

US007254131B2

(12) United States Patent

Brewer

(54) INTERCONNECTED ETHERNET AND 1394 NETWORK

- (75) Inventor: Jason M. Brewer, Dallas, TX (US)
- (73) Assignee: **Texas Instruments Incorporated**, Dallas, TX (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 366 days.

This patent is subject to a terminal disclaimer.

- (21) Appl. No.: 10/694,277
- (22) Filed: Oct. 27, 2003

(65) **Prior Publication Data**

US 2004/0088426 A1 May 6, 2004

Related U.S. Application Data

- (63) Continuation of application No. 08/828,484, filed on Mar. 31, 1997, now Pat. No. 6,657,999.
- (51) Int. Cl. *H04L 12/50* (2006.01) *G06F 15/16* (2006.01)
- (58) Field of Classification Search 709/217–219; 713/153; 370/401

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,627,052	А	*	12/1986	Hoare et al	370/402
4,831,620	Α		5/1989	Conway et al.	
5,088,032	А	*	2/1992	Bosack	709/242

(10) Patent No.: US 7,254,131 B2

(45) **Date of Patent:** *Aug. 7, 2007

- 5,136,580 A 8/1992 Videlock et al.
- 5,251,213 A * 10/1993 Videlock et al. 370/403

(Continued)

FOREIGN PATENT DOCUMENTS

GB 2 283 645 A 10/1995

OTHER PUBLICATIONS

IEEE 1394: A Ubiquitous Bus, Hoffman, G., Moore, D., IEEE, 1063-6390, 1995, p. 334-338.*

(Continued)

Primary Examiner—Beatriz Prieto (74) Attorney, Agent, or Firm—Ronald O. Neerings; Wade James Brady, III; Frederick J. Telecky, Jr.

(57) **ABSTRACT**

A network configuration (10) including a first network medium which is a 1394 network as well as a second network medium. Each of the first and second network media is coupled to a corresponding plurality of host computers (H1 through H3 and H5 through H7). The network configuration further includes a link layer gateway computer (H4) coupled to both the first network medium and the second network medium. The link layer gateway computer is operable to communicate a data packet from a source host computer selected from one of the plurality of host computers coupled to the first network medium to a destination host computer selected from one of the plurality of host computers coupled to the second network medium. Additionally, the link layer gateway computer is operable to communicate a data packet from a source host computer selected from one of the plurality of host computers coupled to the second network medium to a destination host computer selected from one of the plurality of host computers coupled to the first network medium

35 Claims, 3 Drawing Sheets



U.S. PATENT DOCUMENTS

5,309,437	А		5/1994	Perlman et al.
5,371,852	Α	¥	12/1994	Attanasio et al 709/245
5,452,292	А		9/1995	Okanoue et al.
5,479,407	Α	*	12/1995	Ko et al 370/231
5,590,285	А	*	12/1996	Krause et al 709/218
5,671,355	А	*	9/1997	Collins 709/250
5,742,905	А	*	4/1998	Pepe et al 455/461
5,781,550	А	*	7/1998	Templin et al 340/401
5,857,201	А	*	1/1999	Wright et al 707/104.1
5,883,621	А		3/1999	Iwamura
5,918,016	Α	*	6/1999	Brewer et al 709/220
6,058,429	Α	*	5/2000	Ames et al 709/242

OTHER PUBLICATIONS

IEEE 1394: Status and growth path, Diamond, S.L., Picosoft, IN., IEEE Micro, 0272-1732, 1966, p. 75-78.*

Low-cost Networks and Gateway for teaching Data Communications, Hughes, L., ACM 0-89791-298-5, 1989, p. 6-11.* RFC 903: A Reverse Address Resolution Protocol, Finlyson et. al., Jun. 1984, p. 1-4.*

RFC 1009: Requirements for Internet Gateways, R. Braden & J. Postel, Jun. 1987, p. 1-55.*

"RFC 1027—Using ARP to Implement Transparent Subnet Gateways", J. S. Quarterman, et al., Network Working Group, Oct. 1987, XP002218271, Retrieved from the Internet: <URL:ftp://ftp.rfceditor.org/in-notes/pdf_rfc/rfc1027.txt.pdf>, retrieved on Oct. 25, 2002.

"FDDI Lan Bridging Schemes", R. Shani, Electrical and Electronics Engineers in Israel, 1991, Proceedings., 17th Convention of Tel Aviv, Israel Mar. 5-7, 1991, New York, NY, USA, IEEE, US, May 3, 1991, XP010041250, ISBN: 0-87942-678-0.

"IEEE 1394: The Cable Connection to Complete the Digital Revolution", D. Moore, Skipstone, Inc., Oct. 11, 1996, XP002119363, Retrieved from the Internet: <URL:http://www.vxm.com/21R.49. html>.

Newton's Telecom Dictionary, Harry Newton, Telecom Books & Flariton Publishing, 1998.

* cited by examiner

Α

R

Δ



Find authenticated court documents without watermarks at <u>docketalarm.com</u>.



DOCKET A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

Δ



Find authenticated court documents without watermarks at docketalarm.com.

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.

