METHOD AND APPARATUS FOR FAILURE RESILIENT FORWARDING OF DATA OVER A COMPUTER NETWORK

Abstract:
In one embodiment, the present invention is a method and apparatus for failure-resilient forwarding of data over a computer network. In one embodiment, a marker is introduced into the data stream (206), e.g., at the sending node, and allows, in turn, forwarding nodes (206) and/or receivers to efficiently track data stream reception. The marker functions as a checkpoint for the data transport process, and is identified and indexed at each forwarding node and receiver (208, 209). Each receiver saves the marker prior to delivering data to an application (214), thereby designating a point in the data stream at which all preceding data is confirmed to have been delivered to the application. Thus, if a forwarding node fails, the receiver may request stream data from an alternate forwarding node by specifying to the alternate forwarding node to provide data starting from the marker.
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 18/16(2006.01),3/00(2006.01)

USPC: 709/230,250;710/52
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.: 709/230,250;710/52

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)
EAST

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>
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</table>

Further documents are listed in the continuation of Box C. See patent family annex.

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