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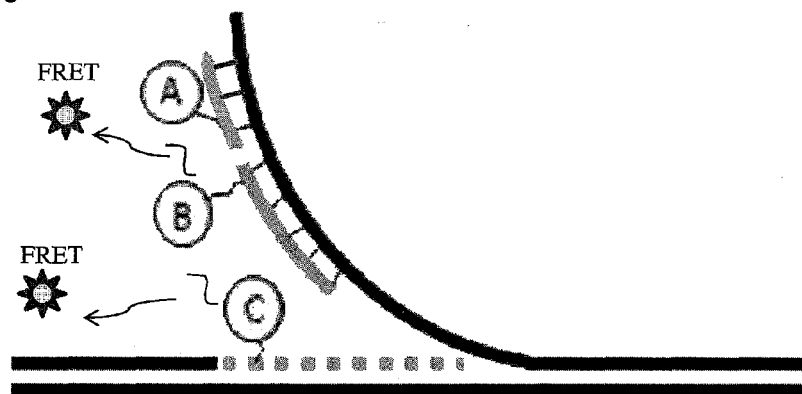
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(54) Title: METHODS AND DEVICES FOR SINGLE-MOLECULE WHOLE GENOME ANALYSIS

Fig 2



A tagging agent A, B or C are associated with the extended DNA during incorporation or hybridization; a co-localization event could be detected by a specific Fluorescent Resonance Energy Transfer (FRET) signal.

(57) Abstract: Provided are methods and devices for single-molecule genomic analysis. In one embodiment, the methods entail processing a double-stranded nucleic acid and characterizing said nucleic acid. These methods are useful in, e.g., determining structural variations and copy number variations between individuals.

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