

United States Patent [19]

Williams

[11] Patent Number: **6,151,630**[45] Date of Patent: **Nov. 21, 2000**[54] **NON-REDUNDANT BROWSING OF A SEQUENCING OF WEB PAGES**[75] Inventor: **Marvin L. Williams**, Hickory Creek, Tex.[73] Assignee: **Avaya Technology Corp.**, Miami Lakes, Fla.[21] Appl. No.: **09/079,484**[22] Filed: **May 15, 1998**[51] Int. Cl.⁷ **G06F 15/16; G06F 17/30**[52] U.S. Cl. **709/229; 709/203; 709/217; 709/227; 709/228; 701/1; 701/500; 345/344; 345/357**[58] **Field of Search** **709/200, 202-203, 709/217-219, 227-229, 231-233; 707/101-102, 500-501, 512-514, 1, 5; 345/340, 344, 353, 356-357**[56] **References Cited****U.S. PATENT DOCUMENTS**

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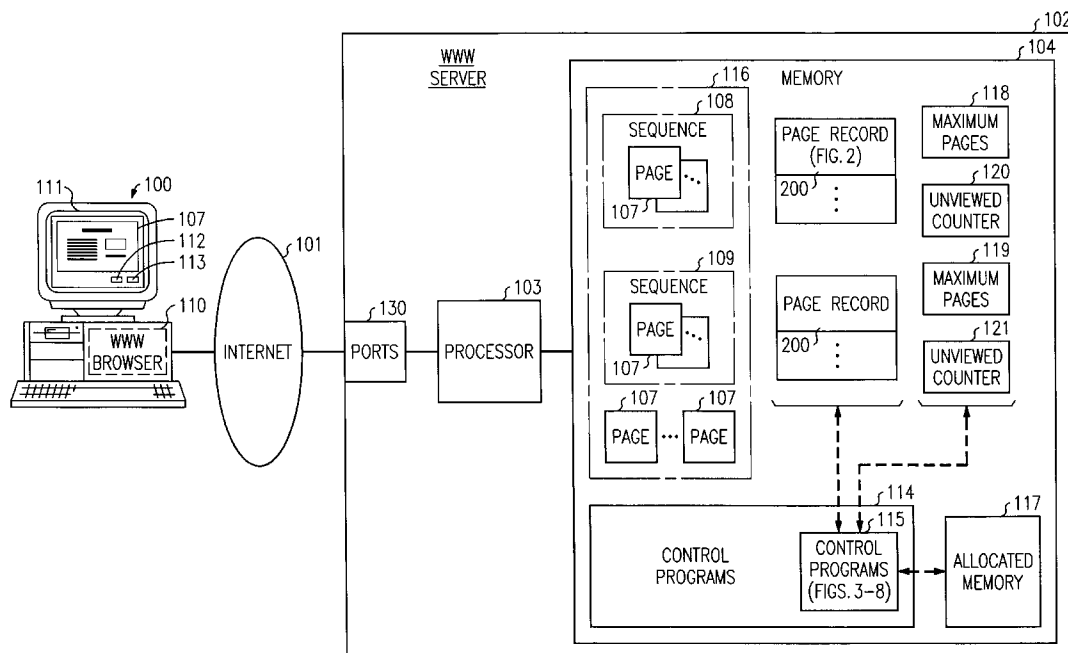
Primary Examiner—Ahmad F. Matar

Assistant Examiner—Bharat Barot

Attorney, Agent, or Firm—David Volejnicek

[57] **ABSTRACT**

A method, an apparatus, and a computer-readable programmed medium that facilitate browsing through an ordered sequence (108, 109) of World Wide Web pages (107) by automatically skipping over, or bypassing, previously viewed pages whenever the user requests a "Next Page" or a "Previous Page". A page owner creates a sequence by defining for each page in the sequence a page record (200) that specifies the page's URL (205), its sequential index value (210), an unviewed flag (220), and optionally page-descriptive information (230). Upon starting a session with a Web server (102), each user is given a copy of all page records. Each time a user requests access to any page by specifying its URL, the unviewed flag of the user's copy of that pages record is set to a viewed state. Each time a user requests access to any page by specifying a "Next Page" or a "Previous Page", the user's copy of the page records is used to find the first subsequent page or the first previous page, respectively, in the sequence to the page that is presently viewed by the user, whose unviewed flag is in the unviewed state, the state of the flag is changed to the viewed state, and the user is given access to this yet-unviewed page. At the end of each session, the page record copies that correspond to the session are deleted.

