

[54] CONTROL AND METERING SYSTEM FOR PAY TELEVISION OVER A CABLE NETWORK

[76] Inventors: **Graham C. Bradley**, 3200 College Avenue, Regina, Saskatchewan, Canada, S4T 1V9; **Alton O. Stretten**, 3615 McCallum Avenue, Regina, Saskatchewan, Canada, S4S 0S6; **John P. Stretten**, 14 Susses Crescent, Regina, Saskatchewan, Canada, S4T6A2; **Rex B. Wentzel**, #2 Rheims Ct., Lake St., St. Louis, Mo. 63367

[21] Appl. No.: 5,979

[22] Filed: Jan. 22, 1987

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 823,759, Jan. 29, 1986, abandoned.

[51] Int. Cl.⁴ H04N 7/16; H04N 7/10; H04H 1/00

[52] U.S. Cl. 380/10; 380/7; 358/86; 358/349; 455/4

[58] Field of Search 380/7, 10, 20; 358/349, 358/84, 86; 307/256, 259; 333/103, 104, 262; 455/1-4

[56] References Cited

U.S. PATENT DOCUMENTS

3,813,482	5/1974	Blonder	380/15
3,859,457	1/1975	Kirk, Jr.	455/1
3,989,887	11/1976	Murphy	455/1
4,012,583	3/1977	Kramer	358/84
4,268,860	5/1981	Blonder	380/7
4,272,791	6/1981	Rifken	358/86
4,367,557	1/1983	Stern et al.	455/4
4,425,579	1/1984	Merrell	358/86
4,475,123	10/1984	Dumbauld et al.	380/13
4,577,224	3/1986	Ost	380/2
4,594,609	6/1986	Romao et al.	380/7

4,598,312	7/1986	Geissler et al.	358/86
4,599,647	7/1986	George et al.	380/20
4,710,956	12/1987	Rast	380/20
4,717,970	1/1988	Long	358/86

