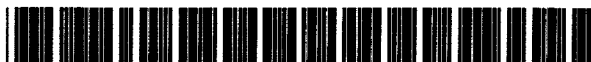


EXHIBIT

DSS-2001



US005699357A

United States Patent [19] Carvey

[11] Patent Number: **5,699,357**
[45] Date of Patent: **Dec. 16, 1997**

[54] **PERSONAL DATA NETWORK**
[75] Inventor: **Philip P. Carvey**, Bedford, Mass.
[73] Assignee: **BBN Corporation**, Cambridge, Mass.

5,297,142 3/1994 Paggeot et al. 370/461
5,307,297 4/1994 Iguchi et al. 364/708.1
5,371,734 12/1994 Fischer .
5,481,265 1/1996 Russell .

[21] Appl. No.: **611,695**
[22] Filed: **Mar. 6, 1996**
[51] Int. Cl.⁶ **H04J 3/06**
[52] U.S. Cl. **370/347; 370/350; 370/442; 370/509; 455/89; 364/708.1**
[58] **Field of Search** 370/310, 311, 370/312, 313, 365, 367, 348, 349, 350, 431, 433, 442, 443, 445, 449, 458, 462, 465, 468, 503, 509, 510, 512, 511, 514, 522; 455/89, 100, 54.1, 66, 38.3; 375/222; 364/705.01, 705.05, 708.1; 395/200.01, 200.02, 200.17, 200.19, 280, 828, 835, 882, 551; 341/22; 345/156, 157, 169

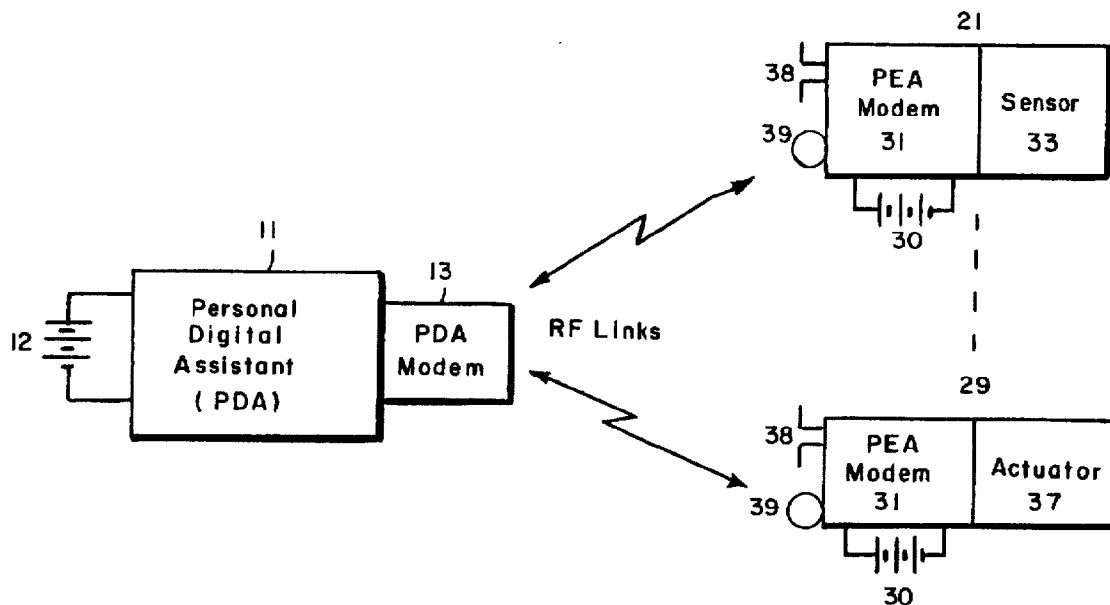
Primary Examiner—Wellington Chin
Assistant Examiner—Huy D. Vu
Attorney, Agent, or Firm—Henry D. Pahl, Jr.