19 Claims, 9 Drawing Sheets

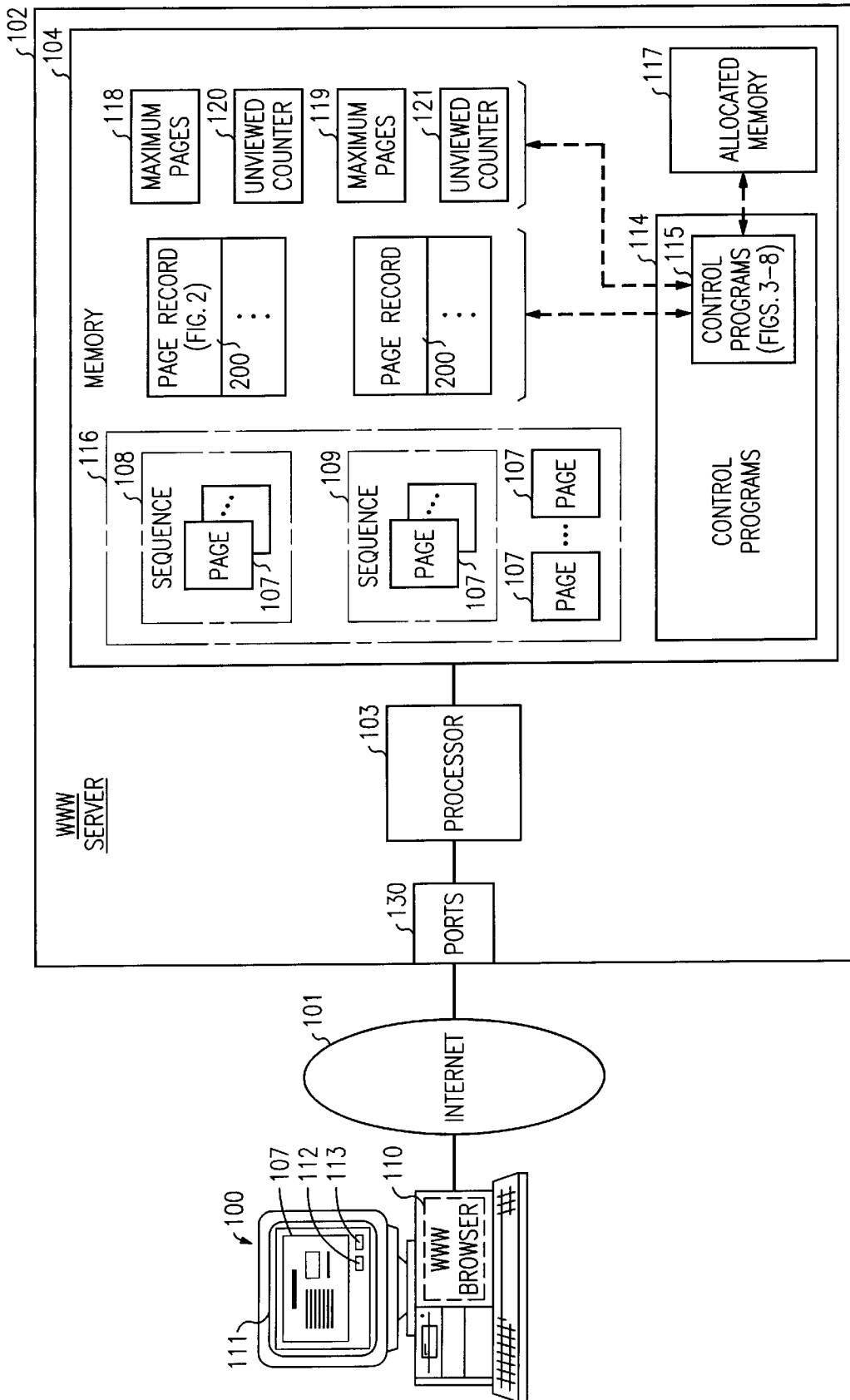


FIG. 1

