United States Patent [19]

Ottesen et al.

[11] Patent Number:

5,654,747

[45] Date of Patent:

Aug. 5, 1997

[54] INTELLIGENT MULTIMEDIA SET-TOP
CONTROL METHOD AND APPARATUS IN
WHICH BILLING SIGNALS ARE
COMMUNICATED TO AN INFORMATION
NETWORK UPON PRESENTATION OF
DOWNLOADED MEDIA PROGRAMS

[75] Inventors: Hal Hjalmar Ottesen; Gordon J. Smith; George Willard VanLeeuwen,

all of Rochester, Minn.

[73] Assignee: International Business Machines

Corporation, Armonk, N.Y.

[21] Appl. No.: 366,268

[22] Filed: Dec. 29, 1994

[51] Int. Cl.⁶ H04N 7/10; H04N 7/14 [52] U.S. Cl. 348/12; 348/5; 348/10;

6.2, 6.3, 3.1, 6.1; H04N 7/10, 7/14

[56] References Cited

U.S. PATENT DOCUMENTS

4,422,093	12/1983	Pargee, Jr 348/7
4,499,568	2/1985	Gremillet 369/30
4,506,387	3/1985	Walter 359/118
4,949,187	8/1990	Cohen 386/69
5,075,771	12/1991	Hashimoto 348/13
5,133,079	7/1992	Ballantyne et al 455/4.1
5,247,347	9/1993	Litteral et al 348/7
5,285,272	2/1994	Bradley et al 348/6

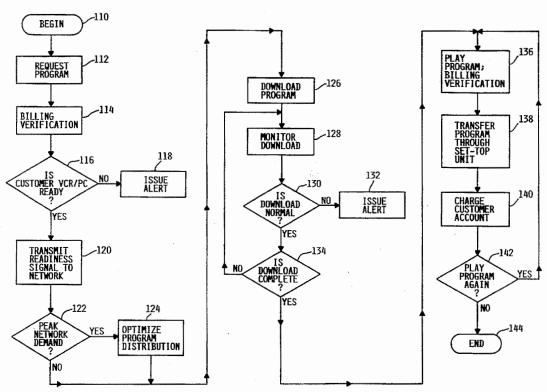
5,329,590	7/1994	Pond	45	5/4.2 X
5,572,442	11/1996	Schulhof et al.	***************************************	. 348/7

Primary Examiner—John K. Peng Assistant Examiner—John W. Miller Attorney, Agent, or Firm—Mark A. Hollingsworth

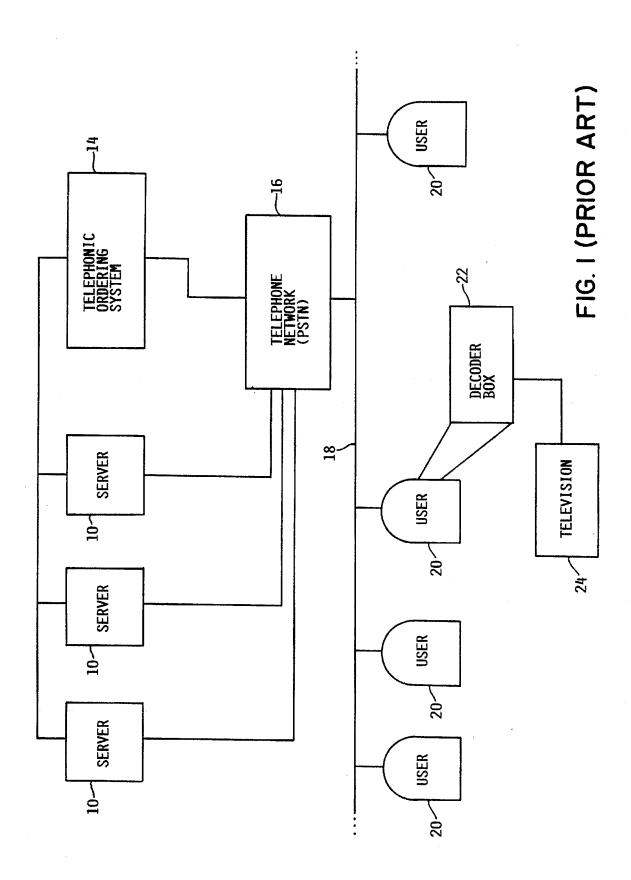
[57] ABSTRACT

A method and apparatus for effectuating the reception and local storage of source information signals representative of a media program transmitted from a source information network preferably over a cable television channel on a pay-per-view basis is disclosed. A local intelligent set-top control unit communicates with a remote information network and a local storage device to coordinate the transmission of customer ordered media programs from the information network for storage on the local storage device. The local storage device is preferably a standard video cassette recorder (VCR) providing full VCR control functionality when presenting a stored media program on a television. A digital or optical data storage disk drive system may alternatively be employed to store source information signals downloaded from the remote information network. The intelligent set-top control unit communicates a pay-per-view billing signal to the information network upon playing of a downloaded media program, and provides protection against unauthorized copying. In an alternative configuration, a set-top control card is installed into a host computer system to coordinate the reception and local storage of downloaded media programs, and preferably provides a platform for interfacing with other home communication and electronic systems.

