



US005502726A

United States Patent [19]

[11] Patent Number: **5,502,726**

Fischer

[45] Date of Patent: **Mar. 26, 1996**

[54] SERIAL LAYERED MEDICAL NETWORK

[75] Inventor: **Michael Fischer**, San Antonio, Tex.

[73] Assignee: **Nellcor Incorporated**, Pleasanton, Calif.

[21] Appl. No.: **829,146**

[22] Filed: **Jan. 31, 1992**

[51] Int. Cl.⁶ **H04J 3/24; H04L 29/02; H04L 12/56**

[52] U.S. Cl. **370/94.1**

[58] Field of Search **370/94.1, 60, 85.15, 370/58.1, 56, 112, 92, 85.13, 42, 83, 85.6**

[56] References Cited

U.S. PATENT DOCUMENTS

4,375,097	2/1983	Ulug	370/94.1
4,423,414	12/1983	Bryant et al. .	
4,495,493	1/1985	Segarra et al. .	
4,549,297	10/1985	Nishimoto .	
4,574,284	3/1986	Feldman et al. .	
4,603,416	7/1986	Servel et al.	370/94.1
4,680,581	7/1987	Kozlik et al. .	
4,692,918	9/1987	Elliott et al. .	
4,706,080	11/1987	Sincoskie .	
4,930,122	5/1990	Takahashi et al.	370/94.1
4,941,089	7/1990	Fischer .	
4,947,390	8/1990	Sheehy	370/85.13
5,007,043	4/1991	van den Dool et al.	370/94.1
5,010,546	4/1991	Kato	370/94.1
5,050,166	9/1991	Cantoni et al.	370/61
5,067,123	11/1991	Hyodo et al.	370/58.1
5,113,392	5/1992	Takiyasu et al.	370/85.15
5,140,584	8/1992	Suzuki	370/60
5,173,897	12/1992	Schrodi et al.	370/60
5,214,642	5/1993	Kunimoto et al.	370/82

OTHER PUBLICATIONS

"Internetworking and Addressing", Gene White, Chapt. 5, pp. 101-125, McGraw-Hill, Inc., 1992.

"Architecture of a Comprehensive Radiologic Imaging Network", H. K. Huang et al., IEEE Journal on Selected Areas in Communications, Sep. 1992, vol. 10, No. 7, ISACEM (ISSN 0733-8716).

Primary Examiner—Wellington Chin

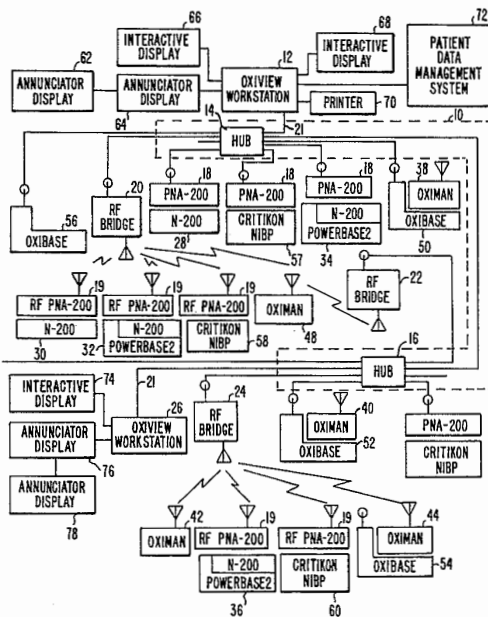
Assistant Examiner—Ajit Patel

Attorney, Agent, or Firm—Townsend and Townsend and Crew

[57] ABSTRACT

A network or telemetry system which allows virtual services at the application or presentation layer to communicate with other virtual services without regard to the physical interconnections. Each message, called a parcel, includes the information to be transmitted along with a virtual address header. The parcel is provided to a gateway, which inserts the parcel without modification into a packet with address information for the physical through session layers in the packet header. The packet is then transmitted to another network node, which receives and delivers the unmodified parcel to the addressed destination virtual service. A number of parcels from the same or different virtual services can be packed into a single packet for transmission from the gateway in cases where these parcels are all directed to virtual services at the same destination node. Once a session is established, such as between a gateway and a workstation, virtual services at the gateway node and the workstation can communicate with each other without requiring a lot of header overhead for each transmission. Instead, the session need simply be identified. Each gateway typically has one session at a time, but a workstation can support up to 64 sessions simultaneously.

