

Title (en)

DEVICES HAVING SUBSURFACE FLOW AND THEIR USE IN DIAGNOSTIC ASSAYS

Title (de)

VORRICHTUNGEN MIT DURCHFLUSS UNTER IHRER OBERFLAECHE ZUR DIAGNOSTISCHEN ANALYSE

Title (fr)

DISPOSITIFS A ECOULEMENT DE SOUS-SURFACE ET LEUR UTILISATION POUR EFFECTUER DES TITRAGES

Publication

**EP 0737104 A1 19961016 (EN)**

Application

**EP 95905970 A 19941216**

Priority

- US 9414510 W 19941216
- US 17465193 A 19931228

Abstract (en)

[origin: WO9517965A1] The present invention is directed to improving the performance of assays using a disposable assay device which includes a porous material (20) in liquid communication with a capillary track (18). In particular, the capillary track (18) is used in conjunction with the solid support to direct test sample and assay reagents directly to a defined reaction site (22) on or in the porous material (20). Signal development at the reaction site (22) indicates the assay result. The present invention is also directed to the construction of a disposable assay device (10) which includes a capillary track (18). In particular, the capillary track is formed by printing a fluid insoluble material (25a), in the reverse image of the desired capillary track (18), on a film layer (23) and then capping the printed material. Alternatively, the capillary track (18) is formed by printing a fluid insoluble material, in the reverse image (30) of the desired capillary track (18), on a porous material (25b) which is then sandwiched between two film layers (23, 26). The present invention is also directed to a drop-forming means (50) which may incorporate one or more assay reagents to allow for improved sample processing and reagent addition, mixing and incubation.

IPC 1-7

**B01L 3/00**; G01N 33/52; G01N 33/543; B01L 3/02

IPC 8 full level

**G01N 31/22** (2006.01); **B01L 3/00** (2006.01); **B01L 3/02** (2006.01); **G01N 33/52** (2006.01)

CPC (source: EP)

**B01L 3/0241** (2013.01); **B01L 3/5023** (2013.01); **G01N 33/521** (2013.01); **B01L 3/5027** (2013.01); **B01L 2200/027** (2013.01); **B01L 2200/16** (2013.01); **B01L 2300/0681** (2013.01); **B01L 2300/0825** (2013.01); **B01L 2300/087** (2013.01); **B01L 2300/0887** (2013.01); **B01L 2400/0406** (2013.01)

Citation (search report)

See references of WO 9517965A1

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

**WO 9517965 A1 19950706**; AU 1437995 A 19950717; CA 2178330 A1 19950706; EP 0737104 A1 19961016; JP H09508200 A 19970819

DOCDB simple family (application)

**US 9414510 W 19941216**; AU 1437995 A 19941216; CA 2178330 A 19941216; EP 95905970 A 19941216; JP 51809495 A 19941216