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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 August 2006 (10.08.2006)

PCT

(10) International Publication Number
WO 2006/084196 A3

(51) International Patent Classification:
G06F 19/00 (2006.01)

(21) International Application Number:
PCT/US2006/003970

(22) International Filing Date: 3 February 2006 (03.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/649,964 4 February 2005 (04.02.2005) US

(71) Applicant *(for all designated States except US)*: **ENTELOS, INC.** [US/US]; 110 Marsh Drive, Foster City, CA 94404 (US).

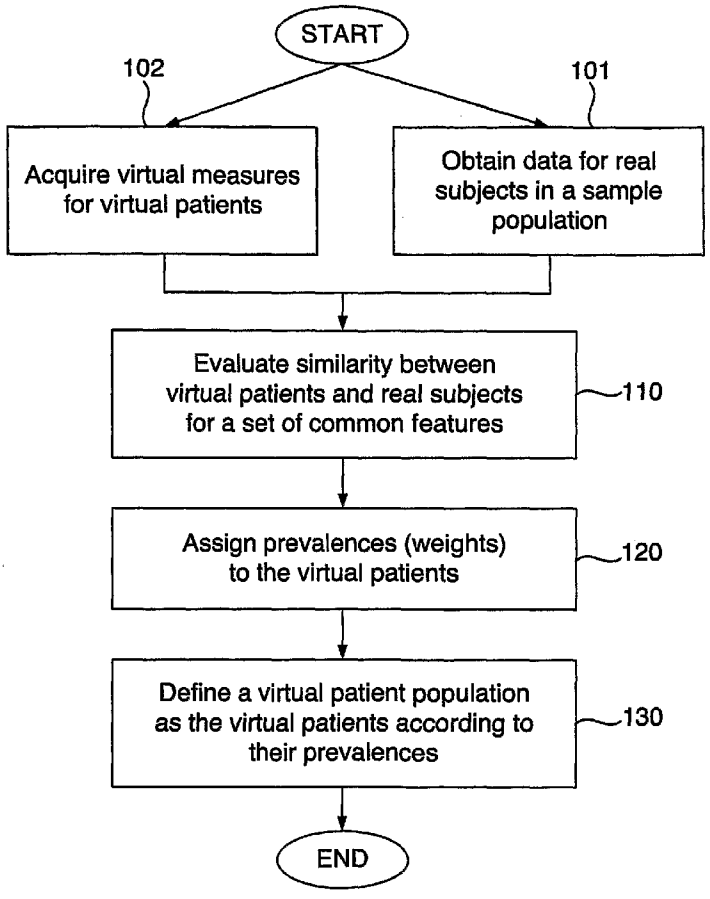
(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **FRIEDRICH, Christina, M.** [DE/US]; 2902 21st St., San Francisco, CA 94110 (US). **KANSAL, Anuraag** [US/US]; 2107 Bank St., Baltimore, MD 21231 (US). **KLINKE, David** [US/US]; 504 Elm Street, Morgantown, WV 26501 (US). **MICHELSON, Seth, Gary** [US/US]; 1473 Mildred Avenue, San Jose, CA 95125 (US). **PATERSON, Thomas, S.** [US/US]; 2219 Graham Ave., Redondo Beach, CA 90278 (US). **POLIDORI, Dave** [US/US]; P.O. Box 416, Rancho Santa Fe, CA 92067 (US). **TRIMMER, Jeff** [US/US]; 1222 Oak Grove Ave. #110, Burlingame, CA 94010 (US). **WENNERBERG, Leif, Gustaf** [US/US]; 196c Elmwood St, Mountain View, CA 94043 (US).

(74) Agent: **FLICK, Karen, E.**; Foley & Lardner LLP, 1530 Page Mill Road, Palo Alto, CA 94304-1125 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,

[Continued on next page]

(54) Title: METHOD FOR DEFINING VIRTUAL PATIENT POPULATIONS



(57) Abstract: The invention encompasses methods, including computer-implemented methods, of defining a virtual patient population and mapping the virtual patient population to a population of real patients. The invention utilizes virtual measures from one or more virtual patients, and data representative of multiple real subjects in a sample population, such as data collected from patients in a clinical trial or epidemiological study of a real population. The invention includes evaluating the similarity between the virtual patients and the real subjects, and assigning prevalences to the virtual patients based on the evaluation. The similarity can be assessed using some or all of the virtual measures of the virtual patients and some or all of the data obtained for the real subjects. Any of various goodness-of-fit measures can be used to evaluate the similarity or to help identify prevalences. The virtual patient population is defined as the virtual patients according to their respective prevalences.

WO 2006/084196 A3

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

(88) Date of publication of the international search report:
26 April 2007

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.