United States Patent [19]

Campbell et al.

Patent Number: 4,536,791 [11]

Aug. 20, 1985

[54]	ADDRESSABLE CABLE TELEVISION CONTROL SYSTEM WITH VIDEO FORMAT	4,225,884 9/1980	Block et al Block et al
	DATA TRANSMISSION	4,233,020 11/1900	Ciciora

[75] Inventors: John G. Campbell, Irving; Carl F. Schoeneberger; Allan B. Bundens, both of Carrollton; Richard M. Fogle,

Bedford; John R. Lemburg, Richardson, all of Tex.

[73] Assignee: Tocom, Inc., Dallas, Tex.

[21] Appl. No.:

617,137

[22] PCT Filed:

Mar. 31, 1981

[86] PCT No.:

PCT/US81/00414

§ 371 Date:

Nov. 27, 1981

§ 102(e) Date:

Nov. 27, 1981 WO81/02961

[87] PCT Pub. No.:

PCT Pub. Date: Oct. 15, 1981

Related U.S. Application Data

[63]	Continuation of Ser. No. 348,937, Nov. 27, 1981, aban-
	doned, which is a continuation-in-part of Ser. No.
	135,987, Mar. 31, 1980, abandoned.

[51]	Int. Cl. ³	H04N 7/16; H04K 1/04
[52]	U.S. Cl	358/122; 358/114;
	3:	58/147; 358/259; 358/263
[58]	Field of Search	358/114, 147, 263, 259,

[56] References Cited

U.S. PATENT DOCUMENTS

2,843,655	7/1958	Gottfried et al
3,472,962	10/1969	Sanford .
3,668,307	6/1972	Face et al 358/114
3,899,633	8/1975	Sorenson et al
3,916,091	10/1975	Kirk, Jr. et al
3,919,462	11/1975	Hartung et al 358/124
4,068,264	1/1978	Pires 358/122

4,163,254	7/1979	Block et al	358/122
4,225,884	9/1980	Block et al	358/117
4,233,628	11/1980	Ciciora	358/147

OTHER PUBLICATIONS

IEEE Transactions on Consumer electronics, vol. CE-25, No. 3, Jul. 1979.

L. Solomon, Pop. Electronics, May 1979, p. 49.

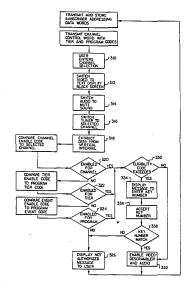
Date of Patent:

Primary Examiner-S. C. Buczinski Attorney, Agent, or Firm-Hubbard, Thurman, Turner & Tucker

ABSTRACT [57]

An addressable cable television control system controls television program and data signal transmission from a central station to a plurality of user stations. The data signals include both control and text signals in video line format which are inserted on the vertical interval of the television signals, thereby freeing all channels for transmission of both television and data signals. Moreover, full-channel teletext data in video line format may be transmitted on dedicated text channels with the modification of only head end processors. An intelligent converter at each remote user location uses the data signals to control access to the system on the basis of channel, tier of service, special event and program subject matter. The converter uses a graphics display generator to generate display signals for the presentation of the text data on the television receiver and for the generation of predetermined messages for the viewer concerning access, emergencies and other functions. The converter processes vertical interval text data and selected full-channel text data, both transmitted in video line format. The keyboard of the subscriber provides a number of different functional inputs for the subscriber to interface with the system. The converter also includes apparatus for interfacing with two-way interactive data acquisition and control systems.

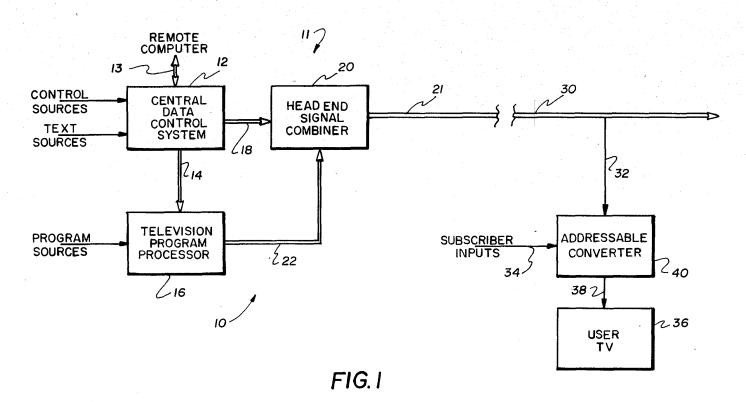
8 Claims, 19 Drawing Figures



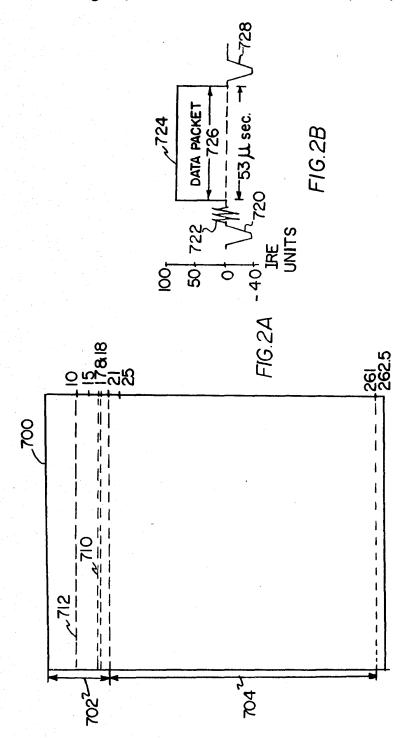
358/122



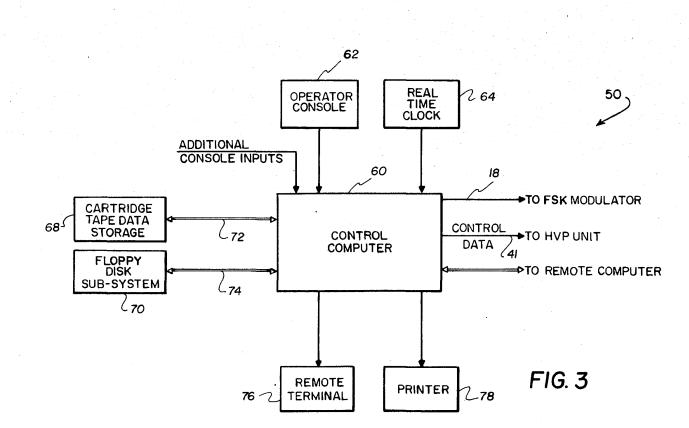
U.S. Patent



U.S. Patent



U.S. Patent



DOCKET A L A R M

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.

