Title (en)

BIOSENSOR FOR AND METHOD OF ELECTROGENERATED CHEMILUMINESCENT DETECTION OF NUCLEIC ACID ADSORBED TO A SOLID SURFACE

Title (de)

VERFAHREN ZUM NACHWEIS VON AUF EINER FESTEN OBERFLÄCHE ADSORBIERTER NUKLEINSÄURE DURCH ELEKTROGENERIERTE CHEMILUMINESZENZ UND BIOSENSOR DAFÜR

Title (fr)

BIOCAPTEUR ET PROCEDE DESTINES A LA DETECTION PAR LUMINESCENCE ELECTROPHOTOCHIMIQUE D'ACIDES NUCLEIQUES ADSORBES SUR UNE SURFACE SOLIDE

Publication

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Application

EP 95930881 A 19950825

Priority

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Abstract (en)

[origin: WO9606946A1] Single-strand DNA was immobilized on an electrode covered with an aluminum alkanebisphosphonate film by immersing it in an ss-DNA solution. The immobilized ss-DNA labeled with Ru(bpy)3<2+> was detected by monitoring the electrogenerated chemiluminescence (ECL) produced upon oxidation in a solution containing tri-n-propylamine. After immobilization of unlabeled ss-DNA, a complementary labeled strand DNA was hybridized to produce ds-DNA on the surface. The extent of DNA hybridization was determined by ECL of the labeled Ru(bpy)3<2+>. Surface immobilized ds-DNA could also be detected by observing the ECL of intercalated Ru(phen)3<2+>. Transmission electron microscopy (TEM) was employed to image the film and the immobilized DNA.

IPC 1-7

C12Q 1/00; C12Q 1/70; C12Q 1/68; C12P 19/34; C07H 21/04; C25D 11/12; G01N 33/53

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 9606946A1

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