



US008041784B1

(12) **United States Patent**  
**Amidon et al.**

(10) **Patent No.:** **US 8,041,784 B1**  
(45) **Date of Patent:** **Oct. 18, 2011**

(54) **REDUNDANT HYBRID P2P CONTENT SHARING**

(75) Inventors: **Christopher M. Amidon**, Apex, NC (US); **Alfredo C. Issa**, Apex, NC (US); **Richard J. Walsh**, Raleigh, NC (US)

(73) Assignee: **Qurio Holdings, Inc.**, Raleigh, NC (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1351 days.

(21) Appl. No.: **11/475,635**

(22) Filed: **Jun. 27, 2006**

(51) **Int. Cl.**  
**G06F 15/16** (2006.01)  
**G06F 15/177** (2006.01)

(52) **U.S. Cl.** ..... **709/220; 709/203**

(58) **Field of Classification Search** ..... **709/203, 709/220**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,065,062	A *	5/2000	Periasamy et al. ....	709/242
6,351,792	B1 *	2/2002	Milillo .....	711/162
6,687,732	B1	2/2004	Bector et al.	
6,920,637	B2 *	7/2005	Mason et al. ....	719/318
7,370,015	B2	5/2008	Gvily	
7,401,115	B1	7/2008	Arsenault	
2001/0007099	A1	7/2001	Rau et al.	
2002/0112001	A1	8/2002	Sutherland et al.	
2002/0184310	A1 *	12/2002	Traversat et al. ....	709/204
2002/0188657	A1 *	12/2002	Traversat et al. ....	709/201
2003/0093520	A1	5/2003	Beesley	
2003/0177246	A1 *	9/2003	Goodman et al. ....	709/228
2004/0044723	A1	3/2004	Bell et al.	
2004/0070678	A1	4/2004	Toyama et al.	
2004/0148434	A1 *	7/2004	Matsubara et al. ....	709/246

2004/0236983	A1 *	11/2004	Burton et al. ....	714/6
2005/0188085	A1 *	8/2005	Lin et al. ....	709/225
2005/0190273	A1	9/2005	Toyama et al.	
2005/0229243	A1	10/2005	Svensden et al.	
2006/0047839	A1	3/2006	Tate et al.	
2006/0077955	A1 *	4/2006	Poustchi et al. ....	370/352
2006/0136551	A1 *	6/2006	Amidon et al. ....	709/203
2007/0073837	A1 *	3/2007	Johnson-McCormick et al. ....	709/217
2007/0198636	A1 *	8/2007	Inamoto et al. ....	709/203

FOREIGN PATENT DOCUMENTS

WO WO 2006/055535 \* 5/2006

OTHER PUBLICATIONS

Pix Village, <http://www.pixvillage.com/online-photo-sharing-features-p2p.aspx>.

