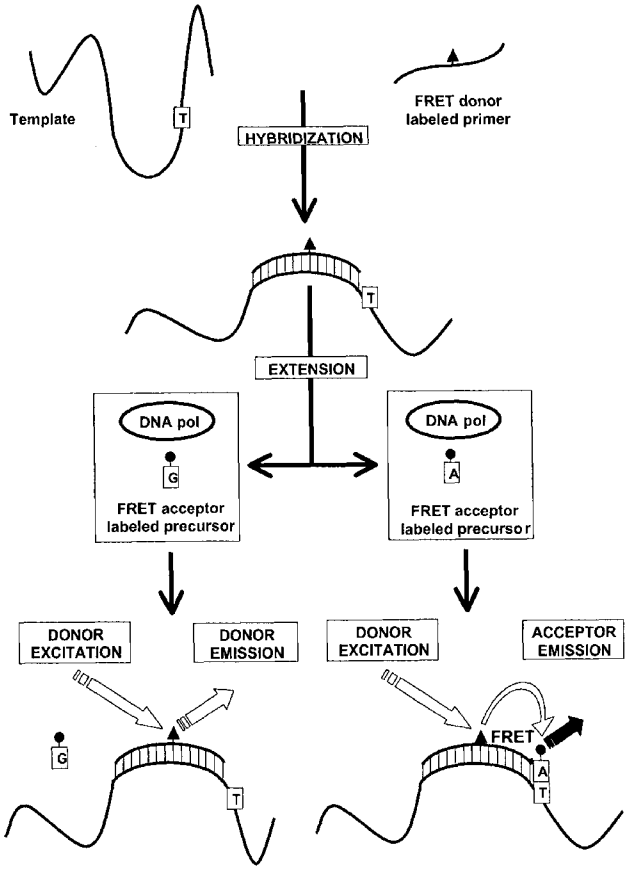
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(54) Title: NUCLEOTIDE DETECTION BY FLUORESCENCE RESONANCE ENERGY TRANSFER AND METHODS THEREOF



(57) Abstract: The present invention provides novel methods for detecting the incorporation of a nucleotide after a single base extension reaction. The methods make use of the Fluorescence Resonance Energy Transfer (FRET) effect generated by two fluorophores linked to the same nucleic acid strand. The methods can be used, either in solution or a solid support, for applications requiring the rapid and precise identification of a nucleotide in a specific position of a nucleic acid, as for genotyping studies.

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