(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 10 January 2008 (10.01.2008)

(10) International Publication Number WO 2008/005062 A3

- (51) International Patent Classification: *G06F 15/00* (2006.01)
- (21) International Application Number:

PCT/US2007/003938

(22) International Filing Date:

13 February 2007 (13.02.2007)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/478,085

29 June 2006 (29.06.2006) U

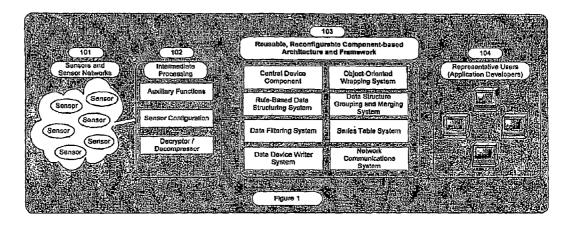
- (71) Applicant: AUGUSTA SYSTEMS, INC. [US/US]; 3592 Collins Ferry Road, Suite 200, Morgantown, West Virginia 26505 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HARVEY, Clint M. [US/US]; 882 Kingwood Pike, Morgantown, West Virginia 26508 (US). ESPOSITO, Patrick R. II [US/US]; 488 Rebecca Street, Morgantown, West Virginia 26505 (US). MOODY, John E. [US/US]; 41 Meadow Brooke Drive, Morgantown, West Virginia 26508 (US). WILLIAMS, Jackie P. II [US/US]; 5015 Riverwood Circle, Fairmont, West Virginia 26554 (US). THOMAS, George K. [US/US]; 4009 Pinehurst Drive, Morgantown, West Virginia 26505 (US).

- (74) Agent: GROSSELIN, John, E., III; Spilman Thomas & Battle PLLC, 990 Elmer Prince Drive, Suite 205, Morgantown, West Virginia 25604-4474 (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, 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.
- (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: 8 May 2008

(54) Title: RAPIDLY DEVELOPING SENSOR DEVICE-ENABLING SOFTWARE APPLICATIONS



(57) Abstract: A reconfigurable, hierarchical component-based architecture and framework for rapidly developing sensor device enabling software applications can have a rule-based data structuring system, a series table system, and a system of acquiring data from a data provider. User defined relationships can be established to enable exchange of data between the rule-based data structuring system, the series table system, the system of acquiring data, another rule-based data structuring system, an object oriented wrapping system, a data filtering system, a data structure grouping and merging system, a data device writer system, and a network communications system. Each system can have components and subcomponents by which the user defined relationships can be established, for example by embedding components of various systems within the rule-based data structuring system, and/or other systems, and/or by setting a property value to link components of the systems with a component of the rule-based data structuring system and/or other systems.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/03938

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G06F 15/00 (2007.01) USPC - 702/127 According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) IPC(8): G06F 15/00 (2007.01) USPC: 702/127			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 702/1, 85, 108; 73/1.01, 324/76.11, 312; 713/1			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Electronic databases: USPTO WEST (PGPB, USPT, EPAB, JPAB); DIALOG PRO Search Terms Used: data structure, hierarchial or tree structure or components or subcomponents, sensor data or information, sensor data or information, wrapping or filtering or merging, software or application or network, rules or tables etc.			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.
Υ	US 2005/0080814 A1 (Hailey et al.) 14 April 2005 (14. Abstract, and [0006]-[0011], [0059]-[0065], [0074]-[007		1-6, 17-19, 73-78, and 86 -91
Υ	US 2006/0117251 A1 (Rothschiller et al.) 01 June 200 especially Abstract, and para [0009]-[0014], [0036]-[00		1-6, 17-19, 73-78, and 86 -91
A	US 2004/0117393 A1 (DeMesa et al.) 17 June 2004 (17.06.2004)		1-144
А	US 6,836,890 B1 (Watts, Jr. et al.) 28 December 2004 (28.12.2004)		1-144
Α	US 4,864,497 A (Lowry et al.) 05 September 1989 (05.09.1989)		1-144
·			
Further documents are listed in the continuation of Box C.			
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention			
"E" earlier application or patent but published on or after the international "X" document of particular relevance; the filing date considered novel or cannot be consi		claimed invention cannot be ered to involve an inventive	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) step when the document is taken a document of particular relevance; special reason (as specified)		claimed invention cannot be	
	O" document referring to an oral disclosure, use, exhibition or other combined with one or more other such documents, such combined with one or more other such documents, such combined with one or more other such documents.		locuments, such combination
"P" document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed			
Date of the actual completion of the international search		Date of mailing of the international search report	
21 August 2007 (21.08.2007)		07 FEB 2008	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents		Authorized officer: Lee W. Young	
P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		PCT Helpdesk: 571-272-4300	Dat