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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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[Continued on next page]

(54) Title: PATIENT-ENACTED SAMPLING TECHNIQUE

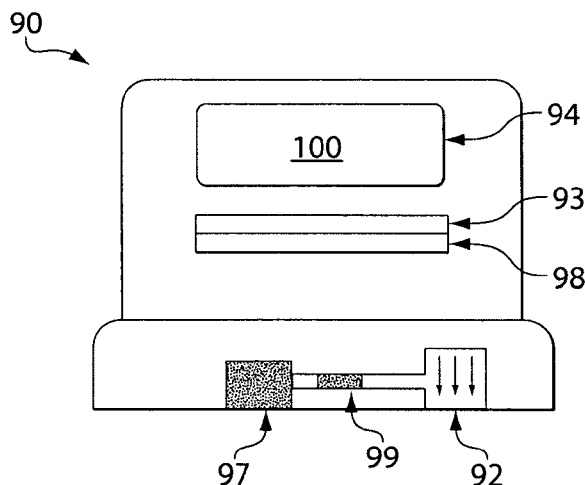


Fig. 1B

(57) Abstract: The present invention is generally directed to systems and methods for sampling fluids from subjects. The fluid may be any suitable bodily fluid, e.g., blood or interstitial fluid. In some cases, the subject is a patient. The subject may have a device that can be applied to the skin of the subject (e.g., by the subject, or another person), and the device is able to obtain a sample of fluid. The fluid may be stored within a reservoir in the device, and the fluid may be obtained from the subject at any convenient time, e.g., at home, away from a healthcare setting, etc. In some embodiments, the device, or a portion thereof, may be returned to a clinical and/or laboratory setting to analyze the fluid stored within the device.



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- *with international search report (Art. 21(3))*
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INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2010/003045

A. CLASSIFICATION OF SUBJECT MATTER  
 INV. A61M5/32 A61B5/145 A61B5/151 A61B5/154 A61B5/155  
 A61B5/157  
 ADD.  
 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)  
 A61B A61M A61J

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)  
 EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/169411 A1 (SHERMAN FAIZ FEISAL [US] ET AL) 14 November 2002 (2002-11-14)	1,3-6, 11-20, 22,78, 79,81-88
Y	paragraph [0001] paragraph [0006] paragraph [0062] - paragraph [0087] paragraph [0109]; figures 1, 4, 9, 10, 22-24	2,7,9, 10, 43-45, 48-50,80
Y	----- WO 2005/025413 A2 (HOLMES ELIZABETH A [US]) 24 March 2005 (2005-03-24) page 12, lines 1-29	2,7,80
Y	----- EP 1 611 837 A2 (LIFESCAN SCOTLAND LTD [GB]) 4 January 2006 (2006-01-04) figure 3	9,10
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Further documents are listed in the continuation of Box C.

See patent family 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
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search  15 July 2011	Date of mailing of the international search report  27/07/2011
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Rapp, Alexander
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2010/003045

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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.: **89-91**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Claims 89-91 relate to a method for the treatment of the human body by therapy.**
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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 fees, this Authority did not invite payment of additional fees.
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.:  
**1-7, 9-20, 22, 37-62, 78-88**
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 and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- 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: 1-7, 9-20, 22, 78-88

Invention I relates to methods for obtaining a fluid sample from the skin or from beneath the skin of a subject, comprising as potential special technical feature the step of transporting a fluid storage reservoir including a stored sample of fluid to a clinical and/or laboratory setting. The invention solves the technical problem of facilitating an elaborate analysis of a fluid sample taken in a home us environment.

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2. claims: 1, 8

Invention II relates to a method for obtaining a fluid sample from the skin or from beneath the skin of a subject, comprising as potential special technical feature a support structure comprising a pressure sensitive adhesive in order to allow for more reliable fluid extraction.

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3. claims: 1, 21, 25-27, 46, 65-67

Invention III relates to devices and methods for extracting a fluid from the skin or from beneath the skin of a subject, the device comprising as potential special technical feature a self-contained vacuum chamber for improving the contact of the fluid transporter with the skin.

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4. claims: 1, 23, 24, 46, 63, 64

Invention IV relates to devices and methods for extracting a fluid from the skin or from beneath the skin of a subject, the device comprising as potential special technical features a stabilizer for the sample withdrawn from the subject in order to allow for long term storage of the sample.

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5. claims: 1, 28-36, 46, 68-77

Invention V relates to devices and methods for extracting a fluid from the skin or from beneath the skin of a subject, the device comprising as potential special technical feature an activator activated by a number of different events in order to assure activation of the device at the right point in time.

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6. claims: 37-62

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

Invention VI relates to devices for obtaining a sample of blood from the skin and/or from beneath the skin of a subject, comprising as potential special technical feature an indicator of one or more conditions associated with the introduction of fluid into the storage reservoir in order to ensure the presence of a valid sample when the device is used by a non-professional person.

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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2010/003045

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/088851 A1 (PELIKAN TECHNOLOGIES INC [US]; FREEMAN DOMINIQUE M [US]; BOECKER DIRK) 30 October 2003 (2003-10-30)	37-42, 46,47, 51-56, 58,60-62
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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