27/09/02
20020059657

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 October 2001 (11.10.2001)

PCT

(10) International Publication Number
WO 01/75433 A3

(51) International Patent Classification[7]: B01L 3/00

(21) International Application Number: PCT/US01/09237

(22) International Filing Date: 22 March 2001 (22.03.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/541,376 31 March 2000 (31.03.2000) US

(71) Applicant: LIFESCAN, INC. [US/US]; 1000 Gibraltar Drive, Milpitas, CA 95035 (US).

(72) Inventor: SHARTLE, Robert, Justice; 1264 Geneve Court, Livermore, CA 94550 (US).

(74) Agents: JOHNSON, Philip, S. et al.; Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ 08933 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

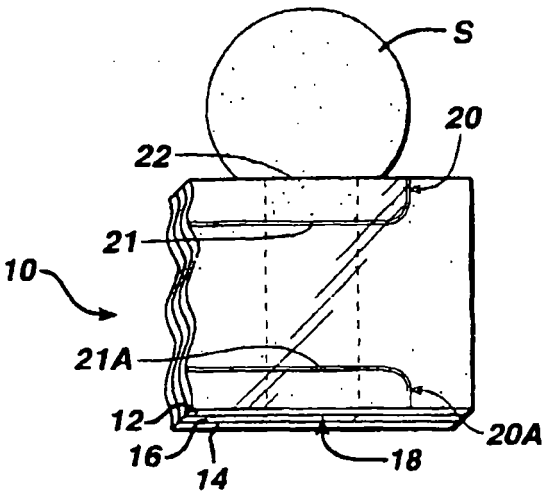
(88) Date of publication of the international search report:
14 March 2002

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.

162162

ACTION

(54) Title: CAPILLARY FLOW CONTROL IN A FLUIDIC DIAGNOSTIC DEVICE



(57) Abstract: A medical diagnostic device for measuring an analyte concentration or property of a biological fluid includes capillary flow channels to convey a sample of the fluid from an inlet to a branching point, and then to a measurement area and , alternatively, through a bypass channel to an overflow region. A first stop junction stops fluid flow after it enters the measurement area. The bypass channel has a capillary dimension in at least one direction. A second stop junction, in the bypass channel, has a boundary region that has a dimension that is greater in that direction and forms an angle that points toward the branching point. With this construction, the second stop junction initially prevents flow to the overflow region, but permits the flow after the measurement area is filled. The device is particularly suited for measuring coagulation time of blood.

WO 01/75433 A3