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Hunt

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(54) **REMOTE/SHARED BROWSER CACHE**

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(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

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(52) **U.S. Cl.** **709/213**; 707/10; 709/218
(58) **Field of Search** 395/200.43, 200.33, 395/200.57, 200.47, 200.56; 709/213, 217, 218, 219, 248, 249; 707/10

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,445,174		4/1984	Fletcher	364/200
5,297,265		3/1994	Frank et al.	395/400
5,604,882		2/1997	Hoover et al.	395/448
5,727,159	*	3/1998	Kikinis	395/200.76
5,784,590	*	7/1998	Cohen et al.	711/122
5,787,466	*	7/1998	Berliner	711/117
5,796,973	*	8/1998	Witt et al.	395/384
5,796,974	*	8/1998	Goddard et al.	395/387
5,878,218	*	3/1999	Maddalozzo, Jr. et al.	709/213
5,944,780	*	8/1999	Chase et al.	709/201

OTHER PUBLICATIONS

C.R. Saravanan, "WWW in DSM" Master's thesis. Univ. of Manitoba, 1997. Univ. of Manitoba Tech. Report TR97–05.*
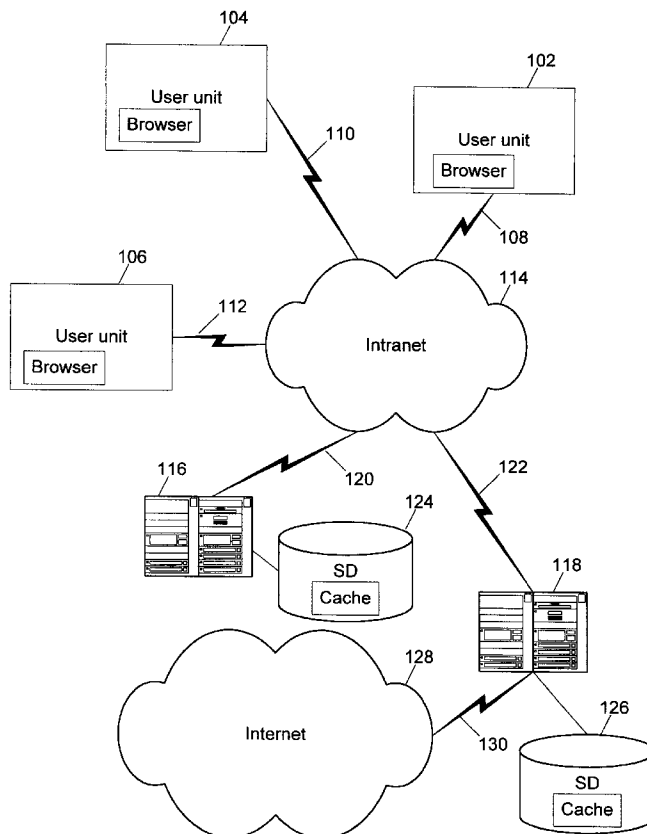
* cited by examiner

