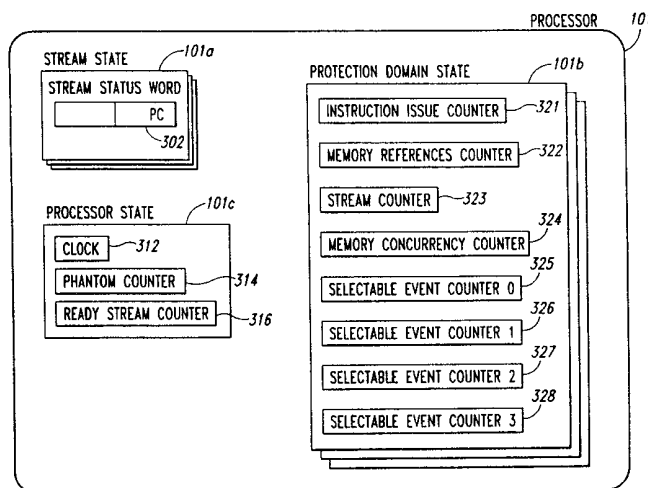




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification</b> <sup>7</sup> :  G06F 11/34	A3	<b>(11) International Publication Number:</b> WO 00/38048  <b>(43) International Publication Date:</b> 29 June 2000 (29.06.00)
<b>(21) International Application Number:</b> PCT/US99/30760  <b>(22) International Filing Date:</b> 23 December 1999 (23.12.99)  <b>(30) Priority Data:</b> 09/221,005 23 December 1998 (23.12.98) US  <b>(71) Applicant (for all designated States except US):</b> TERA COMPUTER COMPANY [US/US]; Merrill Place, Suite 600, 411 First Avenue South, Seattle, WA 98014-2860 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> CALLAHAN, Charles, David, II [US/US]; 3003 Northeast 193rd, Seattle, WA 98155 (US). SHIELDS, Keith, Arnett [US/US]; 2512 East Madison, #502, Seattle, WA 98112 (US). BRIGGS, Preston, Pengra, III [US/US]; 1946 East Blaine Street, Seattle, WA 98112 (US).  <b>(74) Agents:</b> WHITE, James, A., D. et al.; Perkins Coie LLP, Suite 4800, 1201 Third Avenue, Seattle, WA 98101-3099 (US).		<b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 14 September 2000 (14.09.00)

**(54) Title:** PARALLELISM PERFORMANCE ANALYSIS BASED ON EXECUTION TRACE INFORMATION**(57) Abstract**

A system for conducting performance analysis for executing tasks. The analysis involves generating a variety of trace information related to performance measures, including parallelism-related information, during execution of the task. In order to generate the trace information, target source code of interest is compiled in such a manner that executing the resulting executable code will generate execution trace information composed of a series of events. Each event stores trace information related to a variety of performance measures for the one or more processors and protection domains used. After the execution trace information has been generated, the system can use that trace information and a trace information description file to produce useful performance measure information. The trace information description file contains information that describes the types of execution events as well as the structure of the stored information. The system uses the trace information description file to organize the information in the trace information file, extracts and variety of types of performance measure information from the organized trace information, and formats the extracted information for display. The system can use default or user-defined functions to extract and format trace information for display. After the system displays one or more types of performance measure information, a user of the system can then interact with the system in a variety of ways to obtain other useful performance analysis information.

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/30760

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G06F11/34

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>EP 0 422 945 A (IBM) 17 April 1991 (1991-04-17)</p> <p>column 4, line 11 -column 5, line 30 column 9, line 22 -column 9, line 37 column 11, line 38 -column 11, line 49 column 12, line 32 - line 40 column 13, line 11 - line 56</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	<p>1-3, 6-15, 18-22, 24-34, 37-39, 42-44, 46, 47, 49, 56-58</p>

Further documents are listed in the continuation of box C.

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International Application No  
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A	<p>US 5 594 864 A (TRAUBEN RICHARD D) 14 January 1997 (1997-01-14) abstract column 8, line 27 -column 9, line 7</p>	<p>1-4</p>
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Inter. Application No  
PCT/US 99/30760

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