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

## (19) World Intellectual Property Organization

International Bureau



## 

# (10) International Publication Number WO 2011/161681 A3

# (43) International Publication Date 29 December 2011 (29.12.2011)

- (51) International Patent Classification: *A61B 5/151* (2006.01)
- (21) International Application Number:

PCT/IL2011/000504

(22) International Filing Date:

23 June 2011 (23.06.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/822,650

24 June 2010 (24.06.2010)

US

- (71) Applicant (for all designated States except US): RAPIDX LTD. [IL/IL]; Azrieli, Traingle Building Menachem, Begin 132, 67011 Tel Aviv (IL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): TAMIR, Nili [IL/IL]; 3a Hashoftim Street, 30900 Zihron Yaakov (IL).
- (74) Agent: REINHOLD COHN AND PARTNERS; P.O.B. 13239, 61131 Tel-Aviv (IL).
- (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, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

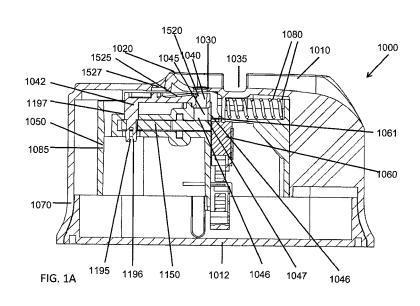
#### Published:

with international search report (Art. 21(3))

(88) Date of publication of the international search report:

5 April 2012

(54) Title: DEVICE AND SYSTEM FOR BLOOD SAMPLING



(57) Abstract: A medical device (1000) is presented for reduced-pain blood sampling and testing. The device comprises a housing (1070) defining a finger site (1010) for supporting a user's finger or a portion thereof within said finger site during the device operation; piercing, sampling and testing assemblies sequentially actuatable to successively initiate piercing, sampling and testing operational modes of the device; a carriage (1050) at least partially accommodated within said housing and being adapted for movement with respect to said finger site between its first position corresponding to the piercing mode of the device and a second position corresponding to the sampling and testing modes of the device, the device being thereby capable of operating in the piercing, sampling and testing modes while at a static position of the user's finger.



## **INTERNATIONAL SEARCH REPORT**

International application No
PCT/IL2011/000504

|  |  | •  |                       |  |  |  |
|--|--|--|-----------------------|--|--|--|
|  | FICATION OF SUBJECT MATTER<br>A61B5/151  |  |                       |  |  |  |
| According to   | b International Patent Classification (IPC) or to both national classifica   | tion and IPC   |                       |  |  |  |
| B. FIELDS  | SEARCHED   |  |                       |  |  |  |
| Minimum do<br>A61B   | oumentation searched (classification system followed by classificatio  | n symbols)   |                       |  |  |  |
|  | ion searched other than minimum documentation to the extent that su  |  | rohed                 |  |  |  |
| Electronic d   | ata base consulted during the international search (name of data bas   | e and, where praotical, search terms used)   |                       |  |  |  |
| EPO-In   | ternal   |  |                       |  |  |  |
| C. DOCUME  | ENTS CONSIDERED TO BE RELEVANT   |  |                       |  |  |  |
| Category*  | Citation of document, with indication, where appropriate, of the rele  | vant passages  | Relevant to claim No. |  |  |  |
| А  | WO 2009/081405 A2 (RAPIDX LTD [II<br>NILI [IL]) 2 July 2009 (2009-07-0<br>page 19, line 13 - page 22, line<br>figures 2A-2C  | e 19, line 13 - page 22, line 18   |                       |  |  |  |
| А  | US 5 662 127 A (DE VAUGHN DONALD<br>2 September 1997 (1997-09-02)<br>column 7, lines 28-51<br>column 11, line 28 - column 12, l<br>figures   | ,  | 1-17,<br>21-25        |  |  |  |
| А  | US 2008/033319 A1 (KL0EPFER HANS<br>AL) 7 February 2008 (2008-02-07)<br>paragraphs [0058] - [0060], [011<br>[0125]<br>figures 22-31  |  | 1-17,<br>21-25        |  |  |  |
| Furth  | ner documents are listed in the continuation of Box C.   | X See patent family annex.   |                       |  |  |  |
| * Special o  | ategories of oited documents :   | "T" later document published after the inter   |                       |  |  |  |
| "A" document defining the general state of the art which is not controlled to be of positive to be of positive to the controlled to be of positive to the controlled to the co |  |  |                       |  |  |  |
| 1  | locument but published on or after the international   | invention "X" document of particular relevance; the cl                                 |                       |  |  |  |
| "L" docume   | nt which may throw doubts on priority claim(s) or  | cannot be considered novel or cannot involve an inventive step when the doc            | ument is taken alone  |  |  |  |
| citation   | n or other special reason (as specified)   | "Y" document of particular relevance; the cl<br>cannot be considered to involve an inv | entive step when the  |  |  |  |
| other r  | "O" document referring to an oral disclosure, use, exhibition or other means of the |  |                       |  |  |  |
|  | ent published prior to the international filing date but<br>an the priority date claimed   | "&" document member of the same patent f   | amily                 |  |  |  |
| Date of the  | actual completion of the international search  | Date of mailing of the international sear  | ch report             |  |  |  |
| 13   | 2 October 2011   | 19/12/2011   |                       |  |  |  |
| Name and n   | nailing address of the ISA/<br>European Patent Office, P.B. 5818 Patentlaan 2  | Authorized officer   |                       |  |  |  |
|  | NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040,<br>Fax: (+31-70) 340-3016   | Schultz, Ottmar  |                       |  |  |  |

International application No. PCT/IL2011/000504

## **INTERNATIONAL SEARCH REPORT**

| 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.: because they relate to subject matter not required to be searched by this Authority, namely:   |
| 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   |
| 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.:  |
| 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.:  See annex   |
| 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.  |

## **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No
PCT/IL2011/000504

| Patent document cited in search report |    | Publication<br>date |                      | Patent family<br>member(s)                     |          | Publication<br>date                                  |
|--|----|---------------------|----------------------|--|----------|--|
| WO 2009081405                          | A2 | 02-07-2009          | US<br>WO             | 2010261988<br>2009081405                       |          | 14-10-2010<br>02-07-2009                             |
| US 5662127                             | Α  | 02-09-1997          | US<br>US             | 5662127<br>5843112                             |          | 02-09-1997<br>01-12-1998                             |
| US 2008033319                          | A1 | 07-02-2008          | CA<br>EP<br>US<br>WO | 2657511<br>2068698<br>2008033319<br>2008019028 | A2<br>A1 | 14-02-2008<br>17-06-2009<br>07-02-2008<br>14-02-2008 |

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-17, 21-25

---

2. claim: 18

A hollow liquid reservoir comprising a bottom plate movable between an open and a closed state;

---

3. claims: 19, 20

A band to apply pressure to a finger;

---