

Title (en)

PROCESS AND DEVICE FOR CARRYING OUT FLUORESCENCE IMMUNOASSAYS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DURCHFÜHRUNG VON FLUORESENZIMMUNTESTS

Title (fr)

METHODE ET DISPOSITIF DE DOSAGE IMMUNOLOGIQUE FLUOROMETRIQUE

Publication

**EP 1027593 A1 20000816 (DE)**

Application

**EP 98959766 A 19981027**

Priority

- DE 9803154 W 19981027
- DE 19747572 A 19971028

Abstract (en)

[origin: DE19747572C1] Apparatus comprises an optical guide (1) which is accommodated in a measurement chamber (9) within a piston (6). The cylinder (7) interior which contains the piston connects to the measuring chamber (9) through an inlet formed in the piston itself. An Independent claim is included for the corresponding method of carrying out testing. Preferred features: Spacing between measuring chamber internal surface and optical guide, is less than 2 mm. In the piston, a sample collection chamber (10) connects to the measurement chamber. A piston sealing surface (2) couples light into and out from the optical guide. A light absorber (5) is located at the other end of the piston. On the absorber and/or on the optical guide (1) there are guidance projections. A closed penetration (3) is formed in the sealing surface. The cylinder has a supply opening (11) with valve closing it. Fluid-absorbent material is placed in the sample chamber. In or ahead of the inlet to the measuring chamber, a filter and/or membrane and/or an immuno column is/are arranged. A lens and optical filter transparent to the fluorescent light intervene in the exit beam path from the optical guide, ahead of the detector. The lens has recesses through which light from the source is directed onto the optical guide. A second light source and optical filter can be moved into the beam path, exciting fluorescence of a second marker substance, at a different wavelength. There is a second lens between optical filter(s) and the detector. Optical filters are opaque to both light sources. There are optical filters in the beam path between sources and the surface (2).

IPC 1-7

**G01N 21/64; G01N 21/77**

IPC 8 full level

**G01N 21/03 (2006.01); G01N 21/64 (2006.01); G01N 21/77 (2006.01); G01N 33/536 (2006.01)**

CPC (source: EP US)

**G01N 21/6428 (2013.01 - EP US); G01N 21/648 (2013.01 - EP US); G01N 21/7703 (2013.01 - EP US); G01N 2021/6419 (2013.01 - EP US); G01N 2021/6441 (2013.01 - EP US); G01N 2021/7709 (2013.01 - EP US); G01N 2021/7786 (2013.01 - EP US); Y10S 435/808 (2013.01 - EP US); Y10S 436/805 (2013.01 - EP US)**

Citation (search report)

See references of WO 9922222A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI NL SE

DOCDB simple family (publication)

**DE 19747572 C1 19990408; CA 2308248 A1 19990506; EP 1027593 A1 20000816; JP 2001521167 A 20011106; RU 2213341 C2 20030927; US 6440748 B1 20020827; WO 9922222 A1 19990506**

DOCDB simple family (application)

**DE 19747572 A 19971028; CA 2308248 A 19981027; DE 9803154 W 19981027; EP 98959766 A 19981027; JP 2000518268 A 19981027; RU 2000110747 A 19981027; US 53050500 A 20000718**