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(57) **ABSTRACT**

Browsers for different clients in an enterprise are configured to cache pages at least in part in a common file area in a remote, shared file server. Duplication or redundancy in caching pages is thus eliminate, and a larger body of distinct pages may be cached within a given allocation of memory space. Each remote, shared cache includes a shared cache contents data structure including information required to "time-out" pages and to determine if a page is in the process of being loaded or updated by another client sharing the cache. Where multiple caches are supported by the browsers, the remote, shared cache may form part of a local/remote cache hierarchy. When accessing a page, browsers check each cache in a multiple cache configuration, updating all caches as necessary.
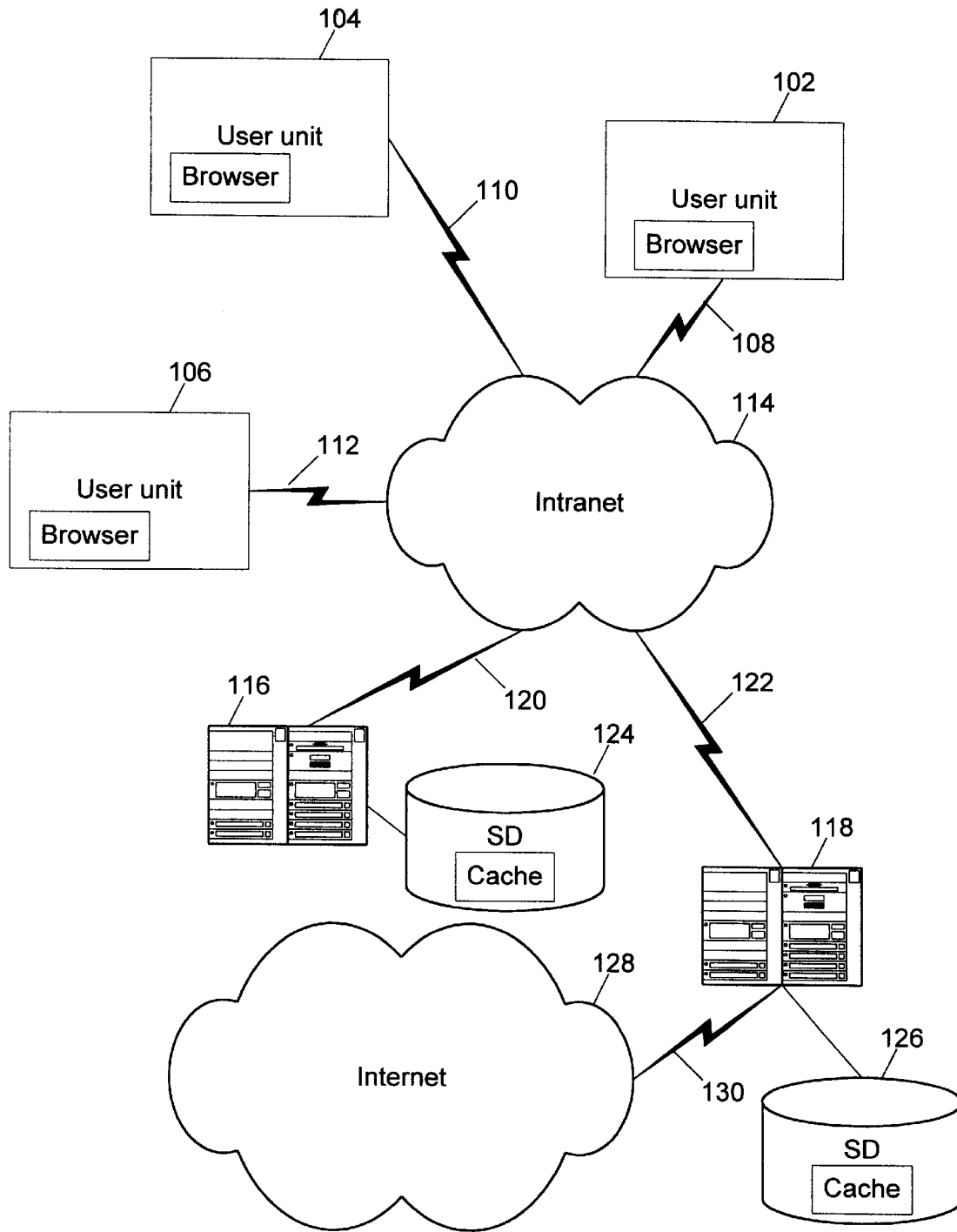
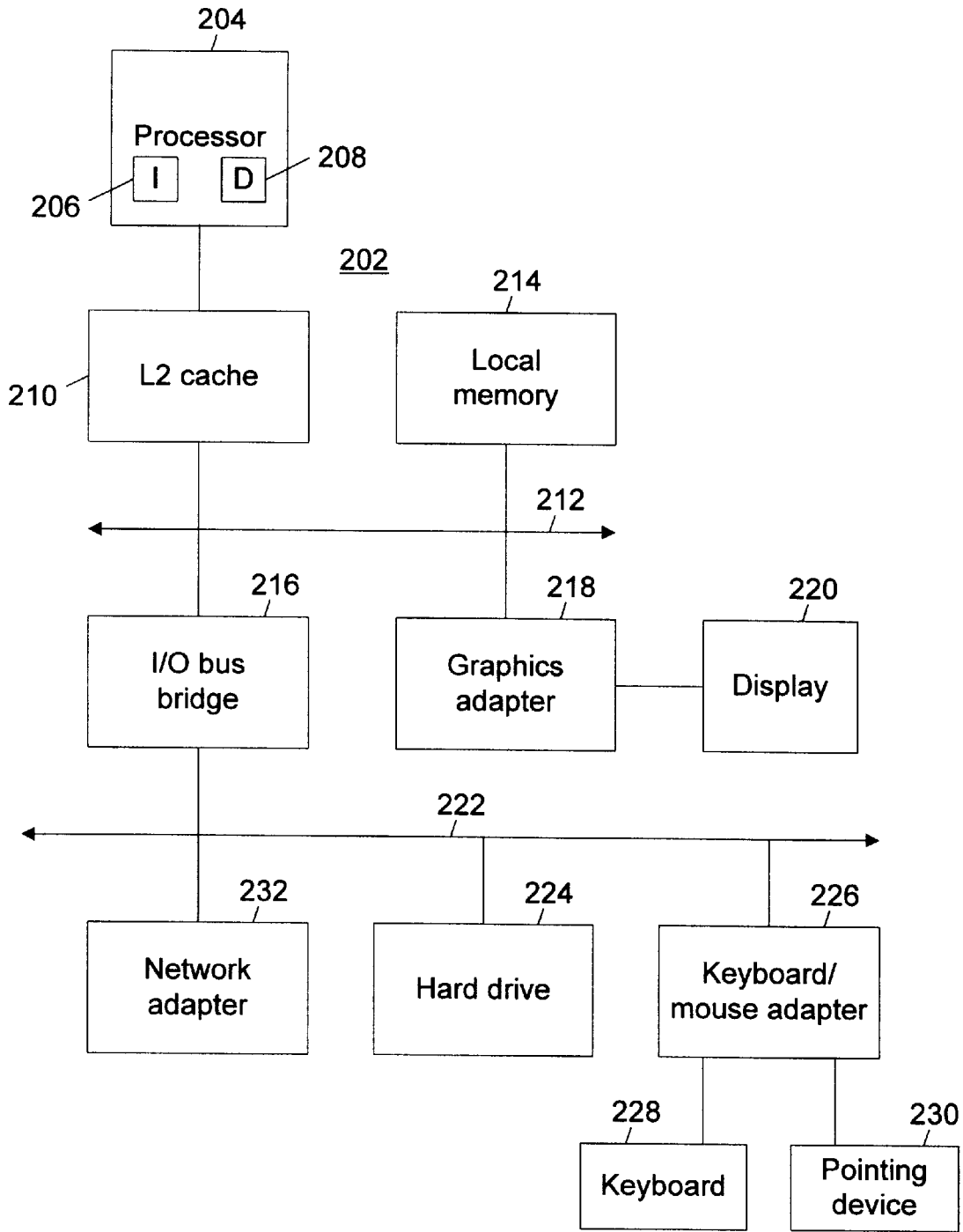**30 Claims, 5 Drawing Sheets**

