

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 July 2008 (03.07.2008)

PCT

(10) International Publication Number
WO 2008/079097 A1

(51) International Patent Classification:
G06N 3/00 (2006.01) *G06N 3/12* (2006.01)

(74) Agent: WATKIN, Timothy, Lawrence, Harvey; Lloyd Wise, Tanjong Pagar, P.O. Box 636, Singapore 910816 (SG).

(21) International Application Number:
PCT/SG2006/000403

(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date:
22 December 2006 (22.12.2006)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicants (*for all designated States except US*): SINGAPORE TECHNOLOGIES DYNAMICS PTE LTD [SG/SG]; 249 Jalan Boon Lay, Singapore 619523 (SG). NANYANG TECHNOLOGICAL UNIVERSITY [SG/SG]; 50 Nanyang Avenue, Singapore 639798 (SG).

(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).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): LIM, Meng Hiot [MY/SG]; 99 Cashew Road, #02-04, Singapore 679670 (SG). XU, Yi Liang [CN/US]; 3214 Caterina Lane, College Station, TX 77845 (US). ONG, Yew Soon [SG/SG]; Bkl 652B, #12-398, Jurong West Street 61, Singapore 642652 (SG).

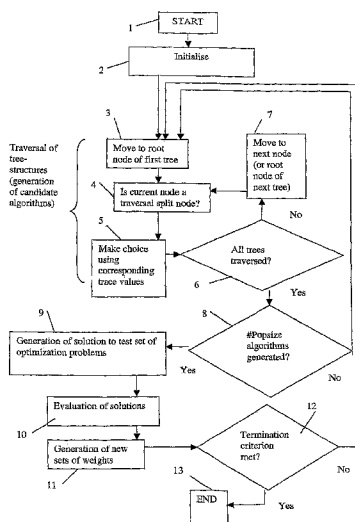
Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report

(54) Title: METHOD AND APPARATUS FOR AUTOMATIC CONFIGURATION OF META-HEURISTIC ALGORITHMS IN A PROBLEM SOLVING ENVIRONMENT



(57) Abstract: A methodology is presented to address the need for rapid generation and optimization of algorithms that are efficient in solving a given class of problems within the framework of a software environment. The environment incorporates an evolutionary learning methodology which automatically optimizes the configurations of procedural components of the algorithm. In this way, both the efficiency and the quality of algorithm development is enhanced significantly.

WO 2008/079097 A1