Primary Examiner—Thomas H. Tarcza

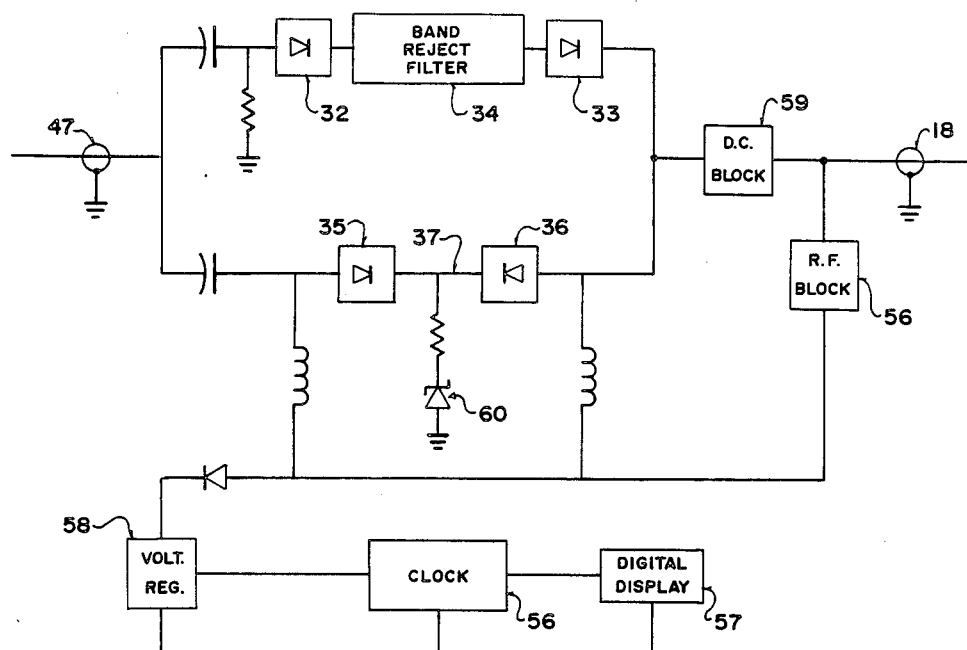
Assistant Examiner—Linda J. Wallace

Attorney, Agent, or Firm—Larson & Taylor

[57] ABSTRACT

An improved control and metering system for pay television distribution over a cable network. A control unit is located near each receiver on a subscribers premises and a secure filter, switching and metering unit is located external to the subscribers home. For the basic apparatus power and control signals needed to operate the external unit require no separate wiring as these signals are multiplexed over the coaxial cable that carries the TV signal into the home. An improved switch in the external unit activates a temperature compensated digital metering unit that displays either (or both) the time that the premium programming has been accessed or the totalized cost of the pay programming accessed. When implemented in high density housing districts common equipment is centralized and the apparatus is known as a switched star configuration. Also included is apparatus that permits metering to be accomplished at a central location for a community. The apparatus allows for tiering of pay programming utilizing different rates. The system is secure without scrambling or jamming. Another version of the apparatus permits Cable TV Operators to sell common carrier services to independent programmers according to utilization. The apparatus also allows for interfacing the cable TV network with a fibre optic television distribution network, for subscribed switching between the two systems and the metering of the utilization of such an apparatus. The system introduces the idea of a fibre optic video party-line to reduce implementation costs.

