14 JUN 2002
20020 36283

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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 June 2001 (21.06.2001)

PCT

(10) International Publication Number
WO 01/044816 A3

(51) International Patent Classification[7]: G01N 33/68, C07K 16/18, 14/47, C12N 15/00, 5/00

(21) International Application Number: PCT/US00/34375

(22) International Filing Date:
15 December 2000 (15.12.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/171,012	15 December 1999 (15.12.1999)	US
60/172,350	16 December 1999 (16.12.1999)	US

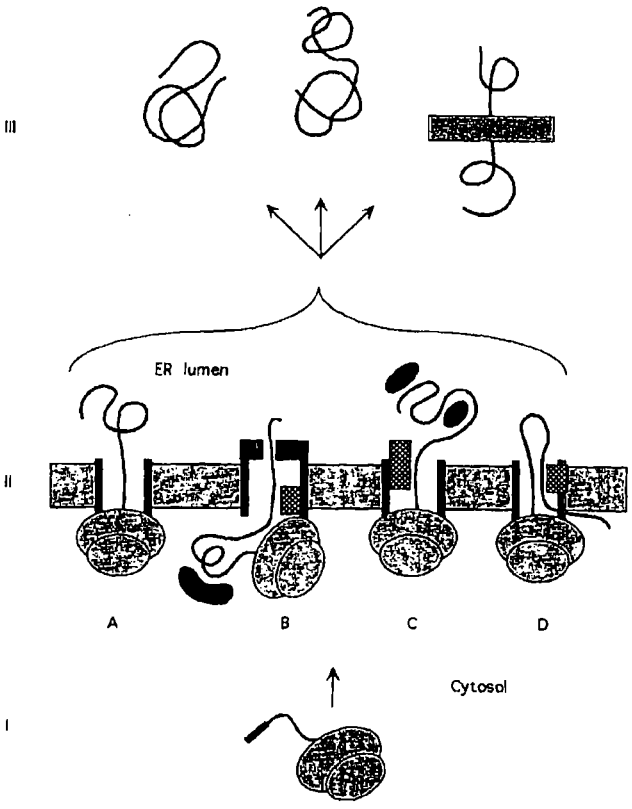
(71) Applicant *(for all designated States except US)*: **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA** [US/US]; 1111 Franklin Street, 12th floor, Oakland, CA 94607 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **LINGAPPA, Vishwanath, R.** [US/US]; Dept. of Physiology and Medicine, University of Ca, lifornia, San Francisco, 513 Parnassus Avenue, San Francisco, CA 94143-0444 (US). **RUTKOWSKI, Thomas, D.** [US/US]; Dept. of Biochemistry and Biophysics, University of California, San Francisco, 513 Parnassus Avenue, San Francisco, CA 94143-0444 (US). **HEGDE, Ramanugan, S.** [US/US]; Laboratory of Cellular Oncology, National Institutes of Health, Building 36, Room 1D-32, Bethesda, MD 20892 (US).

[Continued on next page]

(54) Title: CONFORMATIONAL AND TOPOLOGICAL PROTEIN REGULATION



(57) Abstract: Methods and compositions are provided for identifying novel conformers of proteins not known to exist as different conformers. By using chimeric genes replacing a native signal sequence with a different signal sequence resulting in the production of a conformer, one can compare the native protein with the product of the chimeric gene. Where the conformations are different, the different protein may be used for production of antibodies, elucidation of mechanisms associated with the native and different conformer protein, assays for the presence of the different conformer in physiological samples, identification of compounds specifically binding to the conformer, particularly drugs, etc. Where the formation of the conformer is associated with a diseased state, the conformer may be used in screens to identify compounds as drug candidates.

WO 01/044816 A3

162162

ACTION

(74) **Agents: RAE-VENTER, Barbara** et al.; Rae-Venter Law Group, P.O. Box 60039, Palo Alto, CA 94306 (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, US, 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*

— *with amended claims*

(88) **Date of publication of the international search report:** 30 May 2002

Date of publication of the amended claims: 27 June 2002

(48) **Date of publication of this corrected version:** 5 December 2002

(15) **Information about Correction:** see PCT Gazette No. 49/2002 of 5 December 2002, Section II

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.