



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification<sup>6</sup> : <b>B01L 3/02, G01N 33/543</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 99/25476</b></p> <p>(43) International Publication Date: 27 May 1999 (27.05.99)</p>
<p>(21) International Application Number: PCT/US98/23247</p> <p>(22) International Filing Date: 13 November 1998 (13.11.98)</p> <p>(30) Priority Data: 60/065,798 14 November 1997 (14.11.97) US</p> <p>(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/065,798 (CIP) Filed on 14 November 1997 (14.11.97)</p> <p>(71) Applicant (for all designated States except US): GEN-PROBE INCORPORATED [US/US]; 10210 Genetic Center Drive, San Diego, CA 92121 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): ACOSTA, Galo, F. [US/US]; 7155-E Calabria Court, San Diego, CA 92122 (US). BRANSKY, Jeffrey, D. [US/US]; 357 Coventry Circle, Clarendon Hills, IL 60514 (US). CASE, Robert [US/US]; 680 N. Lake Shore Drive, Chicago, IL 60611 (US). FOSTER, Gregory, J. [US/US]; 5231 W. Berteau Avenue, Chicago, IL 60641 (US). MYERS, Kristi, K. [US/US]; 5130 Benton Place, San Diego, CA 92116 (US).</p>	<p>SHIMEI, Thomas, M. [US/US]; 9385 Stargaze Avenue, San Diego, CA 92129 (US). WOODHEAD, Andrew, J. [GB/GB]; Stonewall Cottage, Warrage Road, Ragland NP5 2LD (GB).</p> <p>(74) Agents: LIPPITT, Raymond, F. et al.; Pillsbury Madison &amp; Sutro LLP, 1100 New York Avenue, Washington, DC 20005 (US).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 16 September 1999 (16.09.99)</p>	
<p>(54) Title: ASSAY WORK STATION</p>		
<p>(57) Abstract</p>		
<p>A work station for simultaneously performing multiple assays includes a base structure (100), a receptacle rack assembly (200) received within a receptacle rack well formed in the base structure, a pipette rack assembly (300) received within a pipette rack well formed in the base structure, a multiple conduit substance transfer device (400), and substance transfer device positioning structure (500). The receptacle rack assembly (200) holds a plurality of receptacles in which a plurality of individual assays are performed, and the pipette rack assembly (300) holds a plurality of contamination limiting pipettes. The substance transfer device (400) is capable of simultaneously dispensing (441) substances into two or more receptacles or simultaneously removing (421) substances from two or more receptacles. Alternatively, the substance transfer device is capable of simultaneously dispensing (441) substances into two or more receptacles, and, at about the same time, simultaneously removing (421) substances from two or more receptacles. The positioning structure (500) permits the substance transfer device (400) to be positioned with respect to the receptacle rack assembly (200) or the pipette rack assembly (300).</p>		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/23247

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 6 B01L3/02 G01N33/543

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B01L G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 092 184 A (DAVIDSON JR ROGER H ET AL) 3 March 1992 (1992-03-03) column 5, line 40 - column 6, line 68; figures column 7, line 66 - column 8, line 2 ---	1,2,22, 24
A	WO 91 07662 A (BIOTROL SA LAB) 30 May 1991 (1991-05-30)	1,2,22, 24
X	page 23, line 21 - page 25, line 28; figures 2,3 ---	34
A	WO 97 15809 A (DYNEX TECHNOLOGIES GUERNSEY LT;INDER DAVID JOHN; HIGGS PAUL ANTHONY; L) 1 May 1997 (1997-05-01) page 3, line 35 - page 4, line 10; figure 1 page 8, line 17 - line 35; figure 5 ---	1,2,22, 24
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "&" document member of the same patent family

Date of the actual completion of the international search

19 July 1999

Date of mailing of the international search report

27. 07. 99

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Hocquet, A

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/23247

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 210 014 A (CETUS CORP) 28 January 1987 (1987-01-28) page 80, line 1 - page 85, line 10; figures 1,24-27 page 85, line 32 - line 34 ---	1,2,22, 24
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Y	US 5 525 302 A (ASTLE THOMAS W) 11 June 1996 (1996-06-11) column 6, line 12 - line 26; figure 1A column 9, line 12 - line 18; figure 1A ---	26
A	US 4 478 094 A (SALOMAA KARI ET AL) 23 October 1984 (1984-10-23) column 4, line 31 - line 62; figures 6,7 column 3, line 55 - line 64; figure 1 ---	26
A	EP 0 317 286 A (GENE TRAK SYSTEMS) 24 May 1989 (1989-05-24) column 7, line 11 - line 21; figures 4,6 -----	1,26

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 98/23247

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1,2-21,22-23,24-25,34-37

substance transfer device constructed to simultaneously remove substance from receptacles of a second set at about the same time that it is simultaneously dispensing substance into receptacles of a first set, and workstations comprising it.

2. Claims: 26-33

workstation comprising means for receiving a structure holding receptacles, a structure holding contamination limiting elements and a substance transfer device positioning structure

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/23247

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