

Title (en)
METHOD AND APPARATUS USING A SURFACE-SELECTIVE NONLINEAR OPTICAL TECHNIQUE FOR DETECTION OF PROBE-TARGET INTERACTIONS

Title (de)
VERFAHREN UND VORRICHTUNG MIT EINER OBERFLÄCHENSELEKTIVEN, NICHTLINEAREN OPTISCHEN TECHNIK ZUM NACHWEIS VON SONDEN-ZIELMOLEKÜL-WECHSELWIRKUNGEN

Title (fr)
PROCEDE ET APPAREIL UTILISANT UNE TECHNIQUE OPTIQUE NON LINEAIRE SELECTIVE EN SURFACE POUR LA DETECTION D'INTERACTIONS CIBLE-SONDE

Publication
EP 1346064 A1 20030924 (EN)

Application
EP 01957166 A 20010717

Priority

- US 0122411 W 20010717
- US 25386200 P 20001129
- US 26024901 P 20010108
- US 26577501 P 20010201
- US 27864101 P 20010327

Abstract (en)
[origin: WO0244412A1] A surface-selective nonlinear optical technique, such as second harmonic or sum frequency generation, is used to detect reactions between surface-attached probes and labeled targets or used to perform imaging of a surface. The surface-selective optical technique allows detection of only those target components near the interface while ignoring those present in the sample bulk. In addition, the direction of the nonlinear light is scattered from the surface in a well-defined direction and because of this, its incidence at a detector some distance from the surface may be easily mapped to a specific and known location on the surface.

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C12Q 1/68; **C12M 1/34**; **G01N 33/566**; **G01N 33/543**

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CPC (source: EP)
B82Y 30/00 (2013.01); **C12Q 1/6816** (2013.01); **C12Q 1/6837** (2013.01); **G01N 21/55** (2013.01); **G01N 33/5008** (2013.01); **G01N 33/502** (2013.01); **G01N 33/54373** (2013.01); **G01N 2500/02** (2013.01)

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WO 0244412 A1 20020606; **WO 0244412 A8 20031211**; AU 7893701 A 20020611; CA 2430430 A1 20020606; EP 1346064 A1 20030924; EP 1346064 A4 20050119; IL 156114 A0 20031223

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