14 Claims, 14 Drawing Sheets



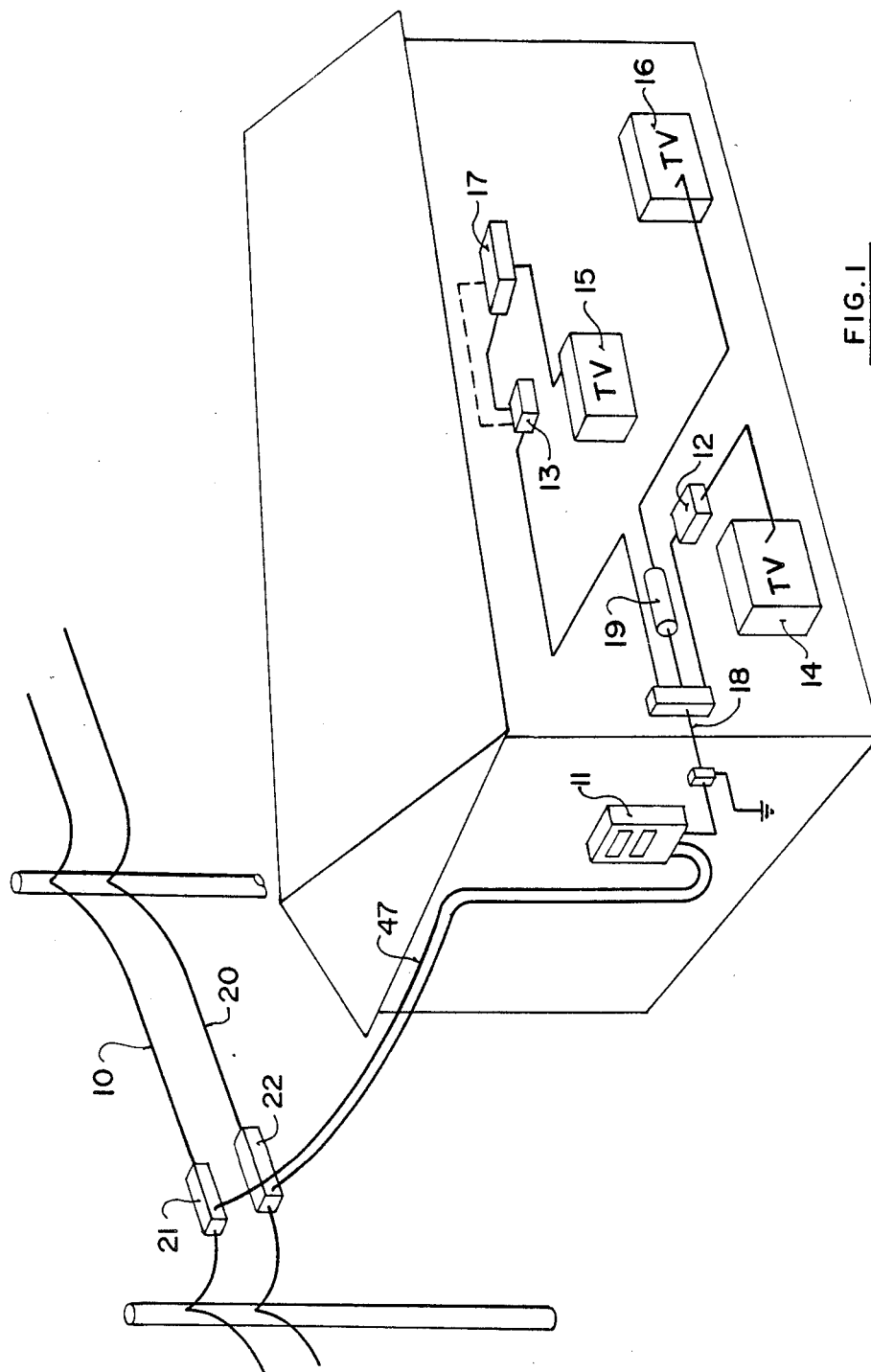


FIG. 1

