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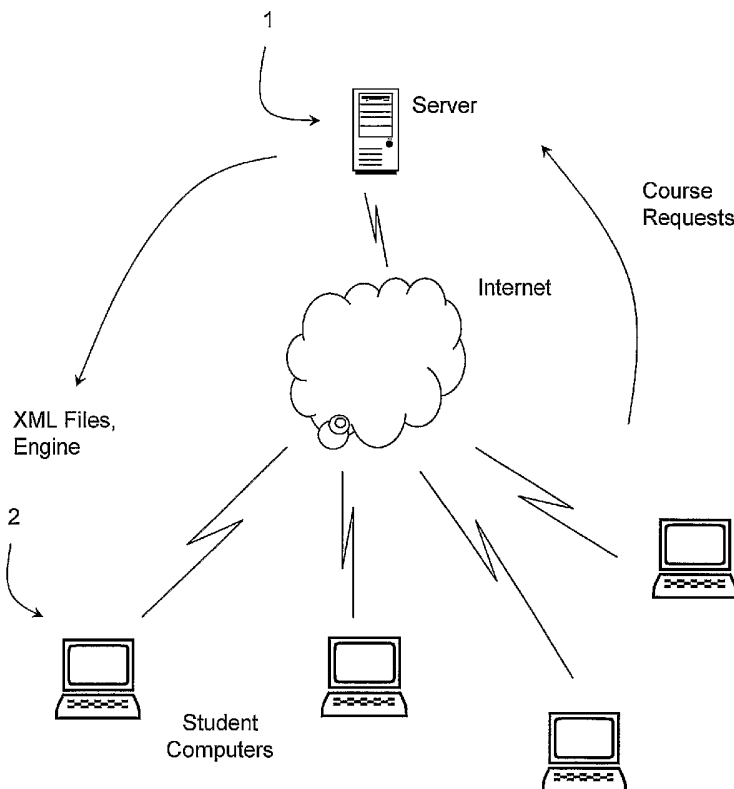
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(54) Title: AN E-LEARNING SYSTEM AND METHOD



(57) Abstract: A control engine (12) downloaded by a server (1) to a student computer (2) instantiates panel objects (16) and multiple media objects (15) linked to each panel object (16). At any one time multiple media objects (15) operate simultaneously and in synchronism to generate multiple display and sound outputs for comprehensive learning output and student interaction. The media objects (15) operate autonomously, without even knowing their places in their respective hierarchies, thus allowing dynamic updates from the server (either server-driven or student-driven). Synchronization is achieved by the panel object activating the multiple relevant media objects for a panel and the media objects using time value attributes to control activation and termination times. The media objects access (84) a stacking mechanism (82) in real time to determine a linked panel or media object to implement an operation in response to an event such as progression to a next panel. In addition to distributing objects in real time, the stacking mechanism (82) also dynamically modifies some objects by scripting or method invocation.

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**INTERNATIONAL SEARCH REPORT**

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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G09B5/12 G09B7/00

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)  
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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, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | SABIN-CORNELIU BURAGA, M. BRUT: "Using Multimedia Presentations on Web"<br>PROCEEDINGS OF THE 14TH INTERNATIONAL CONFERENCE ON CONTROL SYSTEMS AND COMPUTER SCIENCE, 'Online! 2003, pages 1-4,<br>XP002348656<br>Bukarest<br>Retrieved from the Internet:<br>URL:http://thor.info.uaic.ro/{busaco/publications/articles/multimedia_web.pdf}><br>'retrieved on 2005-10-11!<br>page 1 - page 4 | 1-39                  |
| X          | US 2004/010629 A1 (DIESEL MICHAEL E ET AL)<br>15 January 2004 (2004-01-15)<br>abstract<br>paragraph '0006! - paragraph '0039!;<br>figure 2   | 1-39                  |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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| US 2004010629                          | A1               | NONE                    |                  |