\* cited by examiner

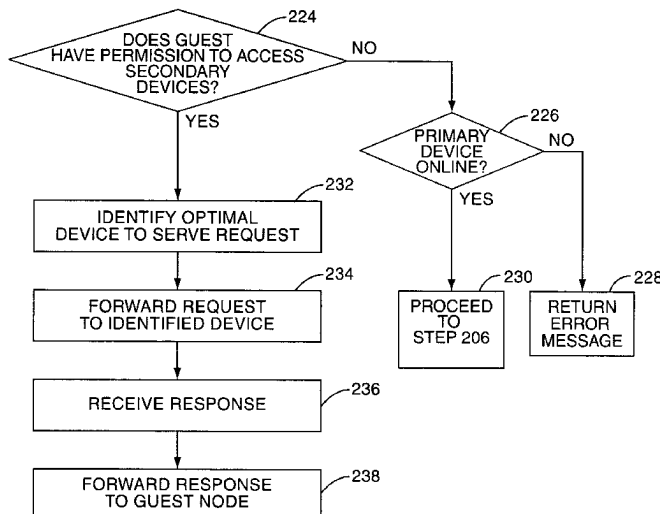
Primary Examiner — Larry Donaghue

(74) Attorney, Agent, or Firm — Withrow & Terranova, PLLC

(57) **ABSTRACT**

A redundant hybrid peer-to-peer content sharing system is provided. In general, the system includes a proxy hosted by a central server and, for each user, a primary user device hosting a primary sharing engine and one or more secondary user devices hosting secondary sharing engines. The user's shared images are hosted by the primary user device, and, based on the capabilities of the secondary user devices, versions of the shared images are copied to the secondary devices. When a guest at a guest node desires to view a shared image, a request for the shared image is provided to the proxy. Generally, if the primary user device is online, the proxy forwards the request to the primary device. If the primary user device is offline, the proxy identifies one of the secondary user devices capable of serving the request and forwards the request to the identified secondary user device.