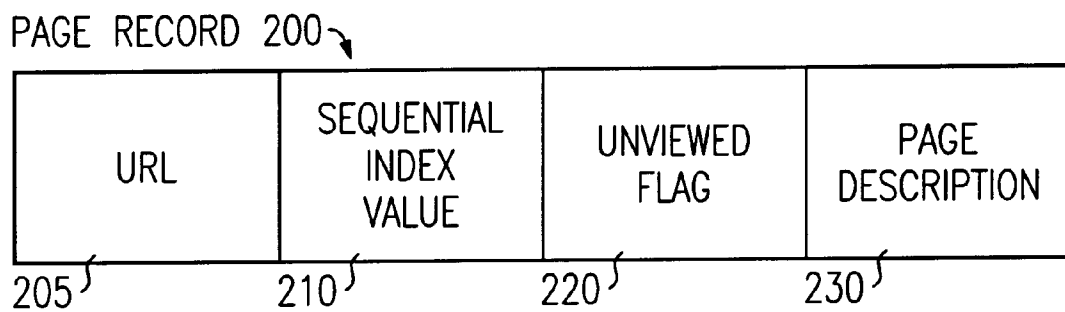
*FIG. 2*

FIG. 3

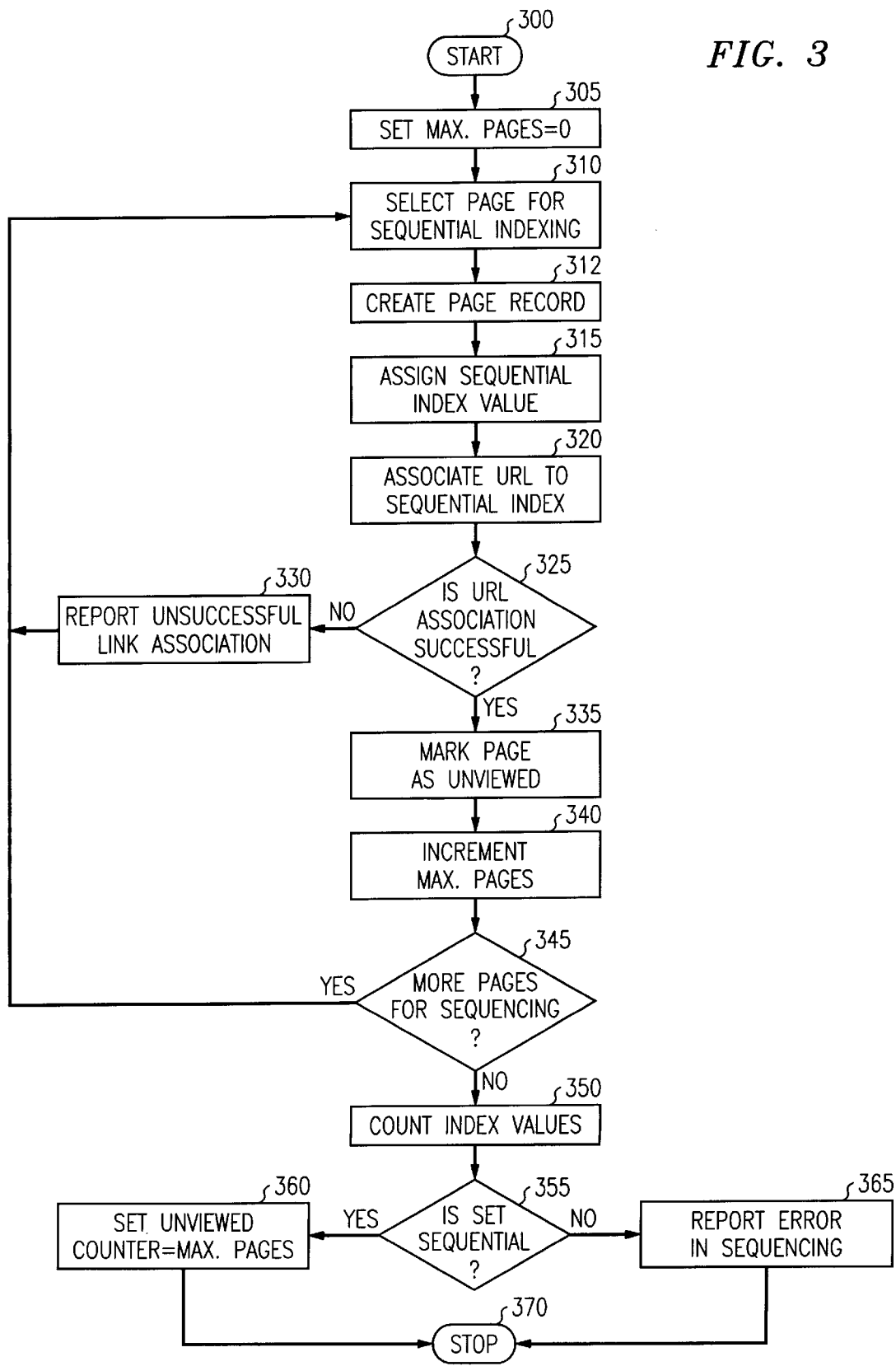
