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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
17 January 2002 (17.01.2002)

PCT

(10) International Publication Number
WO 02/004946 A3

(51) International Patent Classification[7]: G01N 33/543, 33/50

(21) International Application Number: PCT/US01/21292

(22) International Filing Date: 5 July 2001 (05.07.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/611,835 7 July 2000 (07.07.2000) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 09/611,835 (CIP)
Filed on 7 July 2000 (07.07.2000)

(71) Applicant *(for all designated States except US)*: **COMBINATORX, INCORPORATED** [US/US]; 650 Albany Street, Boston, MA 02118 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **STOCKWELL, Brent, R.** [US/US]; 59 West Cedar Street, Apartment #4, Boston, MA 02114 (US). **BORISY, Alexis** [US/US]; 31 Revere Street, Apartment #2, Boston, MA 02114 (US). **FOLEY, Michael, A.** [US/US]; 93 Wolcott Road, Chestnut Hill, MA 02467 (US).

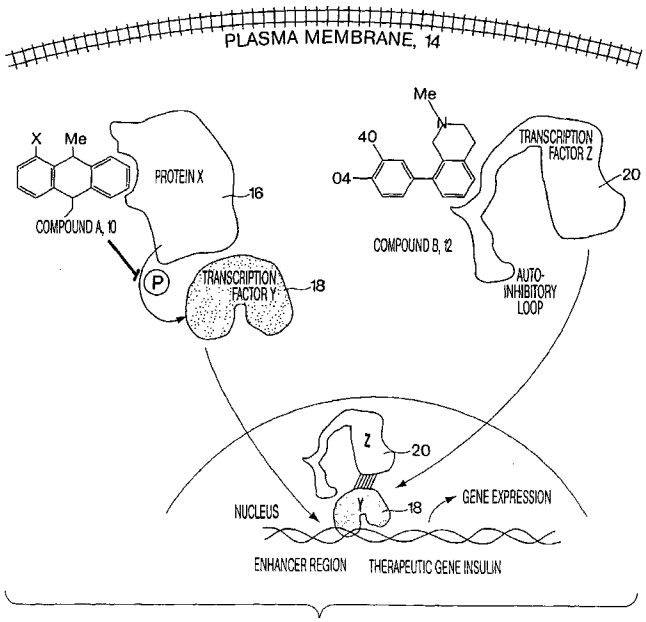
(74) Agent: **CLARK, Paul, T.**; Clark & Elbing LLP, 176 Federal Street, Boston, MA 02110-2214 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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).

[Continued on next page]

(54) Title: METHODS FOR IDENTIFYING COMBINATIONS OF DRUGS



(57) Abstract: The invention features a method of screening two-entity or higher order combinations for biological activity using combinational arrays. The method includes the steps of: (a) providing the entities, (b) creating an array of combinations of entities, (c) providing a test element that includes one or more distinct biological moieties, (d) contacting the array of combinations of entities with the test element under conditions that ensure that each entity/test element contacting is segregated from the others, (e) detecting or measuring a property of the test element, and (f) identifying combinations of entities that cause an effect on the property of the test element that is different from the effect of an entity of the combination by itself.

WO 02/004946 A3

Published:
— *with international search report*

(88) Date of publication of the international search report:
23 January 2003

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.