Title: METHODS FOR SUPPORTING INTRA-DOCUMENT PARALLELISM IN XSLT PROCESSING ON DEVICES WITH MULTIPLE PROCESSORS

Abstract: As mobile handsets are typically much slower than desktops for processing intensive applications, and as XSL-based XML document transformations (or XSLT) are processing intensive, such transformations are costly on mobile devices both because of execution time and energy consumption. While other processing intensive applications, such as voice communication and graphics rendering, have exploited options in the design of mobile processor architecture, similar methodologies have not been applied to XSLT processing. Method for parallelizing XSLT processing on devices with multiple processors is therefore devised. The method divides XSLT processing into separately schedulable subtasks (304, 305), synchronizes these subtasks, and schedules such subtasks on multiple processors for improved time and energy efficiency.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G06F 15/00; 2006.01
USPC: 715/513,522,523;718/102
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.: 715/513,522,523;718/102
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)
IEEE Explore

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Deng et al. Scheduling Real-Time Applications in an Open Environment published 1997 (1997), pages 308-319.</td>
<td>1</td>
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</tbody>
</table>

Further documents are listed in the continuation of Box C.

“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 novel or cannot be considered to involve an inventive step when the document is considered in conjunction with one or more other such documents, such combination being obvious to a person skilled in the art.

“&” document member of the same patent family.

Date of the actual completion of the international search
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