12 Claims, 8 Drawing Sheets



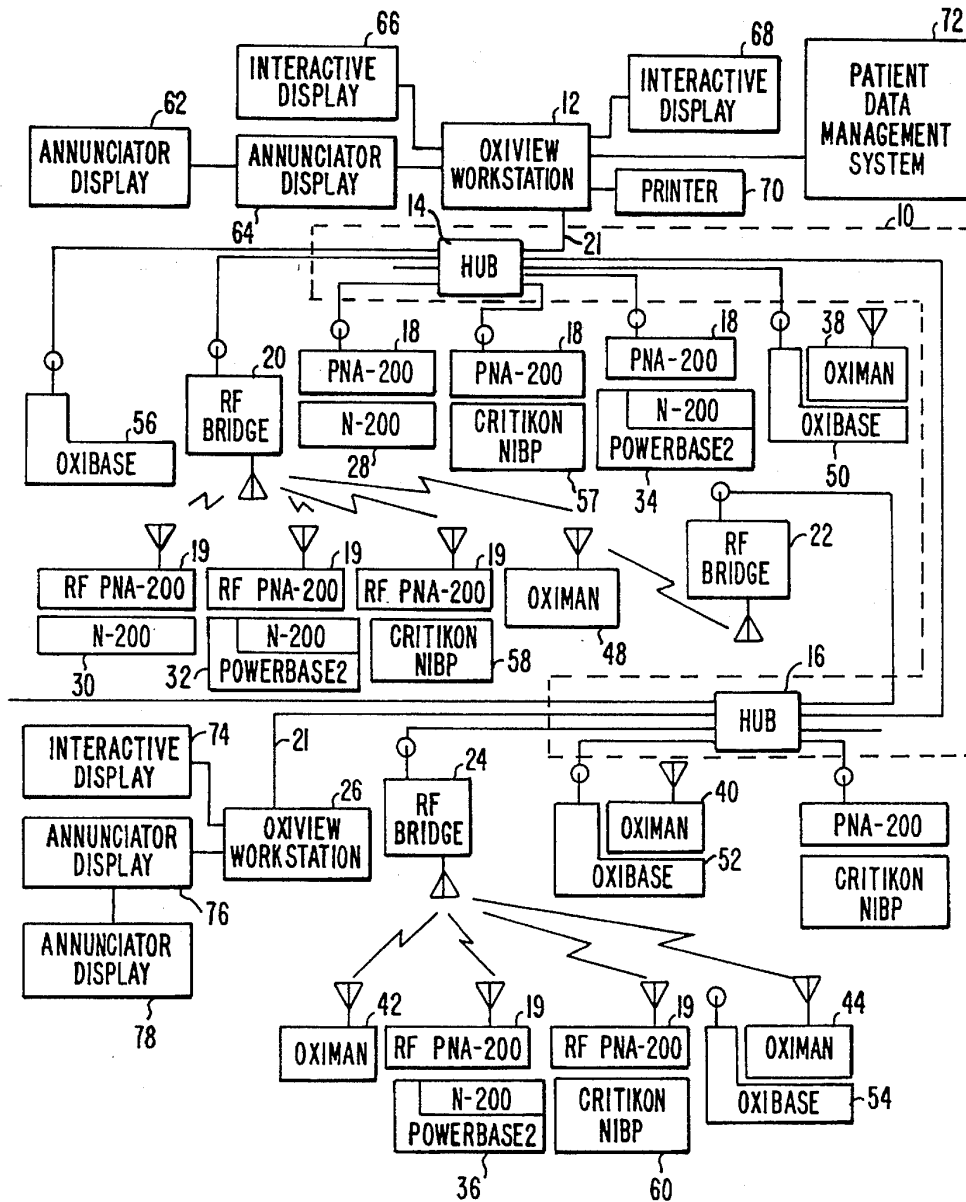


FIG. 1.

