

Title (en)
NON-ENZYMATIC LIPOSOME-LINKED CLOSELY SPACED ARRAY ELECTRODES ASSAY (NEL-ELA) FOR DETECTING AND QUANTIFYING NUCLEIC ACIDS

Title (de)
NICHT-ENZYMATISCHER LIPOSOMEN-GEBUNDENER, AUS EINER DICHTGEPACKTEN ELEKTRODENANORDNUNG BESTEHENDER TEST (NEL-ELA) ZUR DETEKTION UND QANTIFIZIERUNG VON NUKLEINSÄUREN

Title (fr)
ANALYSE NON ENZYMATIQUE A LIAISON LIPOSOMIQUE AVEC ELECTRODES EN RESEAU ETROITEMENT ESPACEES (NEL-ELA) POUR DETECTER ET QUANTIFIER DES ACIDES NUCLEIQUES

Publication
EP 1409728 A2 20040421 (EN)

Application
EP 02735236 A 20020408

Priority
• EP 0203892 W 20020408
• US 28216401 P 20010409

Abstract (en)
[origin: WO02081739A2] Target nucleic acids or amplicons thereof bound to immobilized capture oligonucleotides by molecular biological reations, are detected and quantified with affinity liposomes containing encapsulated electrochemically detectable reporter molecules susceptible to redox recycling and surface-attached affinity components capable of specifically binding to captured target nucleic acids or amplicons thereof in a structure restricted manner. Specifically bound affinity liposomes are lysed by temperature- or detergent-mediated mechanisms and released reporter molecules are quantitated via redox recycling using voltammetry in conjunction with a closely spaced array of thin film noble metal electrodes. The quantity of released reporter molecules is a proportional measure of the quantity of target nucleic acids in the sample. For amplified assay procedures polymeric carrier molecules capable of binding multiple affinity liposomes or preformed complexes of affinity liposomes are utilized.

IPC 1-7
C12Q 1/68; **G01N 27/49**

IPC 8 full level
C12Q 1/68 (2006.01); **C12Q 1/6837** (2018.01); **C12Q 1/6897** (2018.01); **G01N 27/403** (2006.01); **G01N 27/49** (2006.01)

CPC (source: EP)
C12Q 1/6837 (2013.01); **C12Q 1/6897** (2013.01)

Citation (search report)
See references of WO 02081739A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02081739 A2 20021017; **WO 02081739 A3 20040129**; EP 1409728 A2 20040421

DOCDB simple family (application)
EP 0203892 W 20020408; EP 02735236 A 20020408