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Gallant et al.

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(54) **SELECTIVE FILE CACHING METHOD**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 521 days.

"How to Prevent the Storing of File in the Hard Disk
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(21) Appl. No.: **10/610,142**

"How Disk Caching Works in Java Plug-in"; <http://java.sun.com/products/plugin/1.3/docs/cache.html>; Jun. 25, 2003.

(22) Filed: **Jun. 30, 2003**

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(65) **Prior Publication Data**

Primary Examiner—Wayne Amsbury

US 2004/0267702 A1 Dec. 30, 2004

(57) **ABSTRACT**

(51) **Int. Cl.**

A method for improving performance through selective file
caching is disclosed. The caching policy of a client's
browser cache is set to cache all files. Web page files that
reference a dynamic file include JavaScript code that
mangles the dynamic filename, such that a reference by the
web page file to the dynamic file is unique each time a
browser processes the web page file. In one embodiment,
the filename is mangled by appending to it a known string
followed by a 12-digit timestamp. Consequently, the
mangled filename misses in the cache, forcing the browser
to fetch the dynamic file from the web server. The web
server recognizes the filename is in the mangled format,
regenerates the original filename, and returns the file to the
client. Static filenames are not mangled; hence, they are
satisfied from the browser cache. The method also works to
selectively defeat network caching.

G06F 7/00 (2006.01)

(52) **U.S. Cl.** **707/102; 709/246; 711/202**

(58) **Field of Classification Search** **707/102;**
709/246; 711/202

See application file for complete search history.

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53 Claims, 11 Drawing Sheets

