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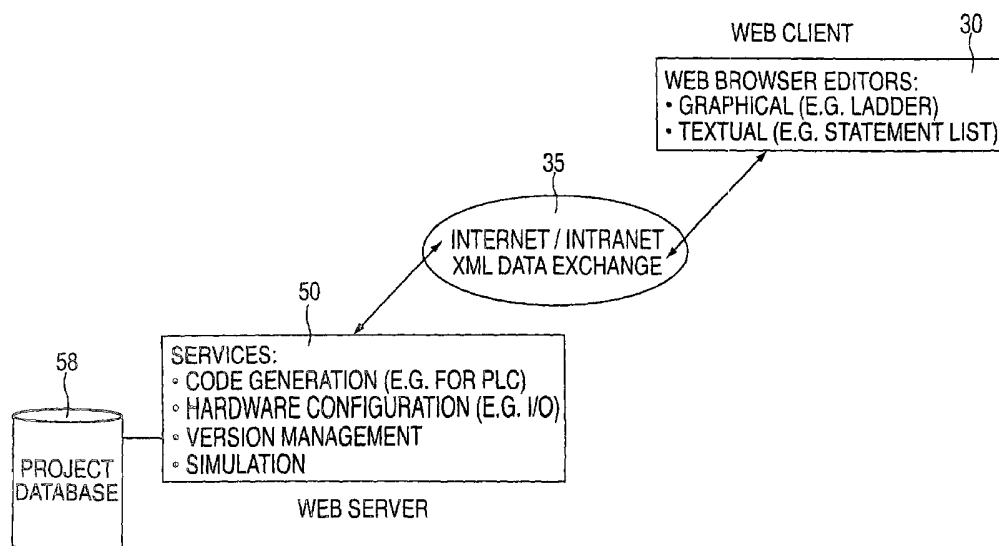
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*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR PROVIDING ENGINEERING TOOL SERVICES



(57) Abstract: A method and system for generating programming code and/or configuration data for programmable controller and the networks on which they operate is disclosed. In one embodiment, programming code is generated on a centralized server having a web-enabled engineering tool. The engineering tool operates on client devices that are in communication with the server over a network, such as the Internet. Preferably, the engineering tool runs in a browser application (or other network-interfacing-application) on the client device and a user generates the programming code on the server with the aid of the client device. By centralizing the engineering tool, which may contain a configuration editor and a configuration management tool having version management functionality, a new business paradigm for providing engineering tool services to customers having programmable controllers is provided. In addition, new methods and tools for collaborative engineering of programming code are enabled.

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/25671

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/60 G06F9/44 G05B19/05

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 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 14963 A (NAT INSTR CORP) 1 March 2001 (2001-03-01) page 8, line 30 -page 13, line 29; figures 1-10	1-43
Y	---	44-48
Y	US 5 253 158 A (MIYATA MASANOBU ET AL) 12 October 1993 (1993-10-12)	44-48
A	abstract	35
X	WO 01 69335 A (SCHNEIDER AUTOMATION INC) 20 September 2001 (2001-09-20) page 3, line 24 -page 4, line 13 page 5, line 6 -page 7, line 24; figures 1,2	1-31
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*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)
- \*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

- \*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
- \*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
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*8\* document member of the same patent family

Date of the actual completion of the international search

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Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 02/25671

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 151 609 A (TRUONG TIMOTHY M) 21 November 2000 (2000-11-21) column 3, line 26 - line 47 column 5, line 27 -column 6, line 12 ---	1-7, 45-48
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X	EP 1 117 034 A (KUHLA KARSTEN ;OVADYA DANIEL (DE)) 18 July 2001 (2001-07-18) page 2, line 45 -page 3, line 53 page 3, line 24 - line 53 ---	32,36,45
A		1-31
X	YANG W-L: "A distributed processing architecture for a remote simulation system in a multi-user environment" COMPUTERS IN INDUSTRY, ELSEVIER SCIENCE PUBLISHERS. AMSTERDAM, NL, vol. 40, no. 1, September 1999 (1999-09), pages 15-22, XP004178447 ISSN: 0166-3615 ---	42
A	page 15 -page 22 ---	32
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A		
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A	US 5 752 245 A (MAGHOUL FARZIN ET AL) 12 May 1998 (1998-05-12) the whole document -----	45-48

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 02/25671

### Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-31

A method for programming a controller using an engineering tool residing on a server and running on a client device, the server and the client device being linked through a network.

2. Claims: 32-41

An editor for generating the configuration data of a controller.

3. Claims: 42-44

A method for testing the programming code of a controller.

4. Claims: 45-48

A method for the version management of the programmes for a controller.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/25671

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