Title (en)

SINGLE MOLECULE SEQUENCING METHOD

Title (de)

EINZELMOLEKÜL-SEQUENZIERUNGSVERFAHREN

Title (fr)

PROCEDE DE SEQUENCAGE PAR MOLECULE INDIVIDUELLE

Publication

EP 1349649 A2 20031008 (DE)

Application

EP 01947427 A 20010629

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Abstract (en)

[origin: WO0202225A2] The invention relates to a method for single molecule sequencing of nucleic acids and to a device for carrying out said method.

[origin: WO0202225A2] The invention relates to a method for single molecule sequencing of nucleic acids that comprises the following steps: a) providing a support particle with a nucleic acid molecule immobilized thereon, substantially all nucleotide components of at least one base type in at least one strand of the nucleic acid molecule carrying a fluorescent label, b) introducing the support particle into a microchannel sequencing device, c) retaining the support particle in the sequencing device, d) progressively cleaving individual nucleotide components from the immobilized nucleic acid molecule, e) guiding the cleaved off nucleotide components through a microchannel by means of a hydrodynamic flow, and f) identifying the base sequence of the nucleic acid molecule by the order of the cleaved off nucleotide components. The invention also relates to a device for carrying out the inventive method.

IPC 1-7

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IPC 8 full level

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C-Set (source: EP US)

C12Q 1/6869 + **C12Q 2565/629** + **C12Q 2521/319**

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GÖSCH ET AL.: "HYDRODYNAMIC FLOW PROFILING IN MICROCHANNEL STRUCTURES BY SINGLE MOLECULE FLUORESCENCE CORRELATION SPECTROSCOPY", ANALYTICAL CHEMISTRY, vol. 72, no. 14, 10 June 2000 (2000-06-10), COLUMBUS, US, pages 3260 - 3265, XP002180726

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