

Title (en)

NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO AND USES THEREFOR

Title (de)

NANOPARTIKEL MIT DARAN GEBUNDENEN OLIGONUKLEOTIDEN UND VERWENDUNGEN DAFÜR

Title (fr)

DETECTION ELECTRIQUE D'ADN BASEE SUR UN ENSEMBLE ET METTANT EN APPLICATION DES SONDAS SOUS FORME DE NANOPARTICULES

Publication

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Application

EP 02799155 A 20021008

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Abstract (en)

[origin: WO03035829A2] The invention provides methods of detecting a nucleic acid. The methods comprise contacting the nucleic acid with one or more types of particles having oligonucleotides attached thereto. In one embodiment of the method, the oligonucleotides are attached to nanoparticles and have sequences complementary to portions of the sequence of the nucleic acid. A detectable change (preferably a color change) is brought about as a result of the hybridization of the oligonucleotides on the nanoparticles to the nucleic acid. The invention also provides compositions and kits comprising particles. The invention further provides methods of synthesizing unique nanoparticle-oligonucleotide conjugates, the conjugates produced by the methods, and methods of using the conjugates. In addition, the invention provides nanomaterials and nanostructures comprising nanoparticles and methods of nanofabrication utilizing nanoparticles. Finally, the invention provides a method of separating a selected nucleic acid from other nucleic acids.

IPC 1-7

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IPC 8 full level

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IPC 8 main group level

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C-Set (source: EP)

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2. **C12Q 1/6834** + **C12Q 2563/155**
3. **C12Q 1/6834** + **C12Q 2565/607** + **C12Q 2563/155**
4. **C12Q 1/6834** + **C12Q 2565/507** + **C12Q 2563/155**

Cited by

US11365409B2; US10640763B2; US11535882B2; US9335292B2; US11460468B2; US10669570B2; US10676779B2; US11332776B2

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