Web Browser Operation

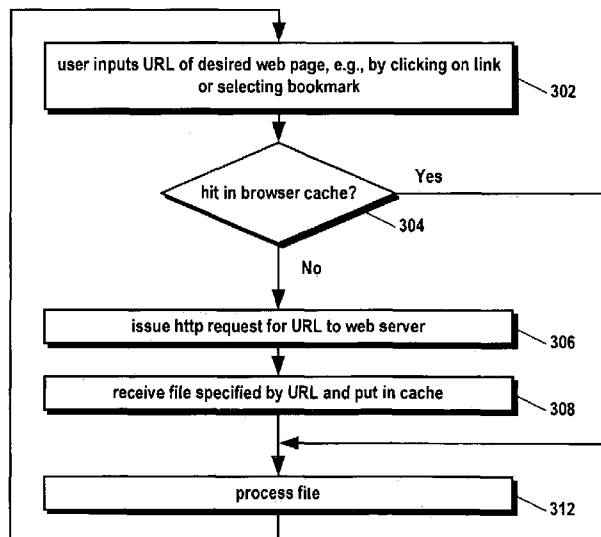


Fig. 1

Computer Network

100

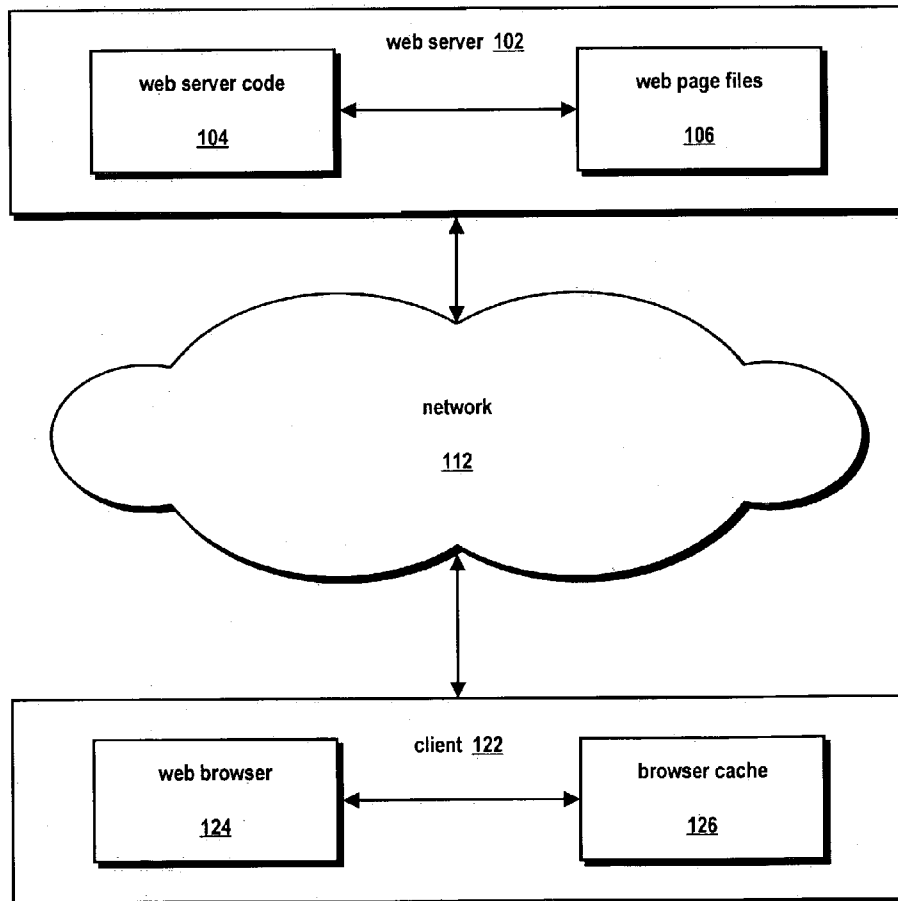


Fig. 2

Web Server Operation

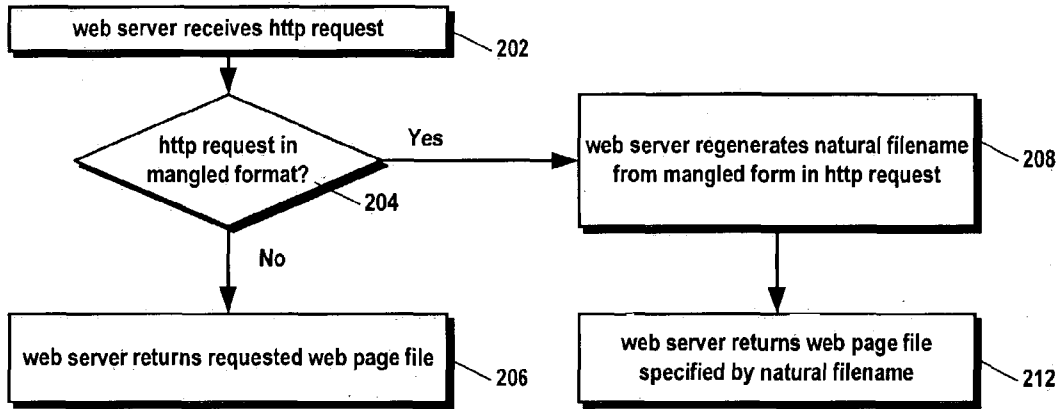


Fig. 3

Web Browser Operation