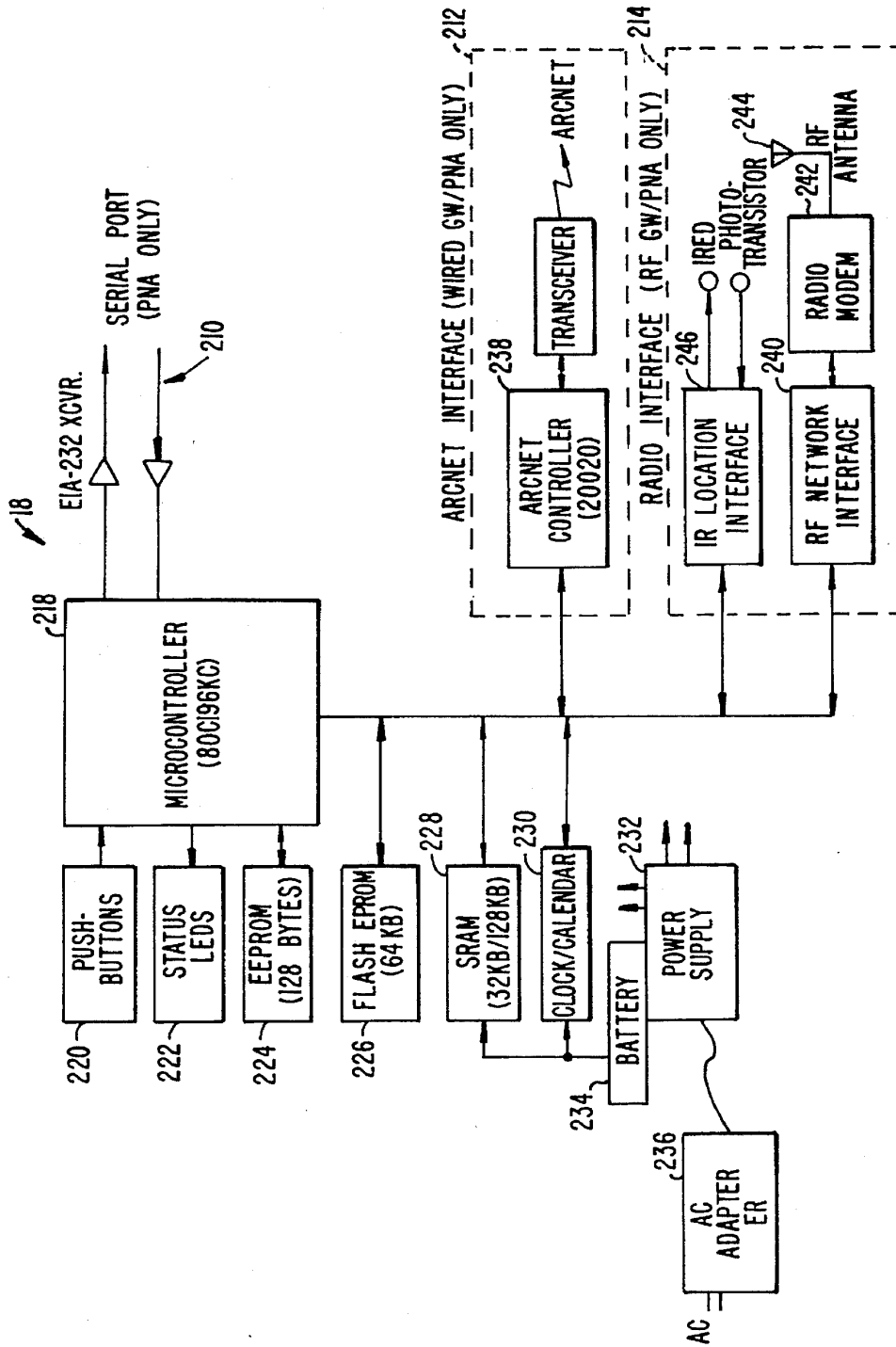


FIG. 2.