[57] ABSTRACT

The data network disclosed herein utilizes low duty cycle pulsed radio frequency energy to effect bidirectional wireless data communication between a server microcomputer unit and a plurality of peripheral units, each of which is intended to be carried on the person of the microcomputer user. By establishing a tightly synchronized common time base between the units and by the use of sparse codes, timed in relation to the common time base, low power consumption and avoidance of interference between nearby similar systems is obtained.

[56] **References Cited**
U.S. PATENT DOCUMENTS
5,247,285 9/1993 Yokota et al. 364/708.1

18 Claims, 6 Drawing Sheets



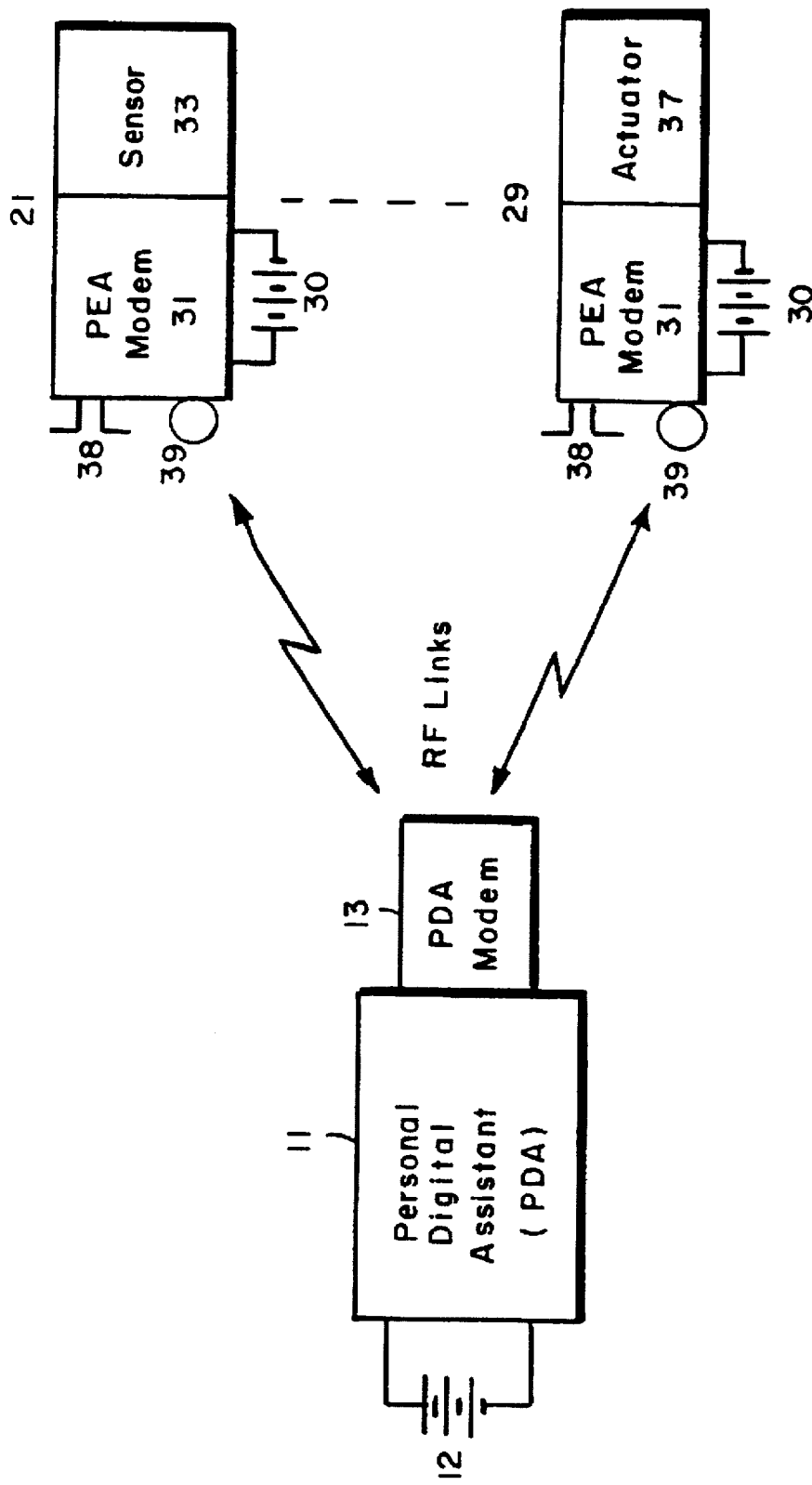


FIG. 1

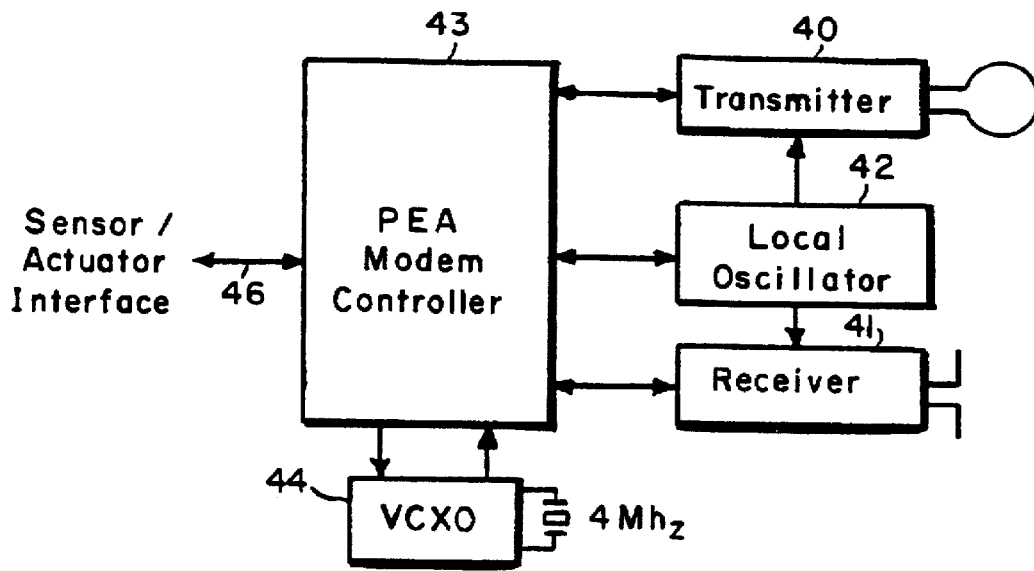


FIG. 2

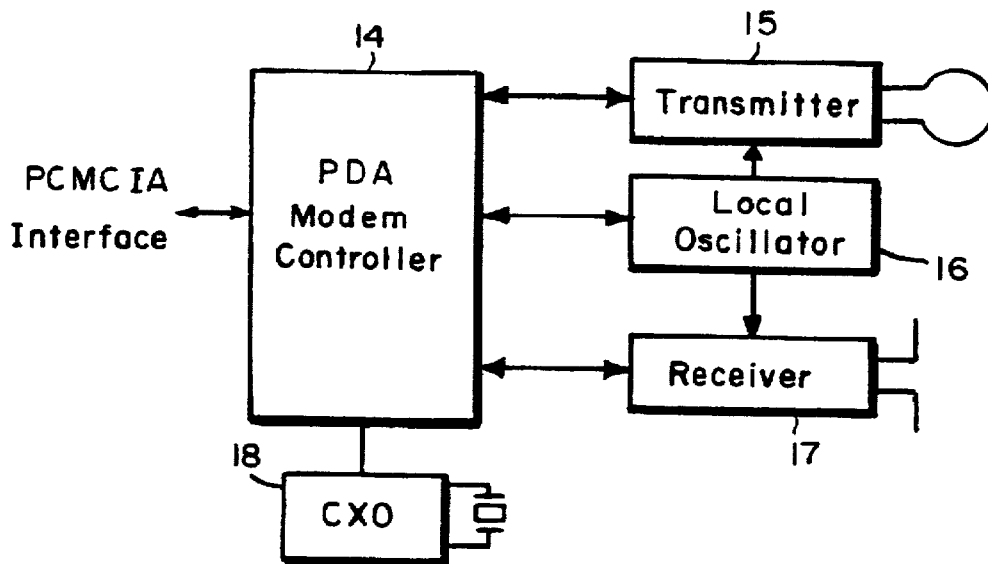


FIG. 3

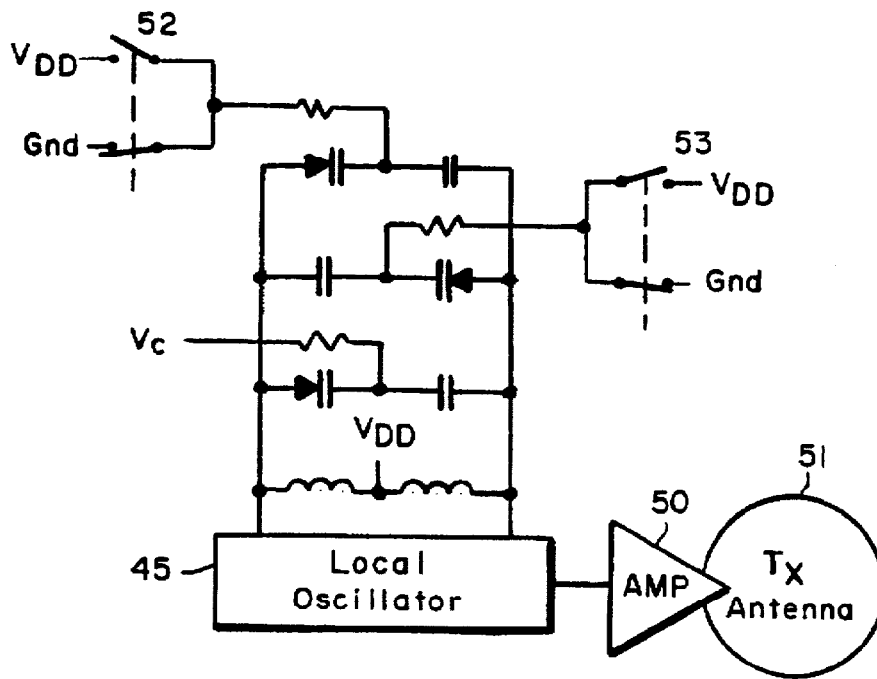


FIG. 4

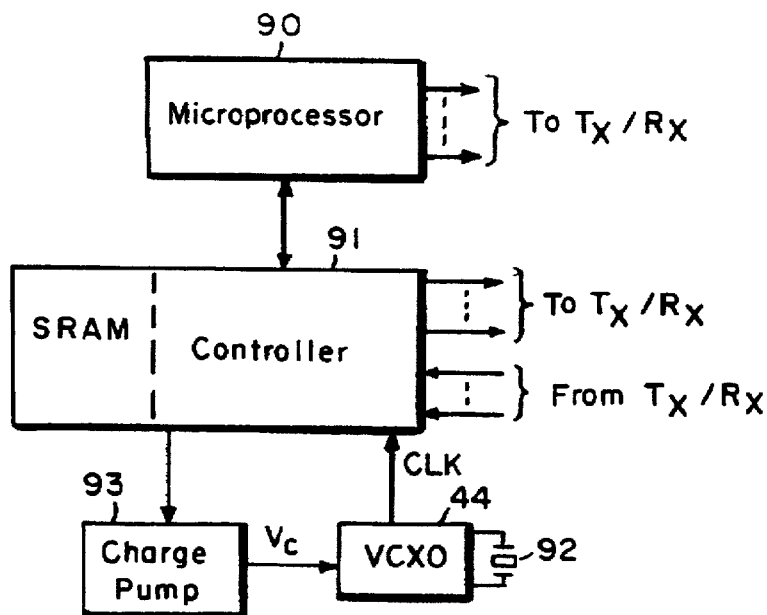


FIG. 7

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.