

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 April 2001 (19.04.2001)

PCT

(10) International Publication Number
WO 01/027610 A3

(51) International Patent Classification⁷: **G01N 22/00**,
33/543

(21) International Application Number: PCT/US00/28491

(22) International Filing Date: 13 October 2000 (13.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/159,175 13 October 1999 (13.10.1999) US
60/191,702 23 March 2000 (23.03.2000) US

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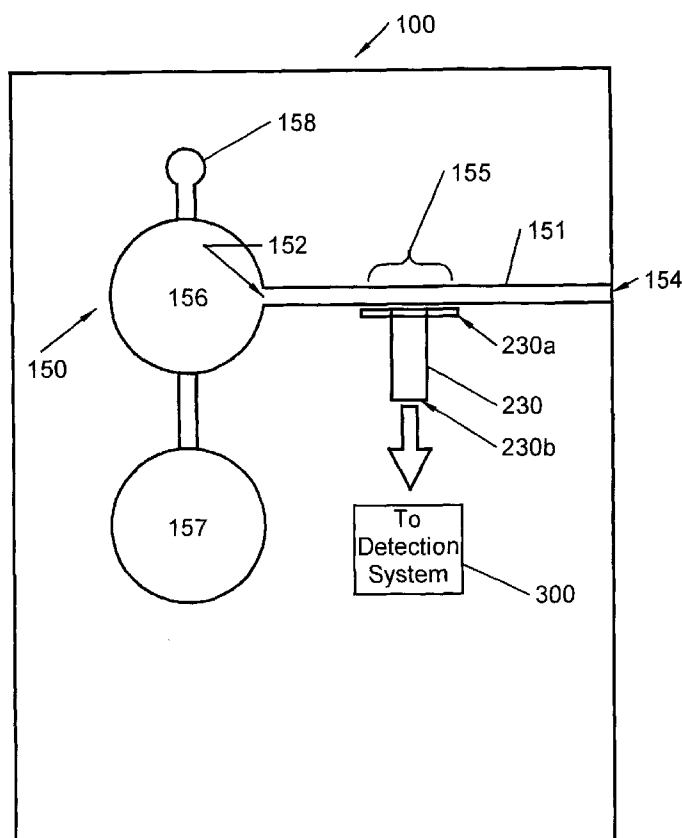
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR DETECTING AND IDENTIFYING MOLECULAR EVENTS IN A TEST SAMPLE



(57) Abstract: A molecular detection system for detecting the presence or absence of a molecular event within a test sample includes a fluid reservoir, a signal source, a measurement probe, and a signal detector. The measurement probe includes a probe head and a connecting end. The probe head is configured to electromagnetically couple an incident test signal to the test sample within the detection region of the fluid reservoir. The interaction of the incident test signal with the test sample produces a modulated test signal, at least a portion of which the probe head is configured to recover. The system further includes a signal detector that is coupled to the connecting end of the measurement probe and configured to recover the modulated test signal.



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NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

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

(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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(48) Date of publication of this corrected version:
1 August 2002

(15) Information about Correction:
see PCT Gazette No. 31/2002 of 1 August 2002, Section II

Published:

— with international search report

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.