

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 September 2006 (08.09.2006)

PCT

(10) International Publication Number
WO 2006/094013 A3

(51) International Patent Classification:
G05B 11/01 (2006.01)

(21) International Application Number:
PCT/US2006/007178

(22) International Filing Date: 1 March 2006 (01.03.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/069,126 1 March 2005 (01.03.2005) US

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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, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, 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.

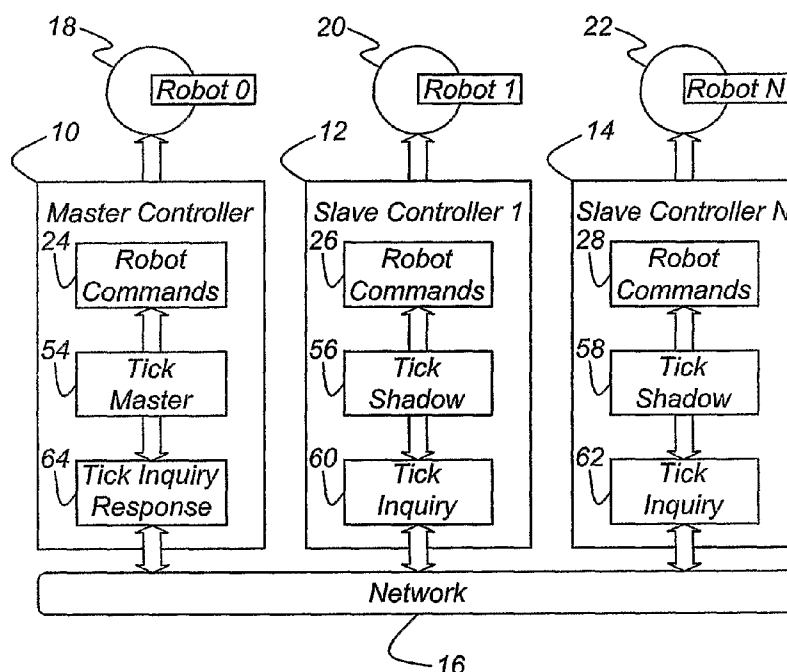
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: SYNCHRONIZING CONTROLLERS LINKED BY A COMMUNICATIONS NETWORK



(57) Abstract: A control system includes controllers that are coupled mutually by a communications network, on which information, transmitted from a master controller to a slave controller, is used to make timing corrections on the slave controller in order to synchronize event timers on the slave controller with that of the master controller. Timing accuracy for the occurrence of the event commanded by each controller is synchronized in narrow range of time, preferably within a few milliseconds depending on the specific application and system.



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

7 June 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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/07178

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G05B 11/01**(2006.01)

USPC: 700/20,3,248

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)

U.S. : 700/20,3,248,2,14,170,306; 702/79,89,176; 713/375,400; 318/705; 375/106,195,149,240.28

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,330,826 A (WHITESIDE et al.) 18 May 1982 (18.05.1982), see entire document.	1-20
A	US 4,342,083 A (FREEDMAN et al.) 27 July 1982 (27.07.1982), see entire document.	1-20
A	US 6,009,360 A (KNAPP) 28 December 1999 (28.12.1999), see entire document.	1-20
A	US 6,535,926 B1 (ESKER) 18 March 2003 (18.03.2003), see entire document.	1-20
A	US 6,804,580 B1 (STODDARD et al.) 12 October 2004 (12.10.2004), see entire document.	1-20

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

29 March 2007 (29.03.2007)

Date of mailing of the international search report

17 APR 2007

Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/07178

Continuation of B. FIELDS SEARCHED Item 3:

USPGPUB, USPAT, USOCR, EPO, JPO, DERWENT, IBM_TDB search notes: ((synchroniz\$5 adj3 controller) and (master adj3 (slave or shadow) adj3 controller) and (periodic adj interval))