

US007076500B2

(12) United States Patent Gallant et al.

(10) Patent No.: US 7,076,500 B2 (45) Date of Patent: Jul. 11, 2006

(54) SELECTIVE FILE CACHING METHOD

(76) Inventors: **David Gallant**, 4726 E. 107th Ave., Thornton, CO (US) 80233; **Rex Vedder**, 2830 Heidelberg Dr., Boulder,

CO (US) 80305

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 521 days.

(21) Appl. No.: 10/610,142

(22) Filed: Jun. 30, 2003

(65) Prior Publication Data

US 2004/0267702 A1 Dec. 30, 2004

(51) **Int. Cl. G06F** 7/00

(2006.01)

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

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

6,029,175	A *	2/2000	Chow et al 707/104.1
6,192,398	B1 *	2/2001	Hunt 709/213
6,457,103	B1*	9/2002	Challenger et al 711/133
6,557,054	B1 *	4/2003	Reisman 710/33
6,557,076	B1 *	4/2003	Copeland et al 711/118
6,918,113	B1 *	7/2005	Patel et al 717/178
6,976,090	B1 *	12/2005	Ben-Shaul et al 709/246
6,988,135	B1 *	1/2006	Martin et al 709/224
2002/0049834	A1*	4/2002	Molnar 709/219

2003/0009563 A	1* 1/2003	Douglis et al	709/227
2003/0078964 A	1 * 4/2003	Parrella et al	709/203
2004/0181598 A	1 * 9/2004	Paya et al	709/227

OTHER PUBLICATIONS

NetCloak Version 3.1 User's Guide: Serving Cloaked Files, 1996-2999, 3 page exerpt.*

"How to Prevent the Storing of File in the Hard Disk Cache"; http://www.web-caching.com/forums/Forum1/HTML/000233.html; Jun. 25, 2003.

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

* cited by examiner

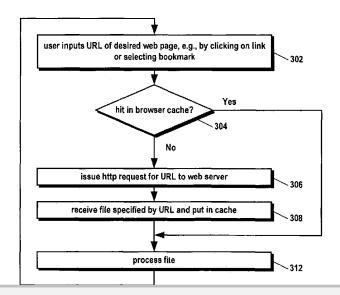
Primary Examiner—Wayne Amsbury

(57) ABSTRACT

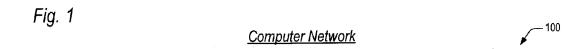
A method for improving performance through selective file caching is disclosed. The caching policy of a client's browser cache is set to cache all files. Web page files that reference a dynamic file include JavaScript code that mangles the dynamic filename, such that a reference by the web page file 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.

53 Claims, 11 Drawing Sheets

Web Browser Operation







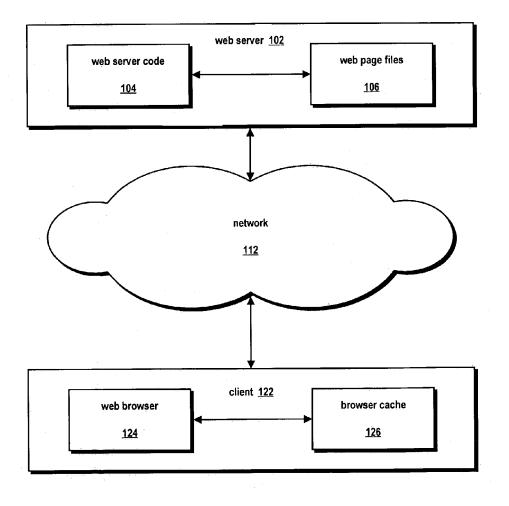


Fig. 2

Web Server Operation

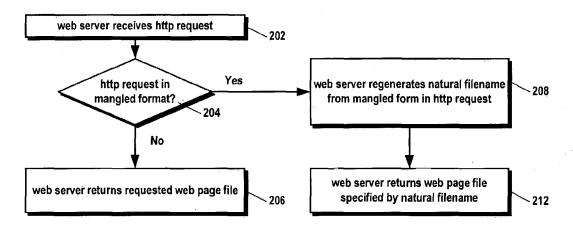


Fig. 3

Web Browser Operation

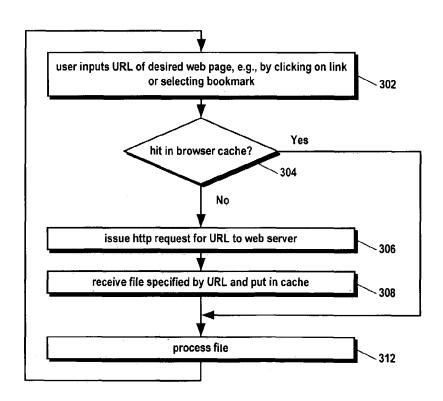


Fig. 4

Web Browser Operation

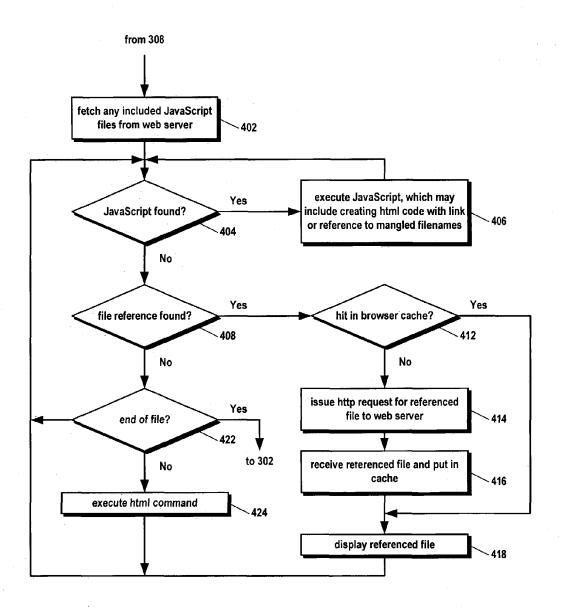
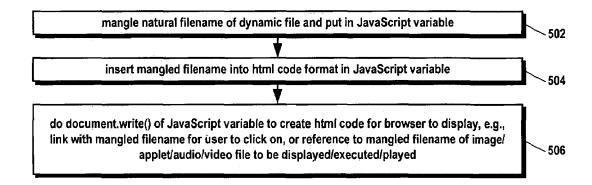


Fig. 5

Web Page JavaScript HTML Code Creation





DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

