PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : G06F 19/00 | A2

(11) International Publication Number: WO 00/42560

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

(21) International Application Number: PCT/US00/01202

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

(30) Priority Data:

60/116,447	19 January 1999 (19.01.99)	US
60/118,854	5 February 1999 (05.02.99)	US
60/118,813	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
Not furnished	18 January 2000 (18.01.00)	US
Not furnished	18 January 2000 (18.01.00)	US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application
US 09/416,375 (CIP)
Filed on 12 October 1999 (12.10.99)

(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]; Apartment #214, 2240 Homestead Court, Los Altos, CA 94024 (US). STEMMER, Willem, P., C. [NL/US]; 108 Kathy Court, Los Gatos, CA 95030 (US). GUSTAFSSON, Claes [SE/US]; 1813 Bayview Avenue, Belmont, CA 94002 (US). TOBIN, Matthew [US/US]; 5662 Sunflower Lane, San Jose, CA 95118 (US). DEL CARDAYRE, Stephen [US/US]; 2049 Monroe Avenue, Belmont, CA 94002 (US). PATTEN, Phillip, A. [US/US]; Apartment 506, 2680 Fayette Drive, Mountain View, CA 94040 (US). MINSHULL, Jeremy [GB/US]; 842 Hermosa Way, Menlo Park, CA 94025 (US).

(74) Agents: QUINE, Jonathan, Alan et al.; The Law Offices of Jonathan Alan Quine, P.O. Box 458, Alameda, CA 94501 (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
Without international search report and to be republished upon receipt of that report.

(54) Title: METHODS FOR MAKING CHARACTER STRINGS, POLYNUCLEOTIDES AND POLYPEPTIDES HAVING DESIRED CHARACTERISTICS

(57) Abstract

"In silico" nucleic acid recombination methods, related integrated systems utilizing genetic operators and libraries made by in silico shuffling methods are provided.