Figure 1

Figure 2

302		304	306	308
www.irs.com\default.html		04/15/97	✓	

300

Figure 3

403a
www.irs.com\default.html

402
Local
Contents
Cache

403b
www.irs.com\default.html

405a
www.irs.com\default.html

404
Server A
Contents
Cache

405b
www.irs.com\index.html

407a
www.irs.com\default.html

406
Server B
Contents
Cache

407b
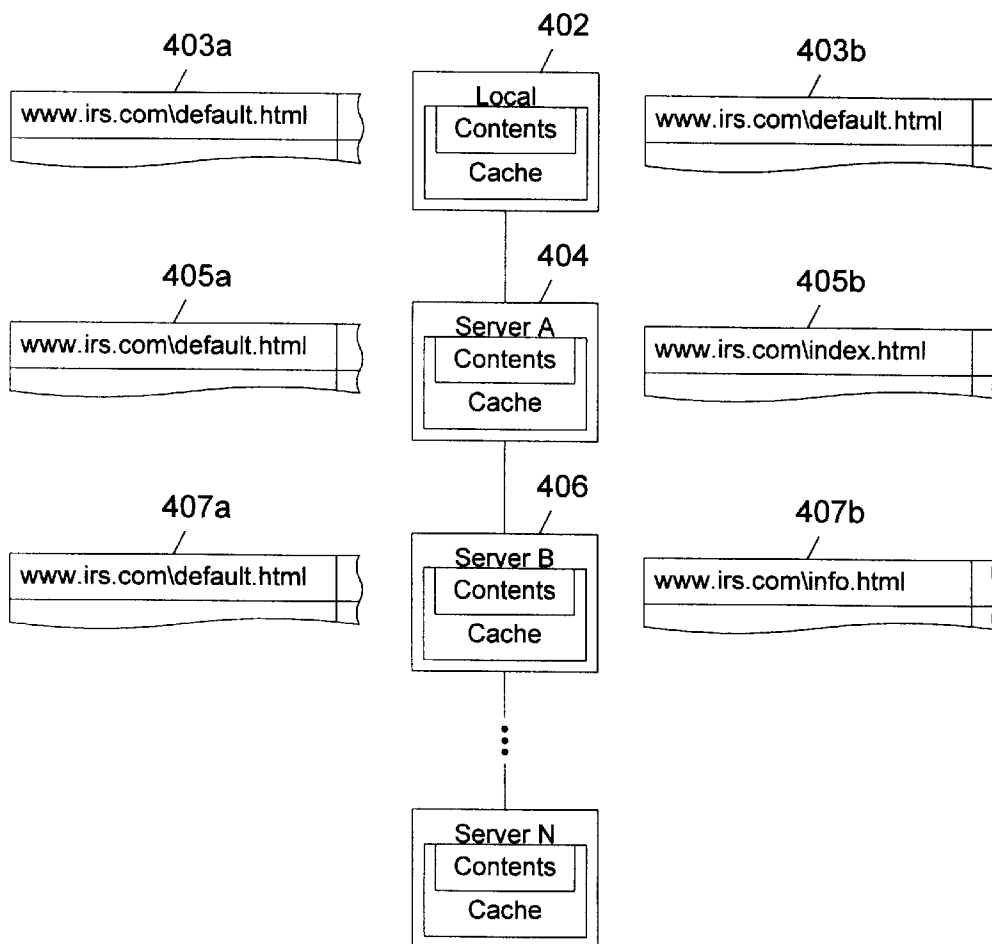www.irs.com\info.html
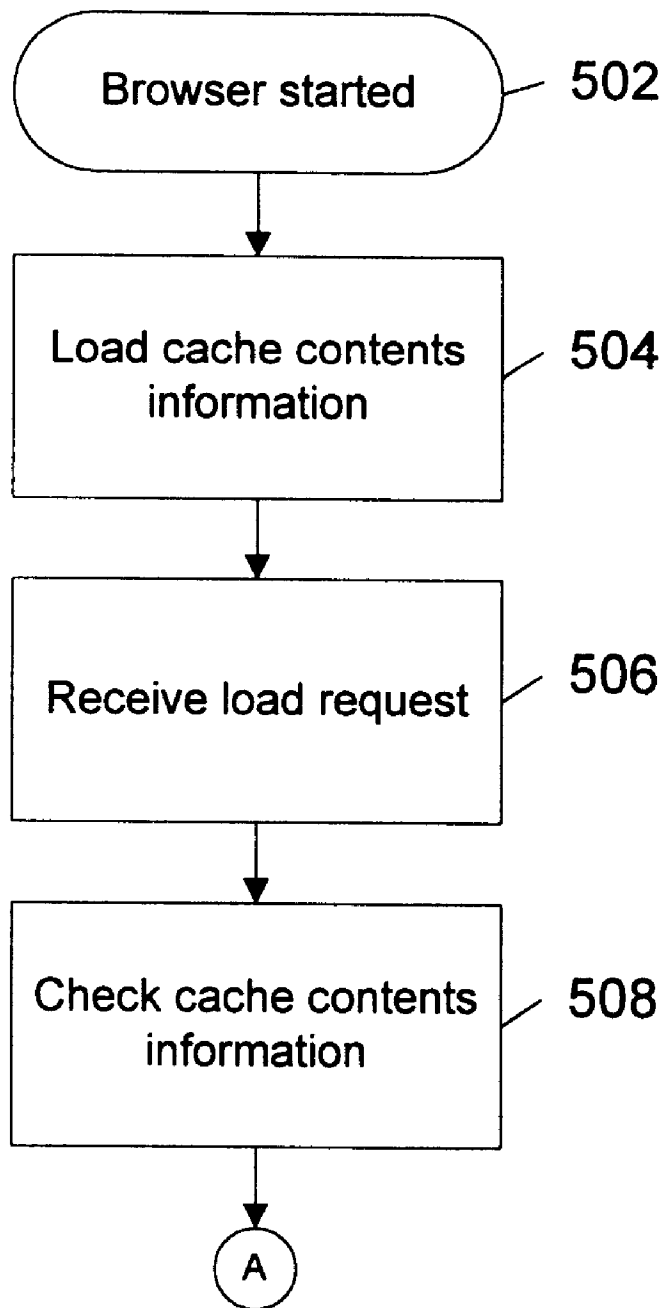
Server N
Contents
Cache

Figure 4

Figure 5A

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