17 Claims, 7 Drawing Sheets



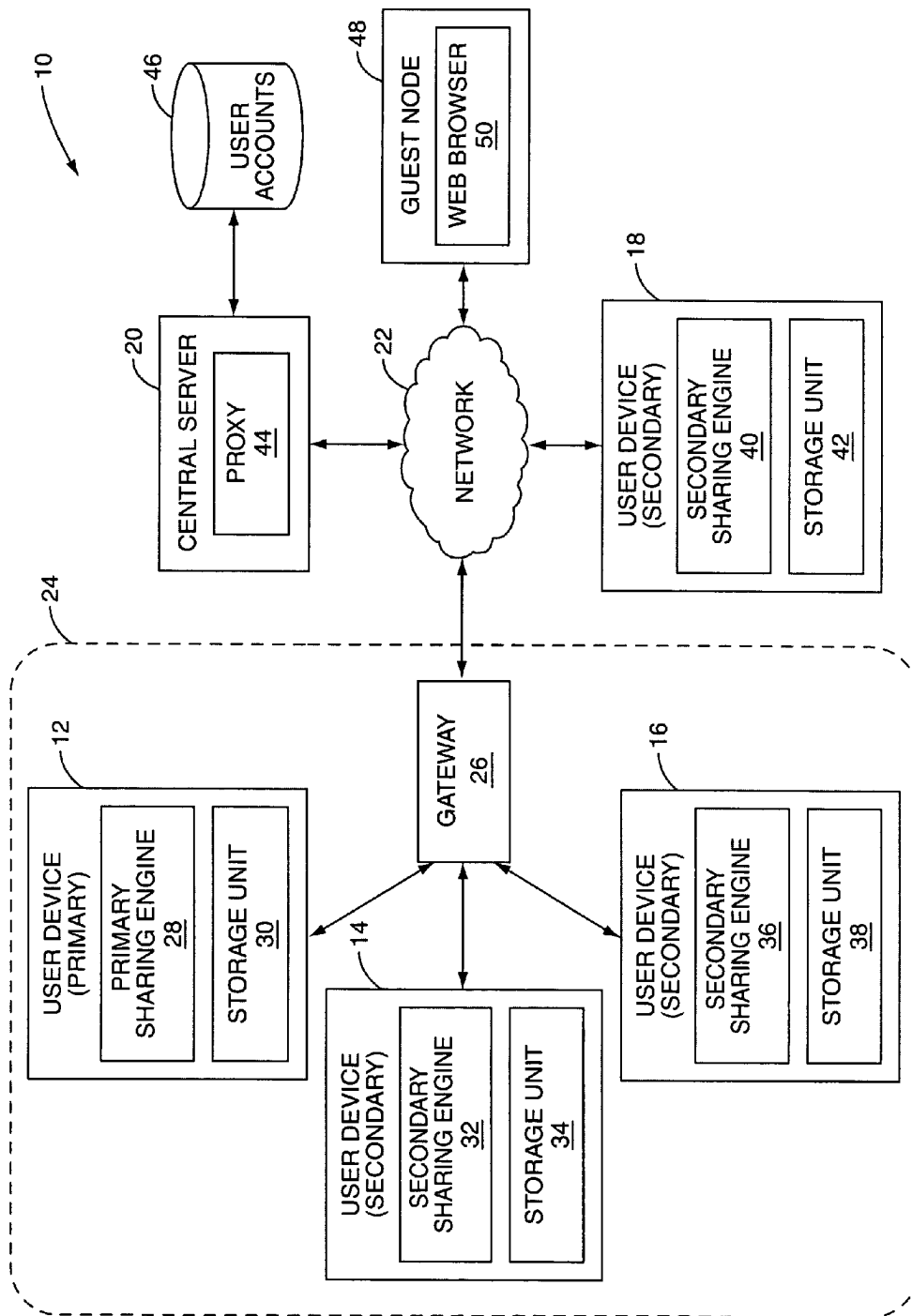