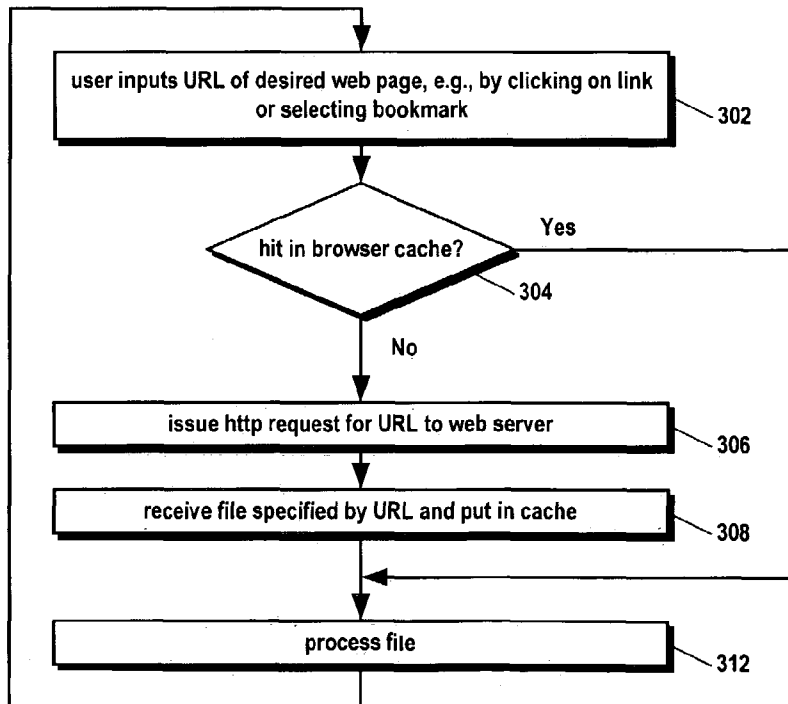


Fig. 4

Web Browser Operation

312

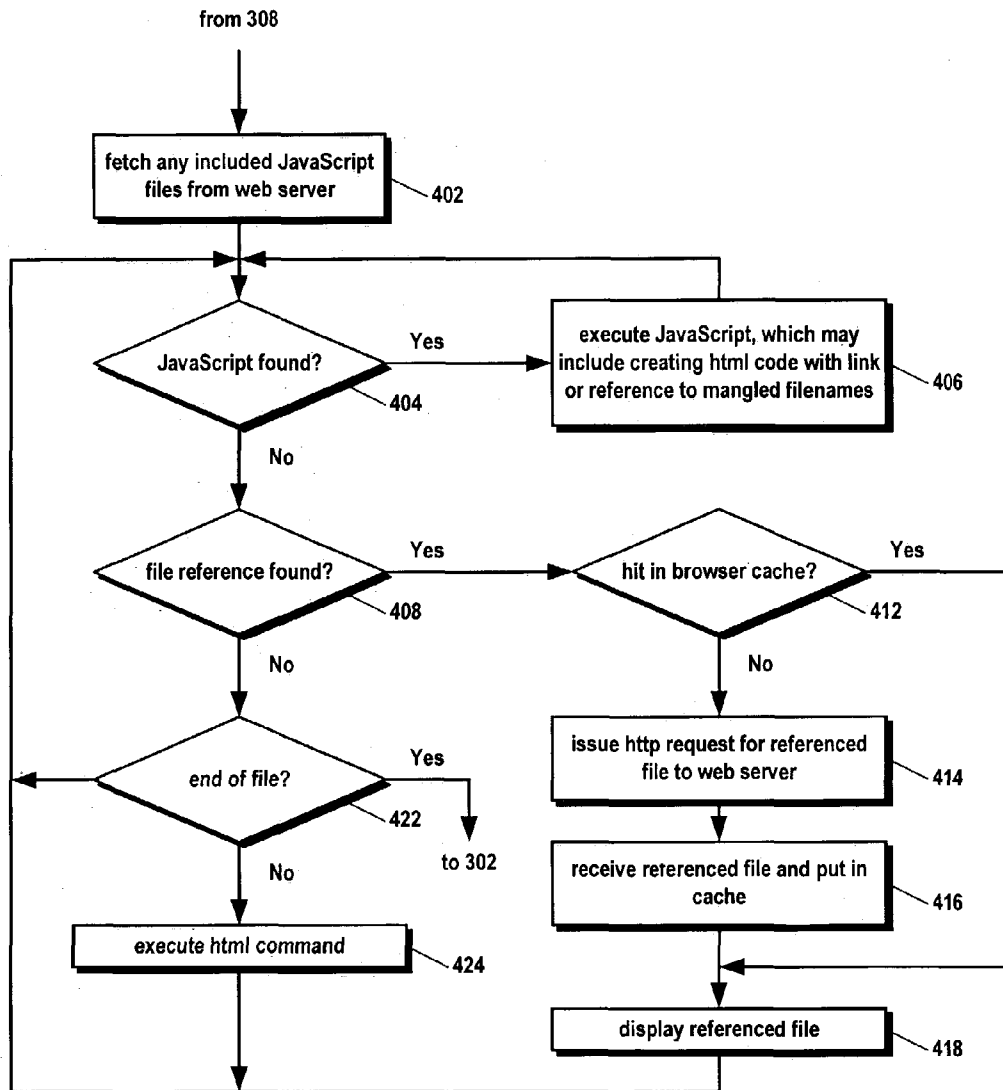
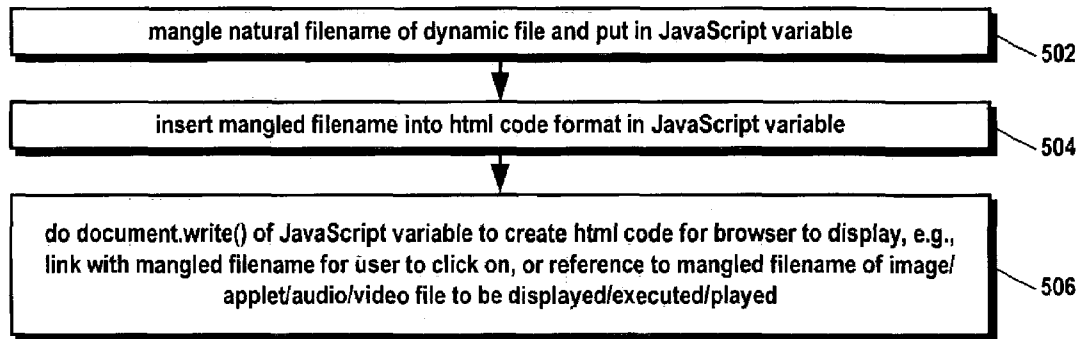


Fig. 5

Web Page JavaScript HTML Code Creation



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