



- [54] **METHOD AND SYSTEM FOR REMOTELY MONITORING MULTIPLE MEDICAL PARAMETERS**
- [76] Inventors: **Joseph Lai**, 19660 Killarney Way, Brookfield, Wis. 53005; **Lawrence A. Buyan**, 6225 S. 38th St., Greenfield, Wis. 53221; **Renee S. DuBore**, 8101 Milwaukee Ave., Wauwatosa, Wis. 53213; **Brian Lewis Pate**, 2042 Bearss Ave. East, Tampa, Fla. 33613; **James L. Reuss**, 164 S. Charles St., Waukesha, Wis. 53186

4,981,141	1/1991	Segalowitz .	
5,307,817	5/1994	Guggenbuhl et al. .	
5,349,953	9/1994	McCarthy et al. ....	600/300
5,381,798	1/1995	Burrows .	
5,410,471	4/1995	Alyfuku et al. ....	600/300
5,415,181	5/1995	Hogrefe et al. .	
5,416,695	5/1995	Stutman et al. ....	600/300
5,421,343	6/1995	Feng .	
5,458,123	10/1995	Unger .	
5,462,051	10/1995	Oka et al. ....	600/300
5,536,084	7/1996	Curtis et al. .	
5,553,609	9/1996	Chen et al. ....	600/300
5,576,952	11/1996	Stutman et al. ....	600/300
5,617,871	4/1997	Burrows .....	600/300
5,619,991	4/1997	Sloane .....	600/300

[21] Appl. No.: 747,859

[22] Filed: Nov. 13, 1996

[51] Int. Cl.<sup>6</sup> ..... A61B 5/02

[52] U.S. Cl. .... 600/300; 128/903

[58] Field of Search ..... 600/300, 368, 600/371, 324, 450, 451, 481, 485, 508, 509, 544, 545, 529, 531, 533, 903

[56] **References Cited**

U.S. PATENT DOCUMENTS

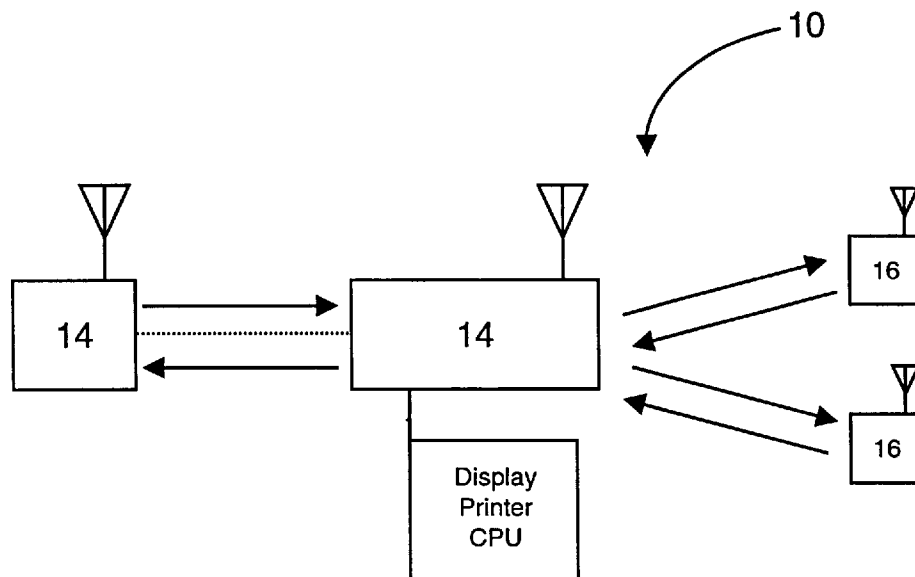
3,646,606	2/1972	Buxton et al. .
3,786,190	1/1974	Pori .
4,494,553	1/1985	Sciarra et al. .
4,517,982	5/1985	Shiga et al. .
4,556,063	12/1985	Thompson et al. .
4,883,057	11/1989	Broderick .
4,958,645	9/1990	Cadell et al. .

Primary Examiner—Robert L. Nasser  
Attorney, Agent, or Firm—Reinhart, Boerner, Van Deuren, Norris & Rieselbach, s.c.

[57] **ABSTRACT**

The invention relates to a medical parameter monitoring device which allows the monitoring of a plurality of medical parameters from a remote location. The invention uses a central monitoring system which transmits and receives data parameters via RF from remote patient monitors. The monitoring system utilizes a digital spread spectrum RF transceiver between the central monitoring system to the remote monitors. Forward error correcting, frequency hopping, and spread spectrum communications are employed to provide accurate transmission of data for a plurality of physiological parameters. Transmitted data can be automatically registered into storage in the central monitoring system.

