CORRECTED VERSION*

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61B 5/00 — A1

(11) International Publication Number: WO 00/25662

(43) International Publication Date: 11 May 2000 (11.05.00)

(21) International Application Number: PCT/US99/23992

(22) International Filing Date: 1 November 1999 (01.11.99)

(30) Priority Data:
09/184,127 2 November 1998 (02.11.98) US

(71)(72) Applicant and Inventor: ABREU, Marcio, Marc, Aurelio, Martins [US/US]; 3304 Dixwell Avenue, North Haven, CT 06473 (US).

(74) Agent: SCHERER, Jonathan, L.; Jacobson, Price, Holman & Stern, PLLC, The Jenifer Building, 400 Seventh Street, N.W., Washington, DC 20004 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, 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).

**Published**

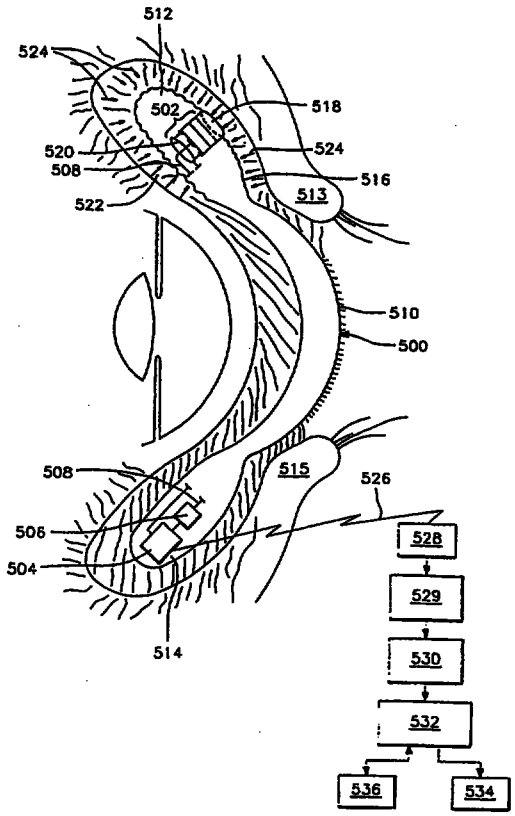
*With international search report.*

*Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*

(54) Title: METHOD AND APPARATUS FOR SIGNAL TRANSMISSION AND DETECTION USING A CONTACT DEVICE

(57) Abstract

This invention is a utilization of a contact device (2) placed on the front part of the eye (4) in order to detect physical, chemical parameters of the body as well as the non–invasive delivery of compounds according to these physical, chemical parameters, with signals preferably being transmitted continuously as electromagnetic waves, radio waves, infrared, and the like. One of the parameters to be detected includes non–invasive blood analysis utilizing chemical changes, chemical products that are found in the front part of the eye, and in the tear film. The contact device (2) includes a rigid annular member (12), a flexible membrane (14), and a movable central piece (16).




*(Referred to in PCT Gazette No. 38/2000, Section II)