PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : G06F 19/00 — A1

(11) International Publication Number: WO 00/42559

(43) International Publication Date: 20 July 2000 (20.07.00)

(21) International Application Number: PCT/US00/01138

(22) International Filing Date: 18 January 2000 (18.01.00)

(30) Priority Data:

PCT/US00/01202	18 January 1999 (18.01.99)	US
09/484,850	18 January 1999 (18.01.99)	US
60/116,447	19 January 1999 (19.01.99)	US
60/118,813	5 February 1999 (05.02.99)	US
60/118,854	5 February 1999 (05.02.99)	US
60/141,049	24 June 1999 (24.06.99)	US
09/408,392	28 September 1999 (28.09.99)	US
09/408,393	28 September 1999 (28.09.99)	US
09/416,375	12 October 1999 (12.10.99)	US
09/416,837	12 October 1999 (12.10.99)	US

(71) Applicant *(for all designated States except US)*: MAXYGEN, INC. [US/US]; 515 Galveston Drive, Redwood City, CA 94063 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: SELIFONOV, Sergey A. [RU/US]; 2240 Homestead Court, Los Altos, CA 94024 (US). STEMMER, Willem, P., C. [NL/US]; 108 Kathy Court, Los Gatos, CA 95030 (US).

(74) Agents: HUNTER, Tom et al.; Majestic, Parsons, Siebert & Hsue P.C., Suite 1100, Four Embarcadero Center, San Francisco, CA 94111-4106 (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, MA, 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: METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS

(57) Abstract

In particular, this invention provides novel methods of populating data structures for use in evolutionary modeling. In particular, this invention provides methods of populating a data structure with a plurality of character strings. The methods involve encoding two or more biological molecules into character strings to provide a collection of two or more different initial character strings; selecting at least two substrings from the pool of character strings; concatenating the substrings to form one or more product strings about the same length as one or more of the initial character strings; addding the product strings to a collection of strings; and optionally repeating this process using one or more of the product strings as an initial string in the collection of initial character strings.