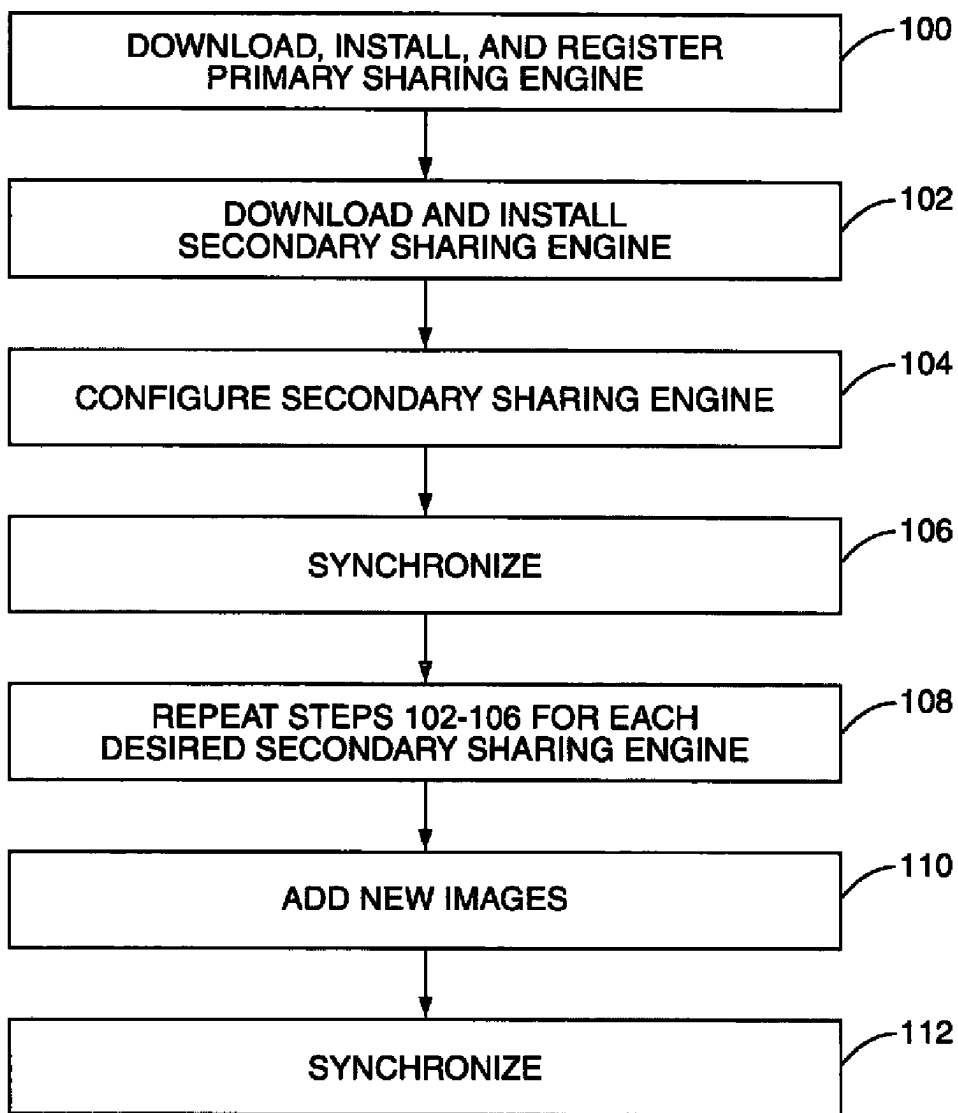
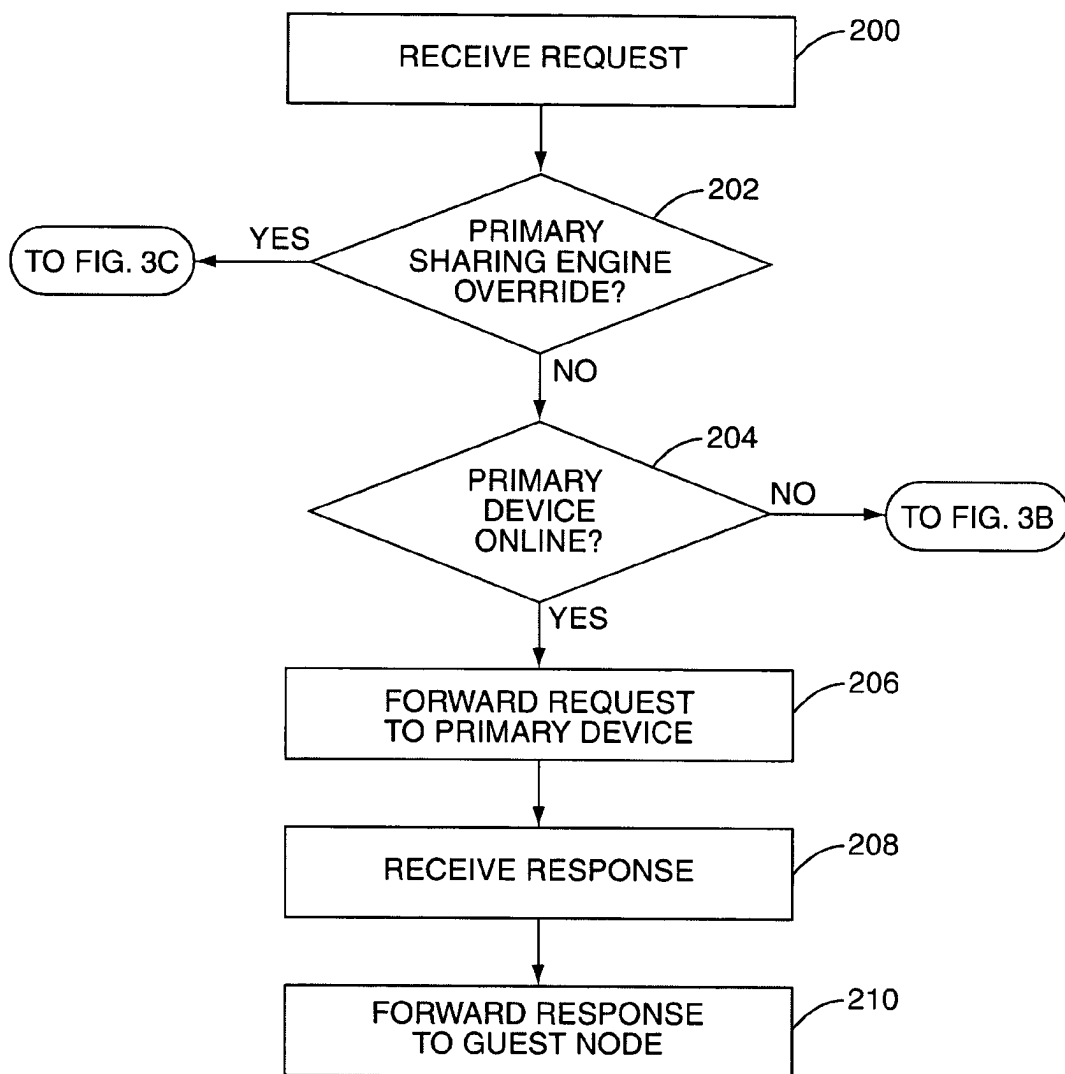


