### (19) World Intellectual Property Organization

International Bureau





# (43) International Publication Date

17 November 2005 (17.11.2005)

G05B 19/418.

(21) International Application Number:

(51) International Patent Classification :

PCT/US2005/015393

(22) International Filing Date: 4 May 2005 (04.05.2005)

(25) Filing Language:

English

(26) Publication Language:

23/02, G06F 9/44

English

(30) Priority Data: 60/567,980

4 May 2004 (04.05.2004) US

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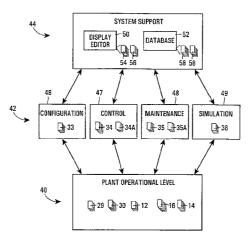
WO 2005/107409 A3 (US). LUCAS, Michael, J. [GB/GB]; 7 Wales Orchard, Leire Lutterworth, Leicestershire LE17 5ES (GB).

(10) International Publication Number

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- (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, 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, 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).

[Continued on next page]

(54) Title: INTEGRATED GRAPHICAL USER INTERFACE FOR PROCESS CONTROL



(57) Abstract: A common process control graphical user interface plant operators, plant maintenance personnel, and management is disclosed which provides a real-time interface to both the process and the plant. The common interface is modular in design and is capable of supporting various specializations for each user type. Operator consoles are dedicated to each section of the plant and include additional functions such as maintenance, configuration, simulation and supervisory information. The common graphical interface replaces control room displays filled with single case analog controllers, meters, and digital indicators. The common interface addresses the functions that previously were provided by the panel motor start/stop buttons and status indications, chart recorders, annunciator panels and subsystem interfaces. From a console, operators manage alarms, adjust the process by entering new setpoints or other parameters, "zoom in" on particular portions of the process for details, and utilize other specialized applications to work with their batch, advanced control, or business applications. The interface will run in both dedicated and non-dedicated modes, will run as a rich client or as part of a browser style interface utilizing web services and will run on workstations, laptops, tablet PC's, handhelds, and smart phones.



## WO 2005/107409 A3



#### **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

(88) Date of publication of the international search report:

26 January 2006

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.

### INTERNATIONAL SEARCH REPORT

In Application No PC1/US2005/015393

A. CLASSII	G05B19/418 G05B23/02 G06F9/44									
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)  G05B G06F										
Documentat	ion searched other than minimum documentation to the extent that su	uch documents are included in the fields se	varched							
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EPO-In	ternal, WPI Data									
C. DOCUMENTS CONSIDERED TO BE RELEVANT										
Category °	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.							
Х	US 2002/077711 A1 (NIXON MARK J E 20 June 2002 (2002-06-20) the whole document	1-20								
X	US 6 445 963 B1 (BLEVINS TERRENCE 3 September 2002 (2002-09-03) the whole document	1-20								
A	US 5 576 946 A (BENDER ET AL) 19 November 1996 (1996-11-19) the whole document		1-20							
A	US 5 353 316 A (SCAROLA ET AL) 4 October 1994 (1994-10-04) the whole document		1–20							
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1	December 2005	09/12/2005								
Name and	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer								
NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Vaño Gea, J								

### INTERNATIONAL SEARCH REPORT

Int Application No P..., \_\_\_ J05/015393

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2002077711	A1	20-06-2002	NONE			
US 6445963	B1	03-09-2002	DE GB HK JP	10048360 2355545 1061578 2001216003	A A1	10-05-2001 25-04-2001 04-02-2005 10-08-2001
US 5576946	Α	19-11-1996	NONE			
US 5353316	Α	04-10-1994	US US	5353315 5287390	• •	04-10-1994 15-02-1994