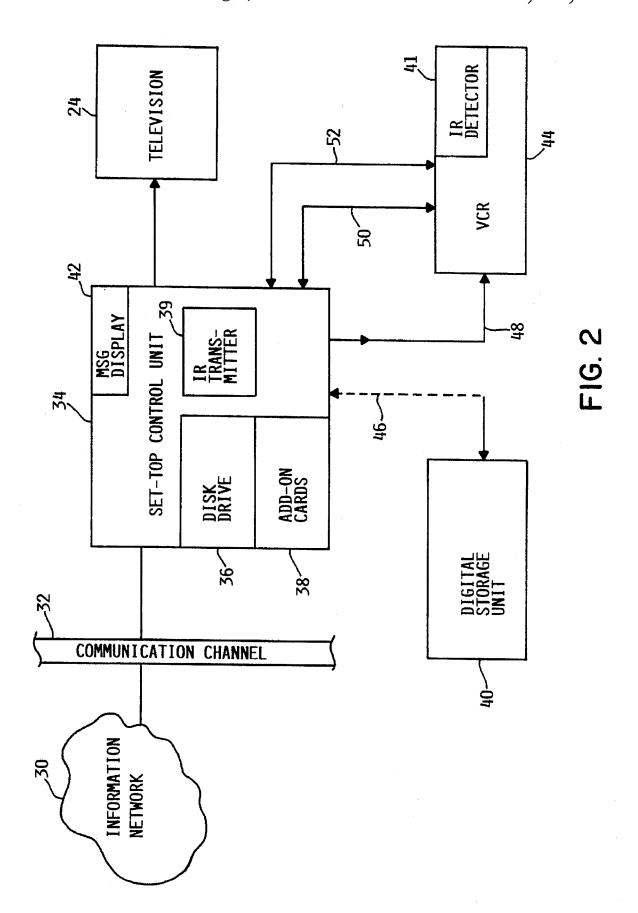
29 Claims, 6 Drawing Sheets











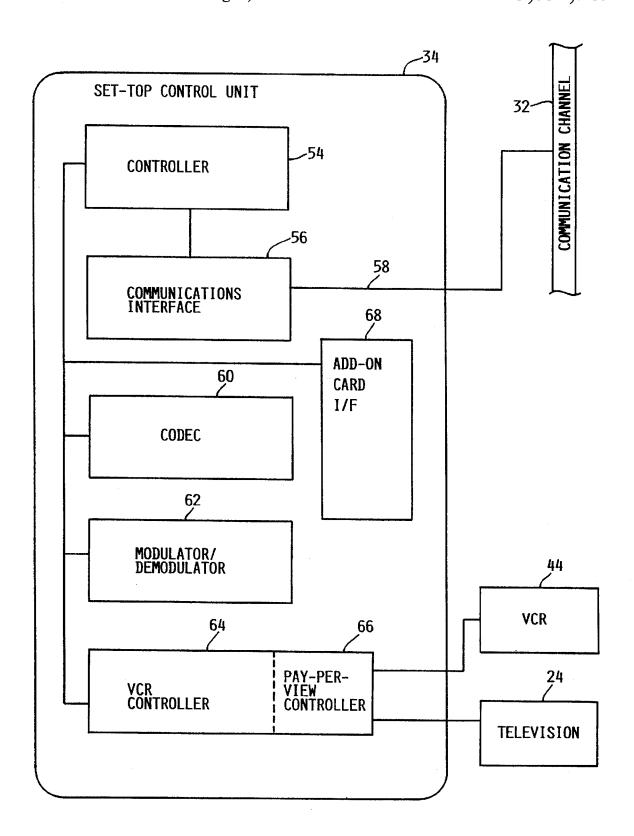
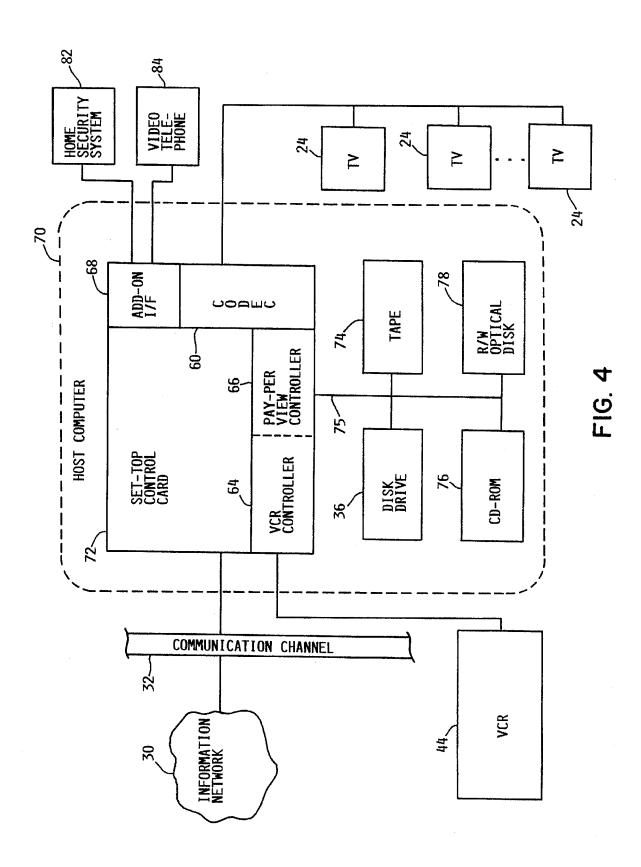


FIG. 3



DOCKET

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.

