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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/084546 A3

(51) International Patent Classification[7]: A61B 5/15

(21) International Application Number:
PCT/EP2005/002357

(22) International Filing Date: 7 March 2005 (07.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04005385.2 6 March 2004 (06.03.2004) EP
60/642,956 11 January 2005 (11.01.2005) US

(71) Applicant *(for DE only)*: **ROCHE DIAGNOSTICS GMBH** [DE/DE]; Sandhofer Strasse 116, 68305 Mannheim (DE).

(71) Applicant *(for all designated States except DE, US)*: **F. HOFFMANN-LA ROCHE AG** [CH/CH]; Grenzacherstrasse 124, CH-4070 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CALASSO, Irio** [IT/CH]; Kronenhofweg 1, CH-6415 Arth (CH). **GRISS, Patrick** [CH/CH]; Elsastrasse 20, CH-8004 Zuerich (CH). **SAROFIM, Emad** [CH/CH]; Loretostrasse 9, CH-6300 Zug (CH). **JAEGGI, Rainer** [CH/CH]; Ringstrasse 5, CH-5610 Wohlen (CH). **KRAEMER, Uwe** [DE/DE]; Neue Schulstrasse 21, 68549 Ilvesheim (DE). **HASKER, Dave** [US/US]; 3431 Hillview Avenue, Palo Alto, CA 94304-1397 (US). **ZIMMER, Volker** [DE/DE]; Burgstrasse 17, 67229 Laumersheim (DE). **SCHMID, Wilfried** [DE/DE]; Nietzschestrasse 32, 68165 Mannheim (DE). **FUERST, Otto** [DE/DE]; August-Bebel-Strasse 42, 68519 Viernheim (DE). **LIST, Hans** [DE/DE]; Siegfriedstrasse 27, 64754 Hesseneck-Kailbach (DE). **HAAR, Hans-Peter** [DE/DE]; Waldstrasse 2, 69168 Wiesloch (DE). **ARNITZ, Theo** [DE/DE]; Schanzenstr. 13, 68753 Waghaeusel (DE). **ROE, Steven, N.** [US/US]; 21 Hillbarn Court, San Mateo, CA 94403 (US).

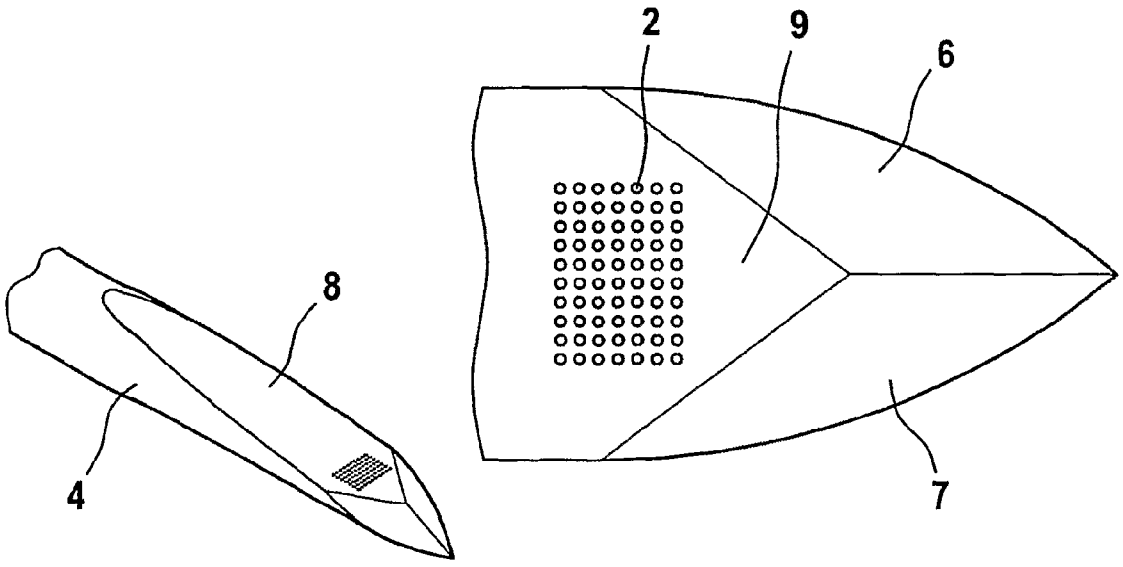
(74) Common Representative: **ROCHE DIAGNOSTICS GMBH**; Patent Department, 68298 Mannheim (DE).

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

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH,

[Continued on next page]

(54) Title: BODY FLUID SAMPLING DEVICE



(57) Abstract: Body fluid sampling device comprising a skin-piercing element (1) having a collection zone (9) for receiving body fluid, and the device further comprising a fluid receiving means (10) remote spaced apart from said collection zone so that body fluid in said collection zone will not contact the fluid receiving means initially. Said collection zone takes up a very small volume of body fluid of about 10 to 500 nl in a very short time period of less than 0,5 s. Said fluid receiving means may have a test zone for performing an analytical reaction. Fluid sample from said collection zone is automatically or manually transported to said fluid receiving means to contact said fluid with said test zone.

WO 2005/084546 A3

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

(88) Date of publication of the international search report:
2 March 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.