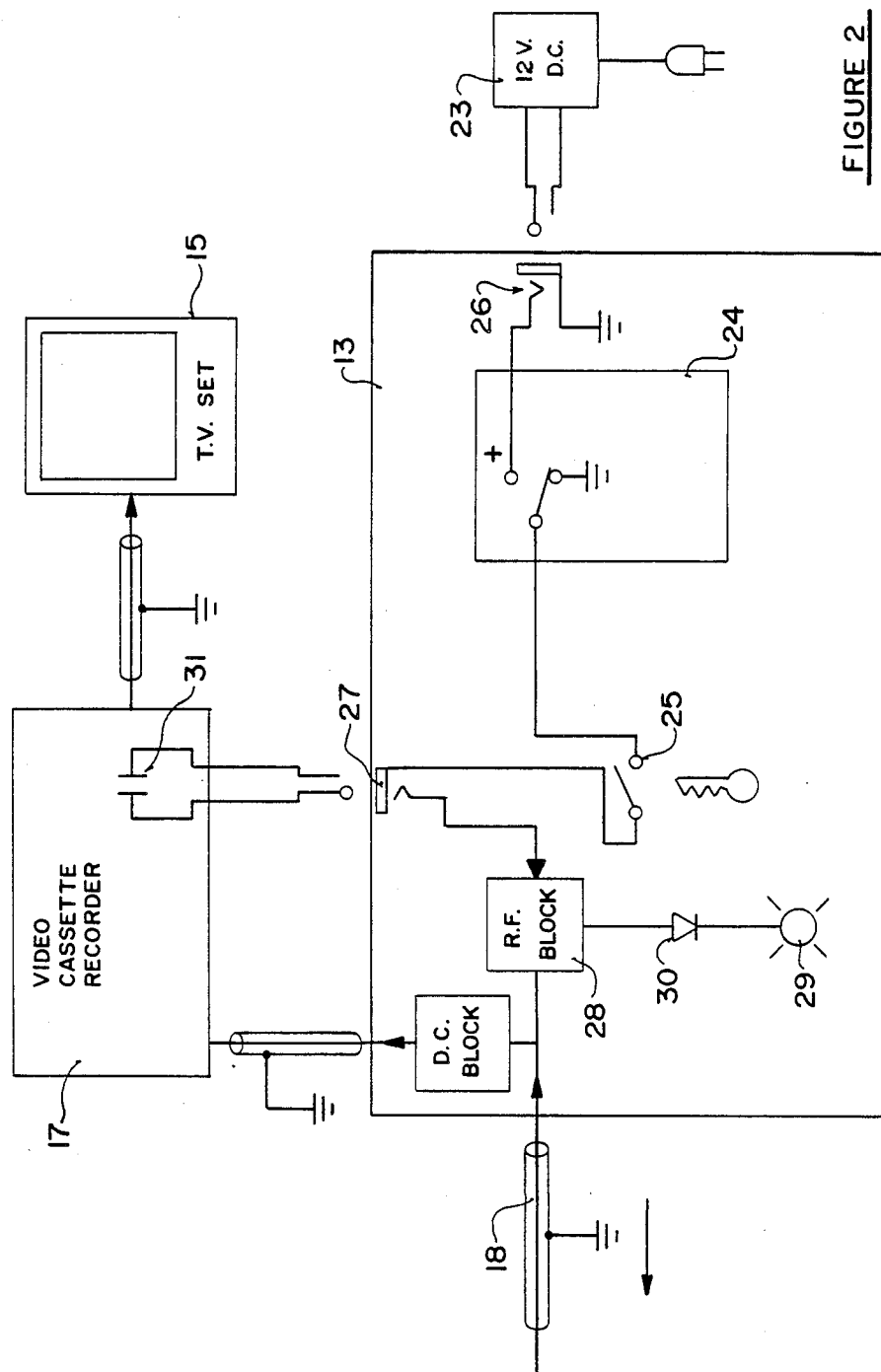


FIGURE 2

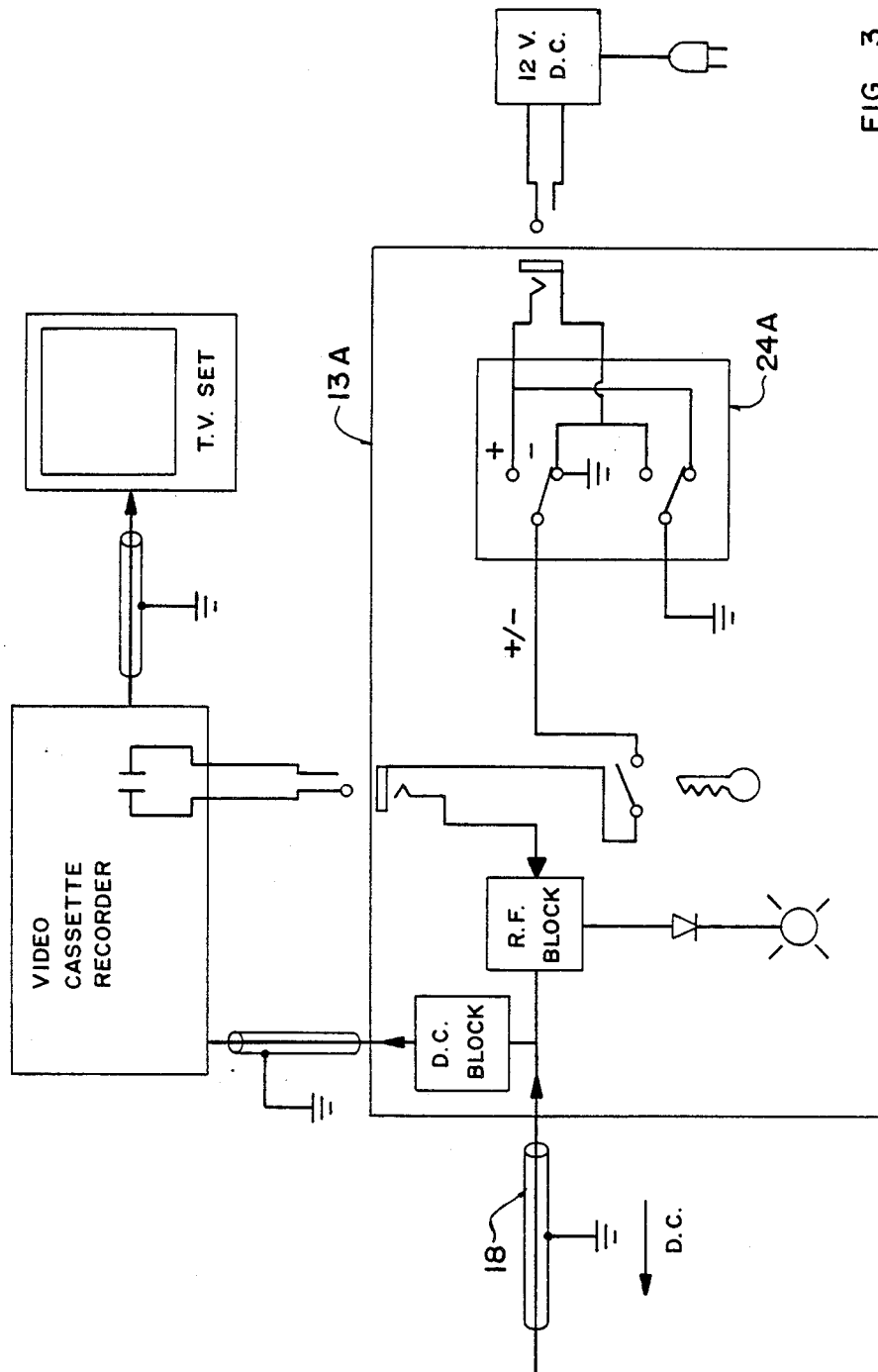


FIG. 3

