Title (en)

REACTION WELLS, ASSEMBLY THEREOF, IMMUNOASSAY APPARATUS AND METHOD USING SUCH WELL ASSEMBLIES

Title (de)

REAKTIONSKÜVETTEN, KÜVETTENANORDNUNG, IMMUNOLOGISCHE ANALYSE-VORRICHTUNG UND -VERFAHREN, DIE SOLCHE KÜVETTEN VERWENDEN

Title (fr)

CUVETTES DE REACTION, ENSEMBLE DE TELLES CUVETTES, APPAREIL DE DOSAGE IMMUNOLOGIQUE ET PROCEDE METTANT EN OEUVRE DE TELS ENSEMBLES DE CUVETTES

Publication

EP 1031025 A1 20000830 (FR)

Application

EP 99942955 A 19990913

Priority

- FR 9902170 W 19990913
- FR 9811375 A 19980911

Abstract (en)

[origin: FR2783321A1] The reaction vessel has a reagent and a substrate with a luminescent chemical substance and an opening (37) for filling. The walls of the vessel are sealed against emitted light from the luminescence, apart from a window to read the intensity of the emitted light from the reactive mixture formed by the sample under test, the reagent and the substrate. The reading window is the filling opening (37), and it is surrounded by a zone (39) with a coating to block the passage of light. The reaction vessels (28) are contained within a mono-block (26) structure. Independent claims are included for the following: (i) an automatic immunological dosing system with a black chamber system temporarily sealed against external light, where the black chamber has a photo-sensor to measure light intensity at a vessel (28) or an assembly of reaction vessels; and (ii) sample testing where the intensity of luminescent light is measured at the interior of a reaction vessel (28), and a temporary black chamber is formed with a reaction vessel (28), an opaque wall and the photo sensor. Preferred Features: An opaque coating is applied round the vessel window, where a central opening allows light to pass from the reaction vessel to the photo-sensor. A plate carries the vessel washing system and the photo-sensors. The photo-sensor system has a moving unit to apply the opaque coating at the reading window of the reaction vessel. Optical insulation is provided at the photo-sensor, and especially a photomultiplier. The electrical values are registered at the sensor while it is in the dark and the insulation is closed. The mobile unit opens and closes the insulation shrouding. The assembly has a lamp, controlled from outside the black chamber formed by the vessel walls and the photo-sensor, to test the light sealing, and the immunological test is rejected if the photo-sensor detects emitted light. The light sealing is checked at each reaction vessel.

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G01N 21/76; G01N 21/03

IPC 8 full level

G01N 21/03 (2006.01); **G01N 21/76** (2006.01)

CPC (source: EP US)

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Citation (search report)

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DOCDB simple family (application)

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