17 Claims, 5 Drawing Sheets



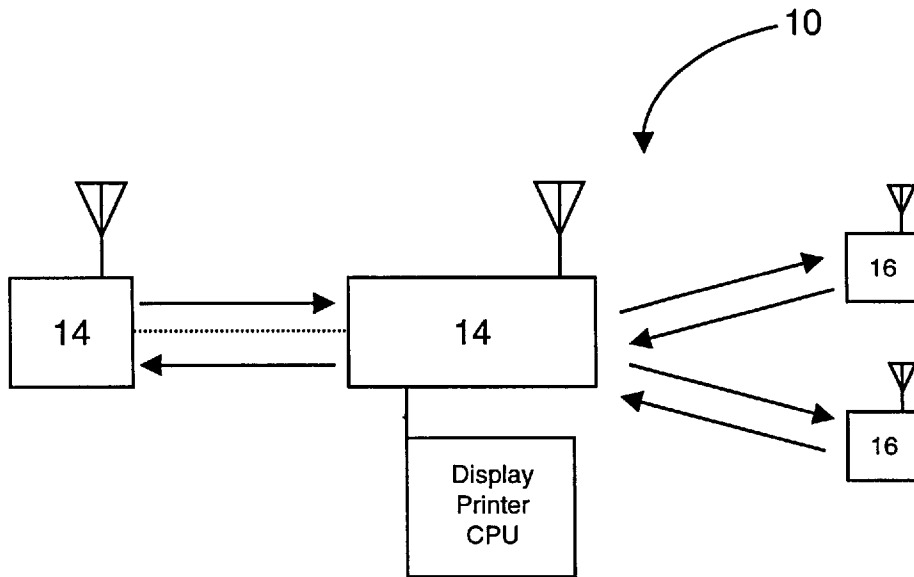


FIG. 1

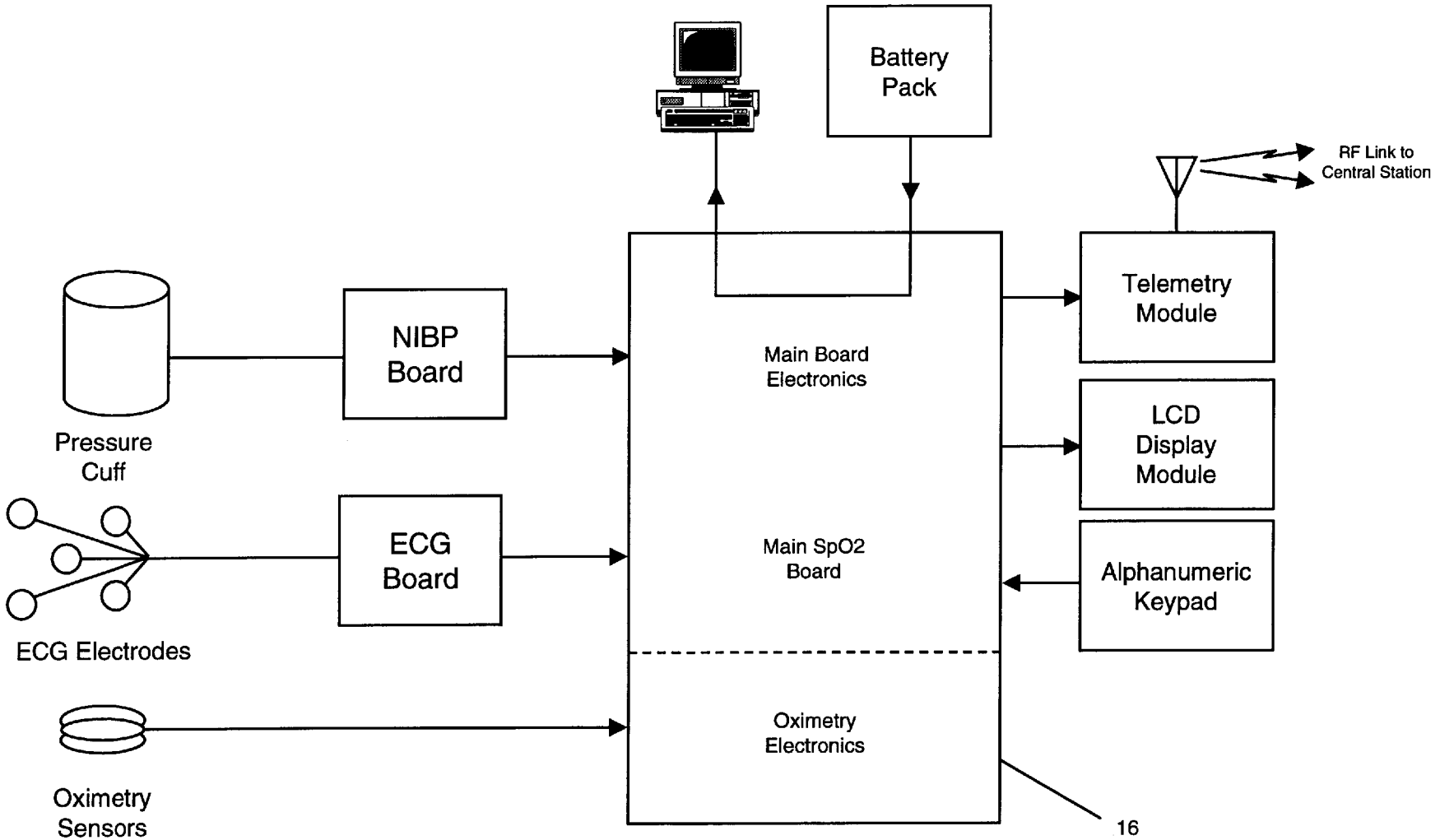