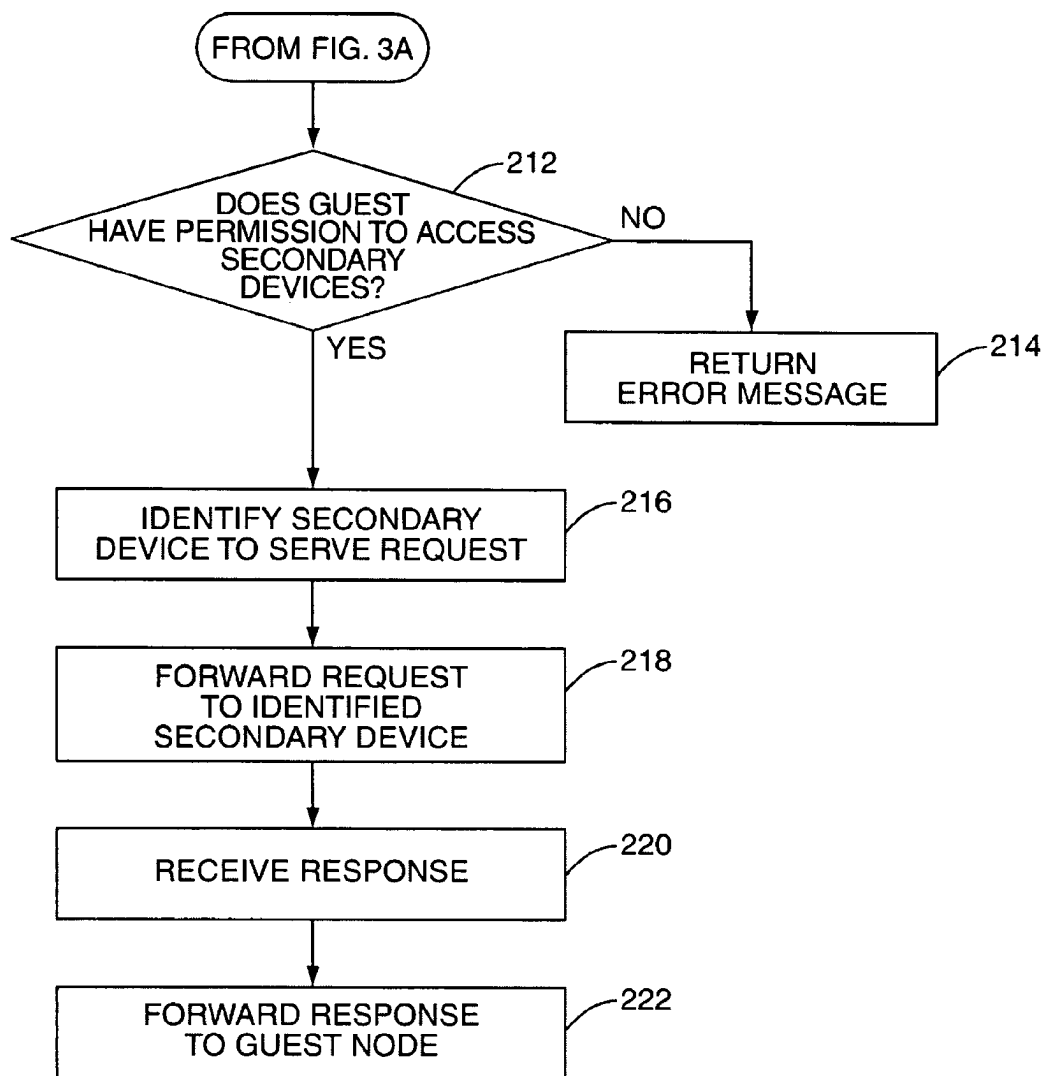
FIG. 1



**FIG. 2**



**FIG. 3A**



**FIG. 3B**

# 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.