

[54] **RECONFIGURABLE REMOTE CONTROL**

[75] **Inventor:** Kenneth B. Welles, II, Schenectady, N.Y.

[73] **Assignee:** General Electric Company, Schenectady, N.Y.

[21] **Appl. No.:** 610,377

[22] **Filed:** May 15, 1984

[51] **Int. Cl.⁴** G08C 19/00; H04N 5/44

[52] **U.S. Cl.** 340/825.57; 340/825.69; 340/825.72; 455/603; 358/194.1

[58] **Field of Search** 340/825.57, 825.69, 340/825.72, 825.34, 825.31; 358/194.1; 455/601, 603, 608

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,200,862	4/1980	Campbell et al.	340/310 A
4,274,082	6/1980	Litz et al.	340/167 R
4,398,193	8/1983	Kuniyoshi et al.	358/194.1
4,535,333	8/1985	Twardowski	340/825.69

Primary Examiner—Ulysses Weldon
Assistant Examiner—Ralph E. Smith
Attorney, Agent, or Firm—Marvin Snyder; James C. Davis, Jr.

[57] **ABSTRACT**

A reconfigurable remote control transmitter is disclosed that has the ability to learn, store and repeat the remote control codes from any other infrared transmitter. The reconfigurable remote control transmitter includes an infrared receiver, a microprocessor, nonvolatile and scratch pad random access memories, and an infrared transmitter. The microprocessor application is divided into four main categories: learning, storing, retransmitting, and user interface. In the learning process, the reconfigurable remote control transmitter receives and decodes the transmissions from another remote control transmitter. The process is repeated at least twice for each key to make sure that it has been properly received and decoded. Once the data has been received and decoded, it is stored for later use. In order to do this, the received and decoded data is compressed so that it can fit into the nonvolatile memory. This process is repeated for each of the several remote control transmitters that are to be replaced by the reconfigurable remote control transmitter. When the learning and storing operations have been completed, the reconfigurable remote control transmitter is ready to use.

