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(54) Title: INTERACTIVE COMPUTER-BASED TRAINING SYSTEM AND METHOD

(57) **Abstract:** An interactive computer-based training (ICBT) system and method operable over a computer network for training users. The ICBT system is provided with a state-machine-based hardware simulator for emulating various hardware states associated with a piece of equipment on which the users are to receive interactive training. A software simulator provided as a command inference engine is coupled to the hardware simulator, wherein the software simulator allows the users to interactively interrogate the emulated piece of equipment for its software functionality. One or more independently selectable learning modules are provided as part of the ICBT system, wherein each learning module includes one or more lesson plans related to the hardware and software functionality of the emulated piece of equipment. Also, the learning modules are inter-dependently associated with the hardware and software simulators. A user interface is provided for selecting one or more learning modules and for providing inputs from the users to the hardware and software simulators of the emulated piece of equipment so as to modify its configuration. The users can select any lesson plan or execute a portion of an ICBT session at any point therein without having to follow any sequential procedure.

INTERNATIONAL SEARCH REPORT

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PCT/US00/42017

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G09B 7/00,25/02,19/24

US CL : 434/118,219,323

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. : 434/118,219,323,350,236,307R

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 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.
X	US 5,791,907 A (Ramshaw et al) 11 August 1998 Figures 4A-13E, column 2 line 39 - column 3 line 5, claims 1-9	1,13,17
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Y		2,4,14,16,19,20
X,P	US 6,033,226 A (Bullen) 07 March 2000, columns 1-4, Figure 2	1-4,10-20
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Y,P		5-9
Y	US 5,823,781 A (Hitchcock et al) 20 October 1998 column 4 lines 1-2, Figures 1-4	5-9
Y,E	US 6,149,441 A (Pellegrino et al) 21 November 2000 Figures 8-11	2,4,14,16,19,20
A,E	US 6,164,974 A (Carlile et al) 26 December 2000	1-20
A	US 5,311,422 A (Loftin et al) 10 May 1994	1-20

<input type="checkbox"/> Further documents are listed in the continuation of Box C.		<input type="checkbox"/> See patent family annex.	
<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>		<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>	
<p>Date of the actual completion of the international search</p> <p>03 May 2001 (03.05.2001)</p>		<p>Date of mailing of the international search report</p> <p>17 MAY 2001</p>	
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Continuation of B. FIELDS SEARCHED Item 3: EPO,JPO search terms: learning, education, module, troubleshooting, network, component or element, router, testing equipment, switching equipment, customer premises equipment