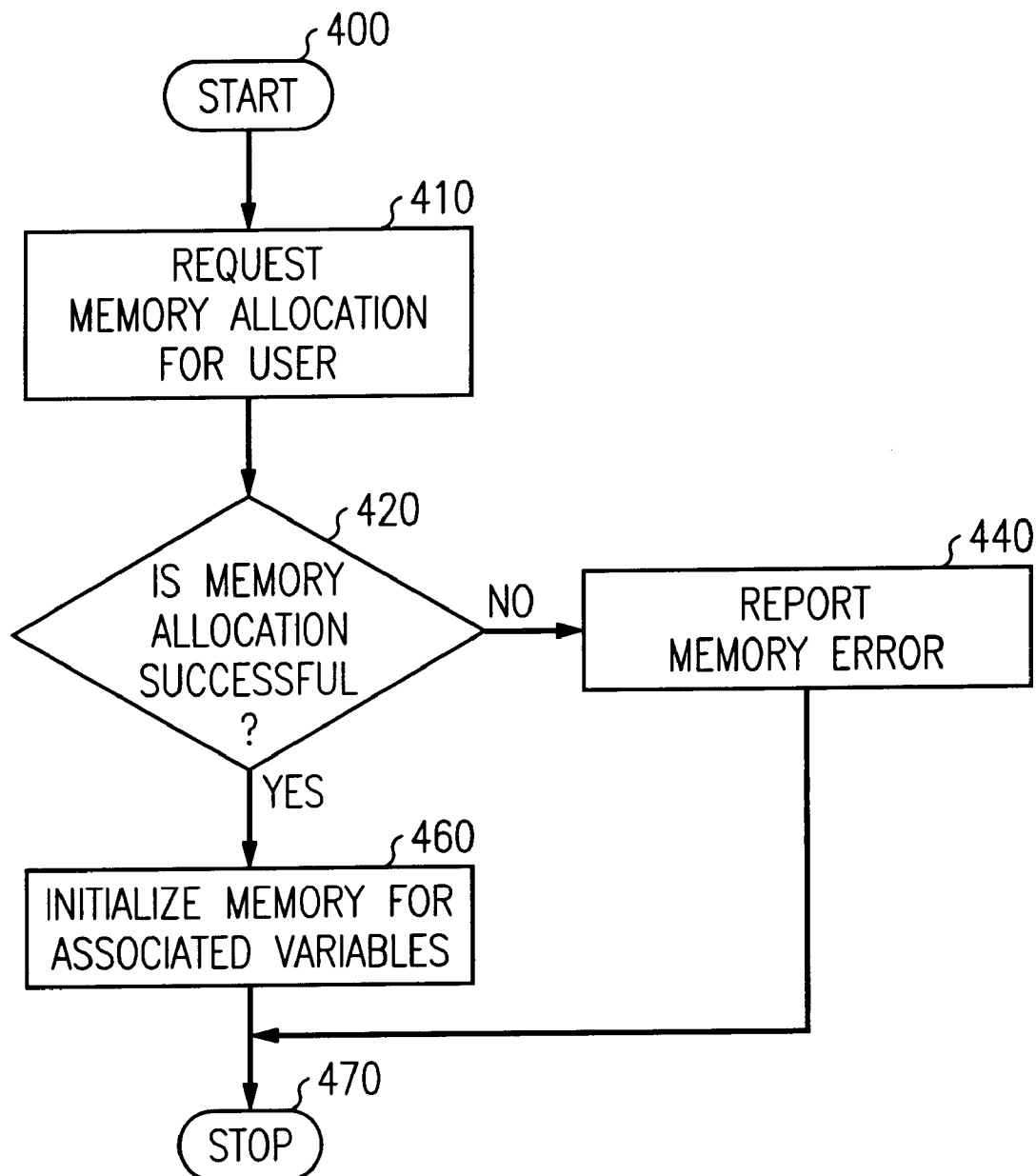


FIG. 4

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