FIG. 2

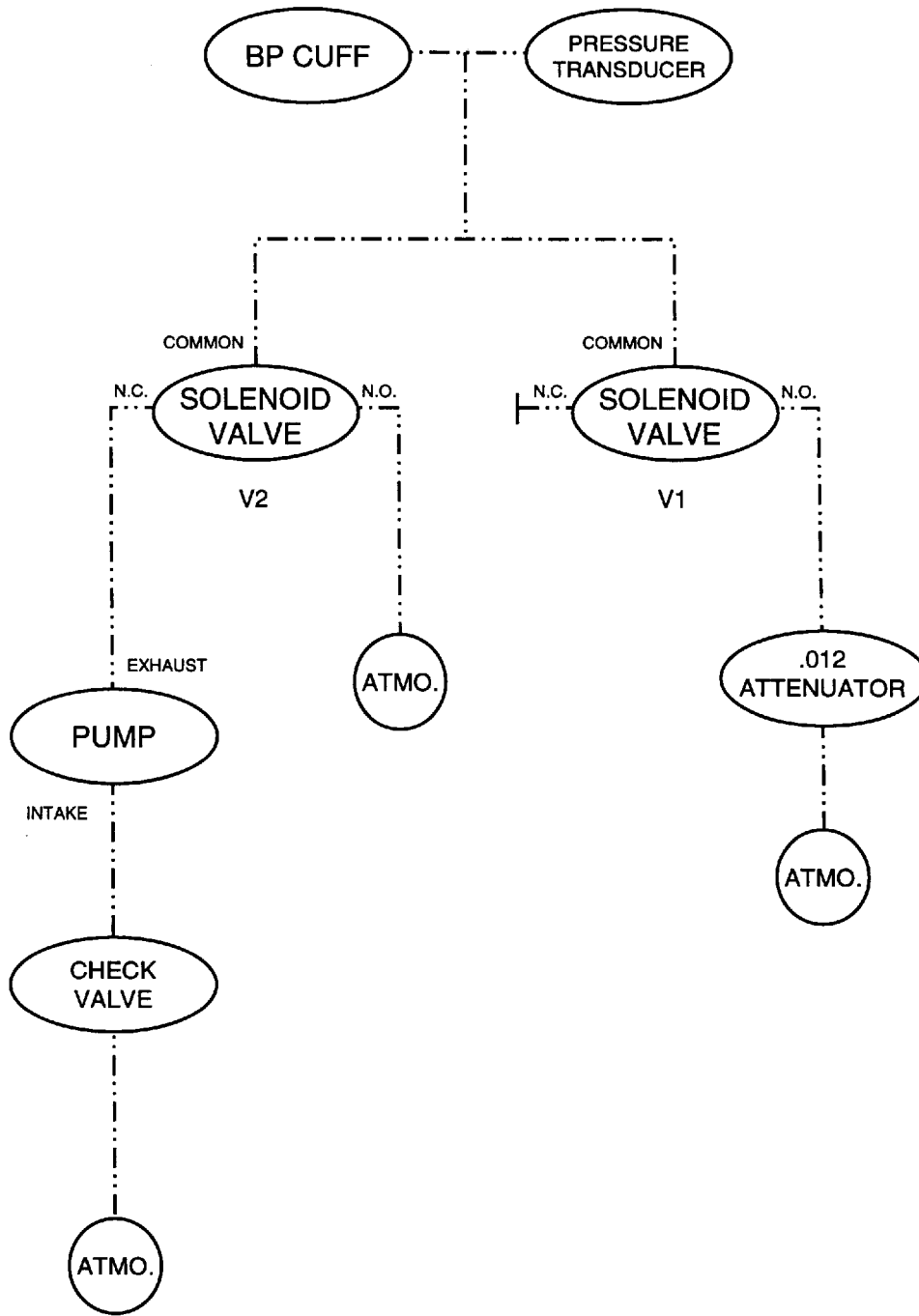


FIG. 3

### Software Block Diagram