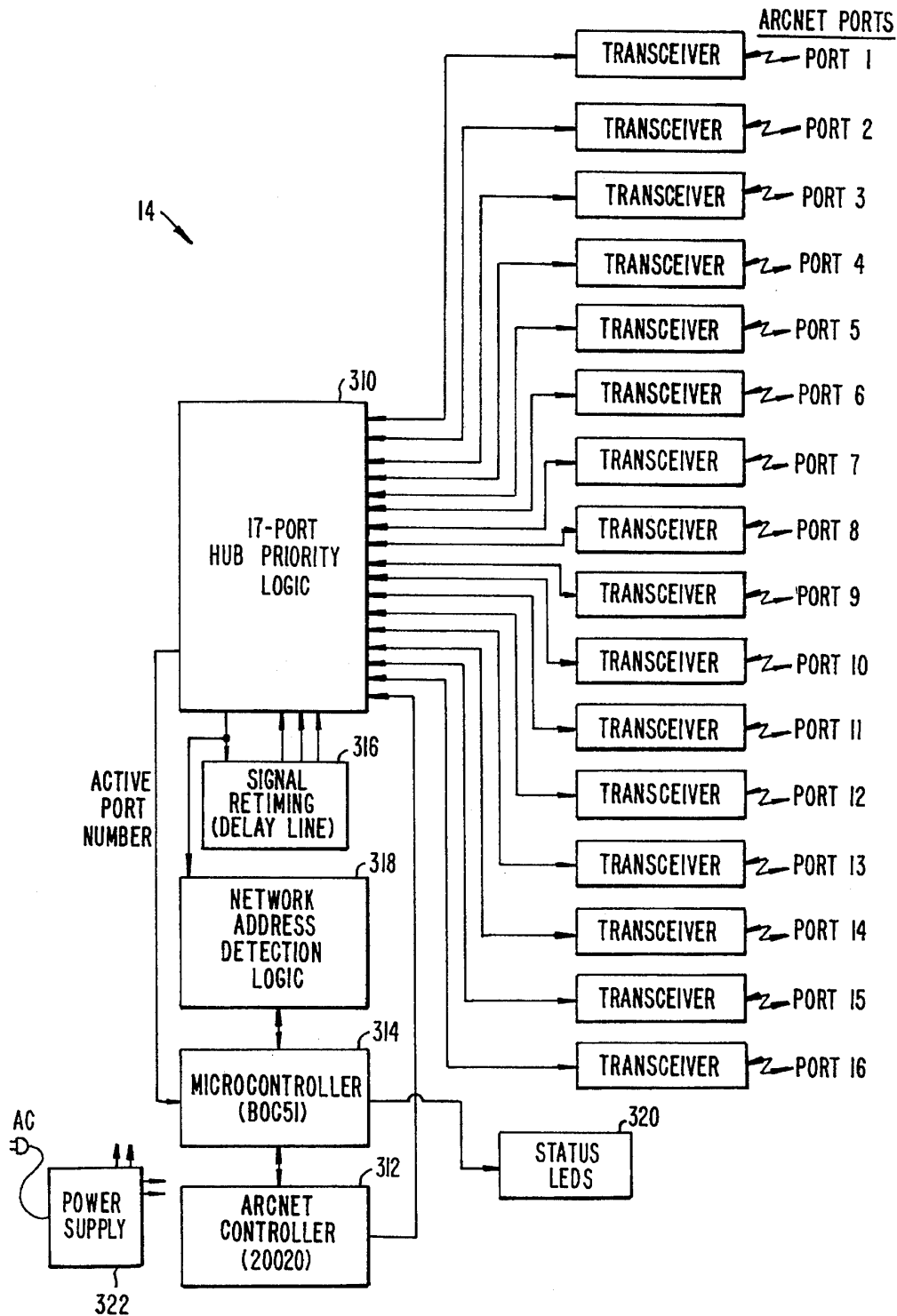


FIG. 3.

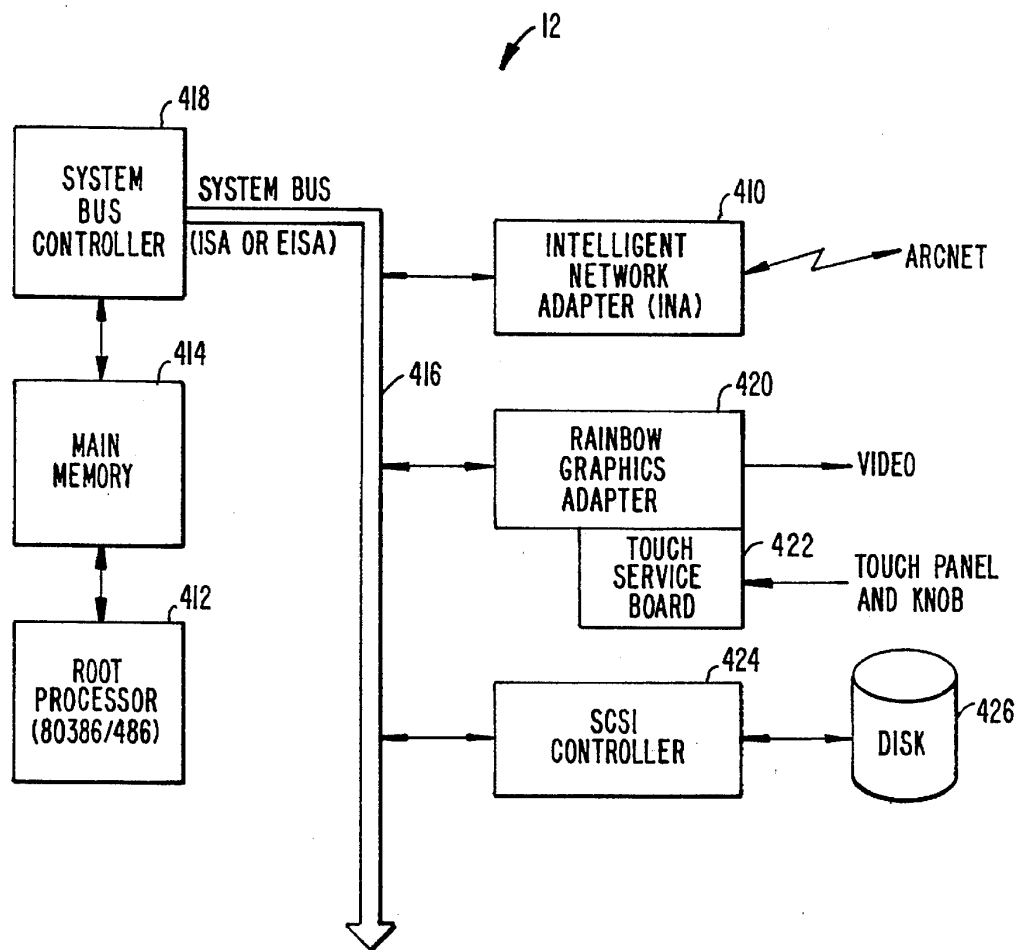


FIG. 4.

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.