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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
5 December 2002 (05.12.2002)

PCT

(10) International Publication Number
WO 02/097706 A1

(51) International Patent Classification[7]: G06G 7/48, G06F 17/10

(21) International Application Number: PCT/US02/16770

(22) International Filing Date: 28 May 2002 (28.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/293,533	29 May 2001 (29.05.2001)	US
10/154,123	23 May 2002 (23.05.2002)	US

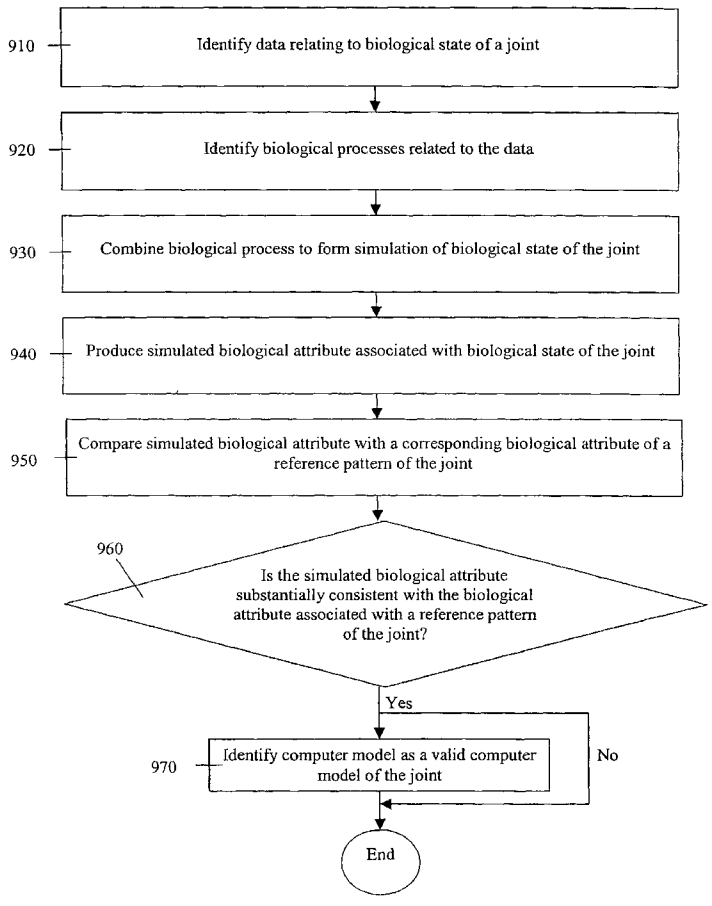
(71) Applicant *(for all designated States except US)*: **ENTELOS, INC.** [US/US]; Suite 200, 4040 Campbell Avenue, Menlo Park, CA 94025 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **DEFRANOUX, Nadine, A.** [FR/US]; 1227 Cole Street, San Francisco, CA 94117 (US). **DUBNICOFF, Todd, B.** [CA/US]; 2125 Ralston Avenue, Burlingame, CA 94010 (US). **KLINKE, David, J. II** [US/US]; 804 Santa Lucia Avenue, San Bruno, CA 94066 (US). **LEWIS, Annette, K.** [US/US]; 150 Middle Court, Menlo Park, CA 94025 (US). **PATERSON, Thomas, S.** [US/US]; 560 Westbourne Drive, West Hollywood, CA 90048 (US). **RAMANUJAN, Saroja** [US/US]; 419 Williams Place, San Mateo, CA 94401 (US). **SHODA, Lisl, K., M.** [US/US]; 36 Duane Street, Apt 11, Redwood City, CA 94062 (US). **SODERSTROM, Karl, Petter** [SE/US]; 941 Page Street, #1, San Francisco, CA 94117 (US). **STRUEMPER, Herbert, K.** [DE/US]; 1245 Hoover Street, #1, Menlo Park, CA 94025 (US).

[Continued on next page]

(54) Title: METHOD AND APPRATUS FOR COMPUTER MODELING A JOINT



(57) Abstract: The present invention relates to a mathematical and computer model of a joint (fig.9, item 940). The model includes representation of the biological processes related to the synovial tissue and cartilage (item 910). In one embodiment, the model represents a human joint afflicted with rheumatoid arthritis.

WO 02/097706 A1

(74) **Agents: ROCHE, Anie, K.** et al.; Cooley Godward Llp, 3000 El Camino Real, Five Palo Alto Square, Palo Alto, CA 94306-2155 (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, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) **Designated States** *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, GQ, 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 receipt of amendments*

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.