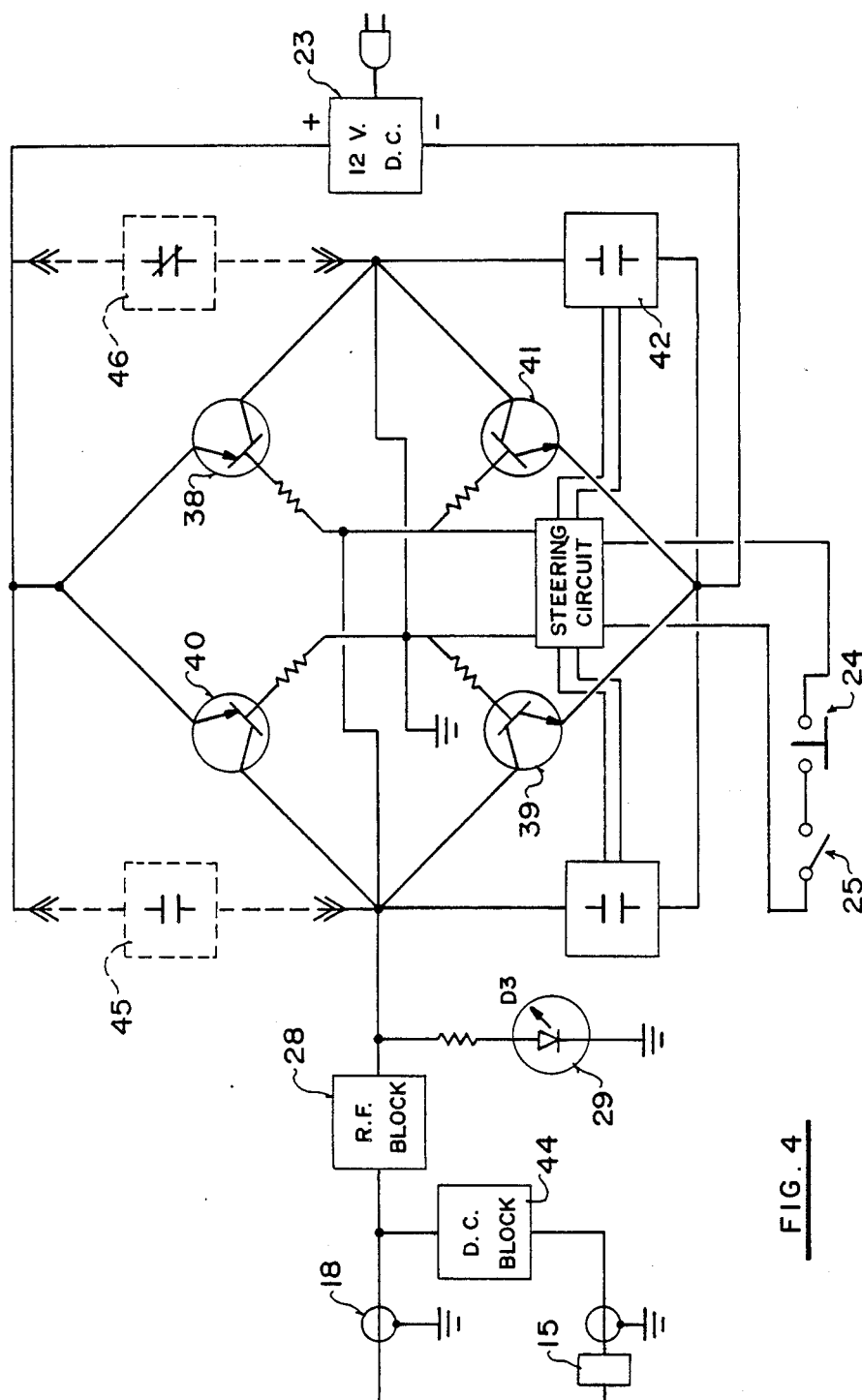


FIG. 4

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.