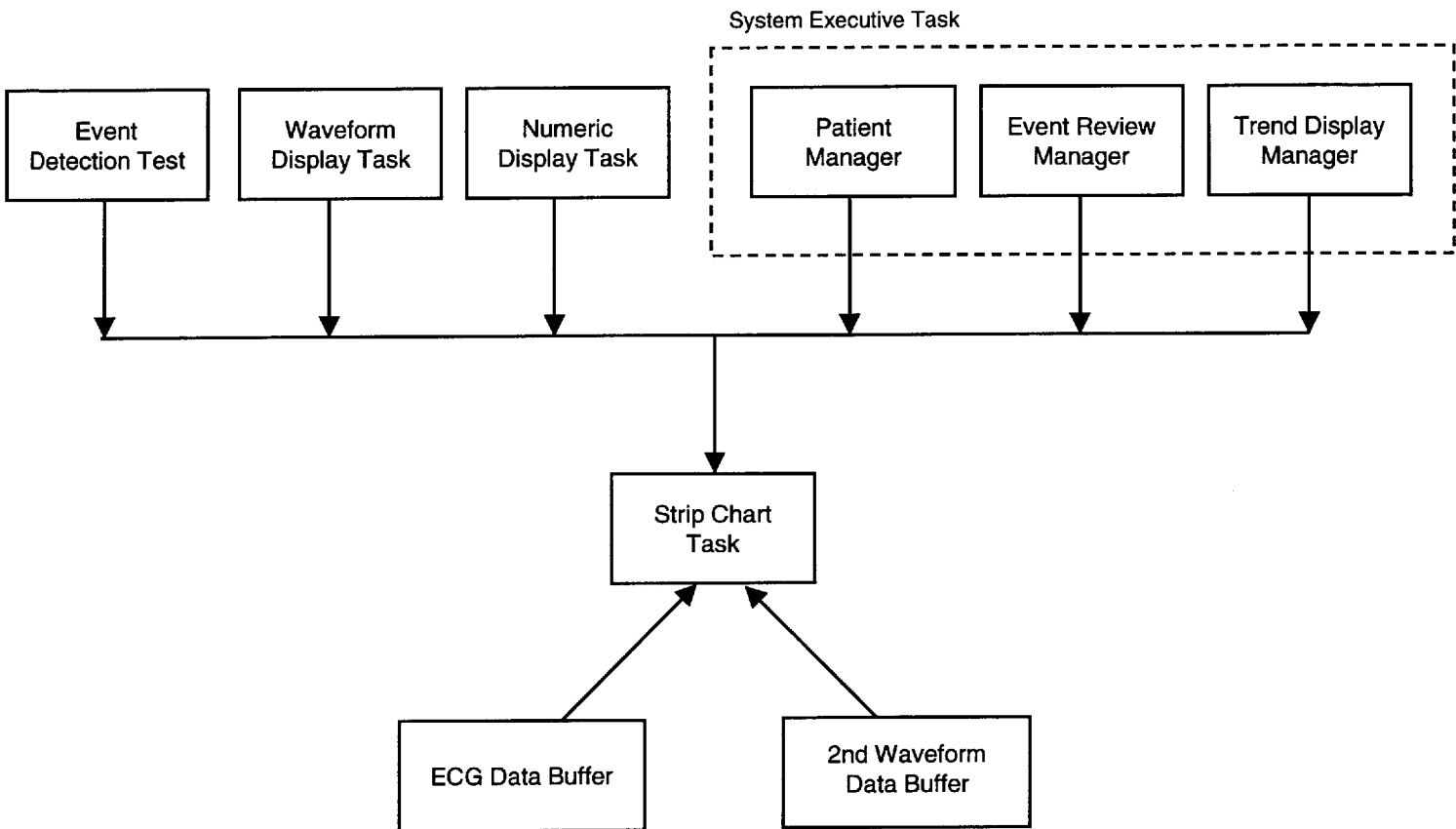


FIG. 4

# 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.