10 Claims, 13 Drawing Figures

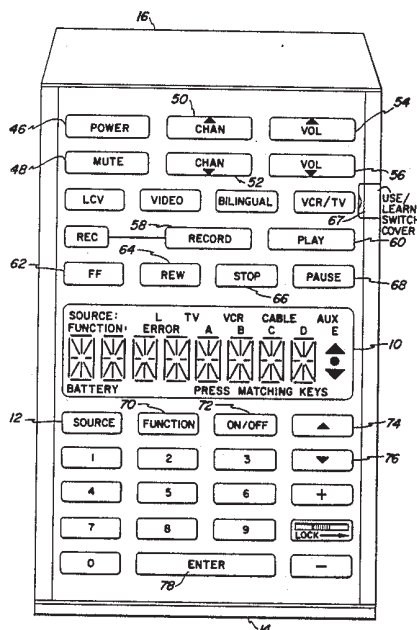


FIG. 1

MODULATION SCHEMES

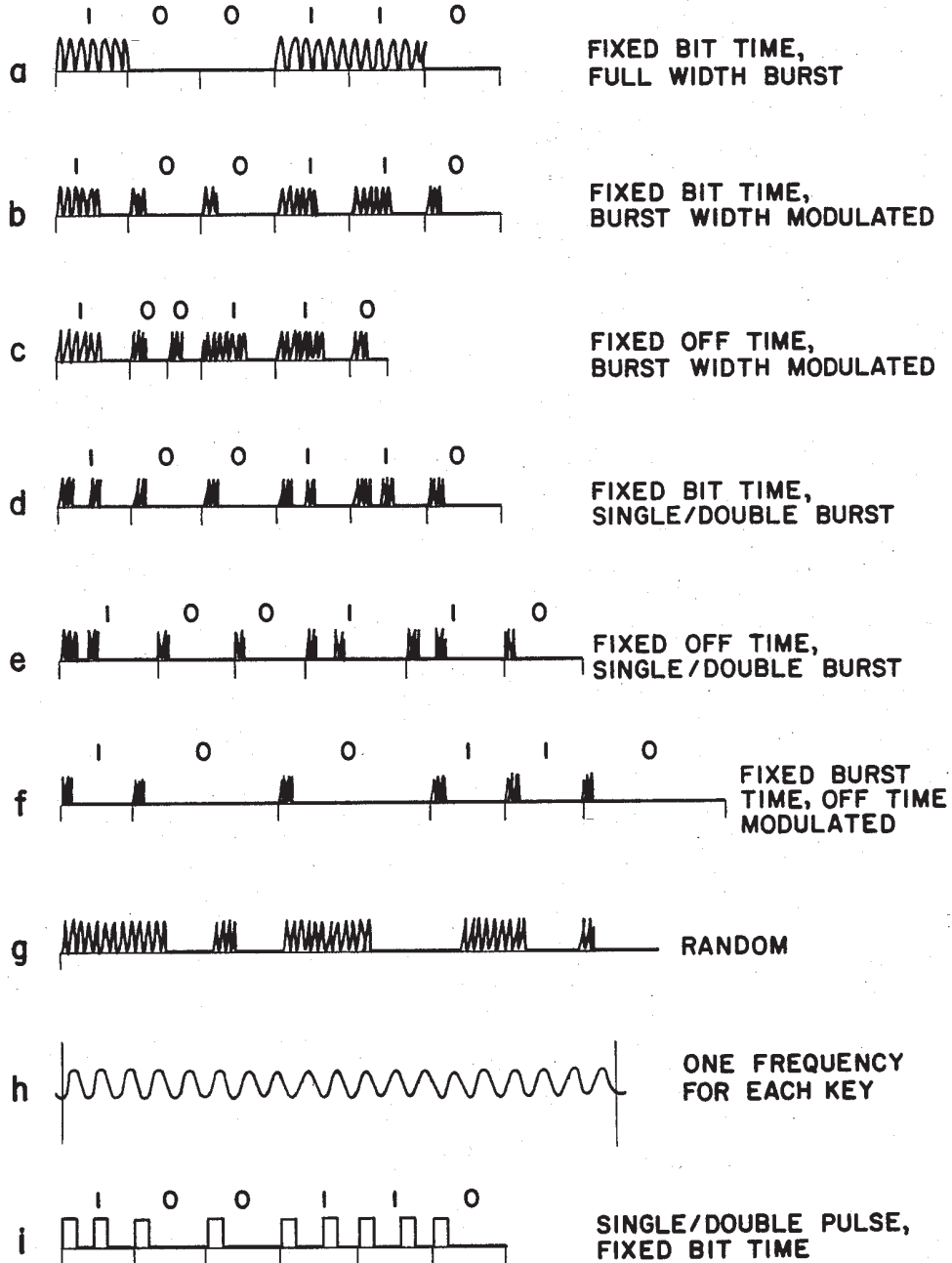


FIG. 2
KEYBOARD ENCODING SCHEMES

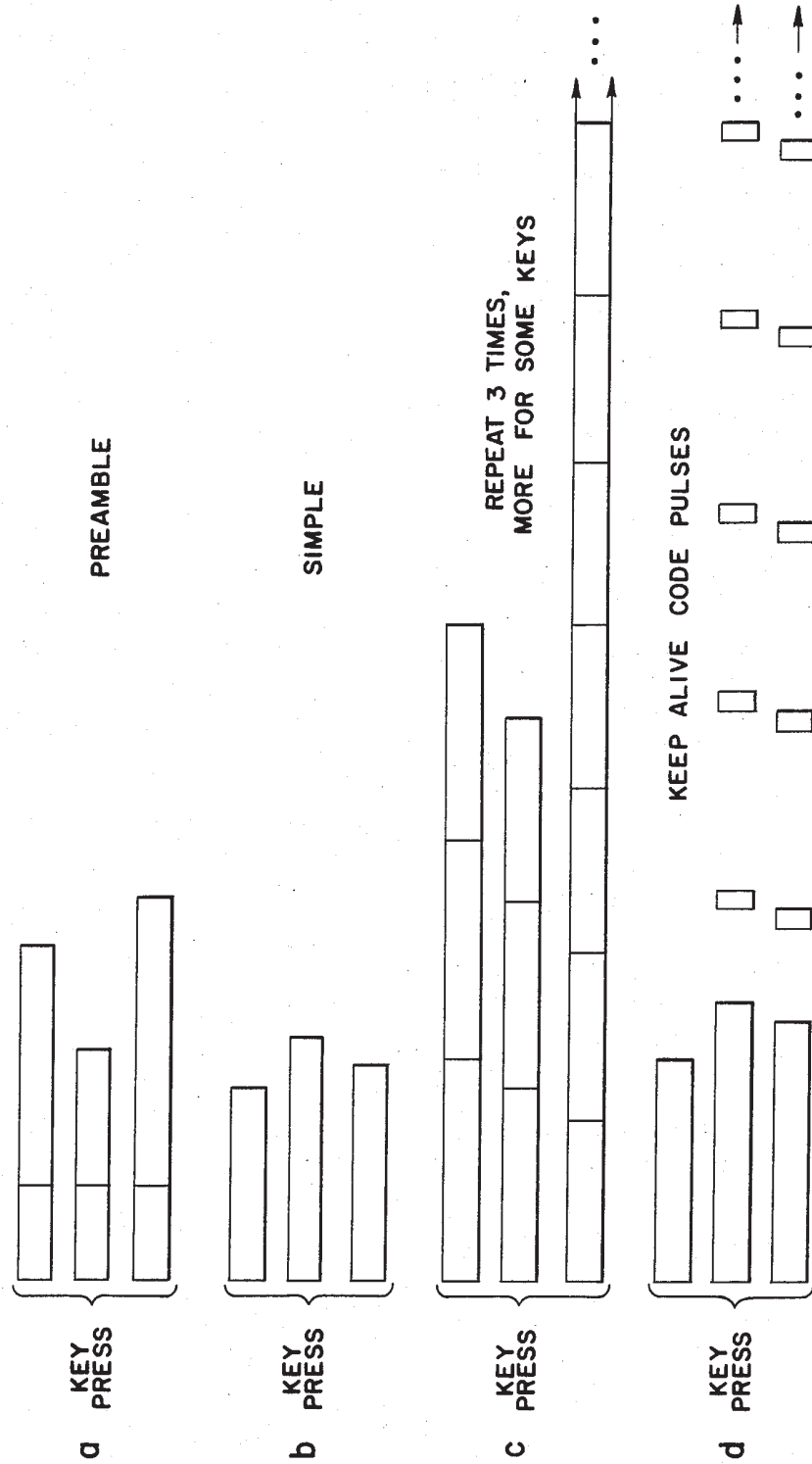
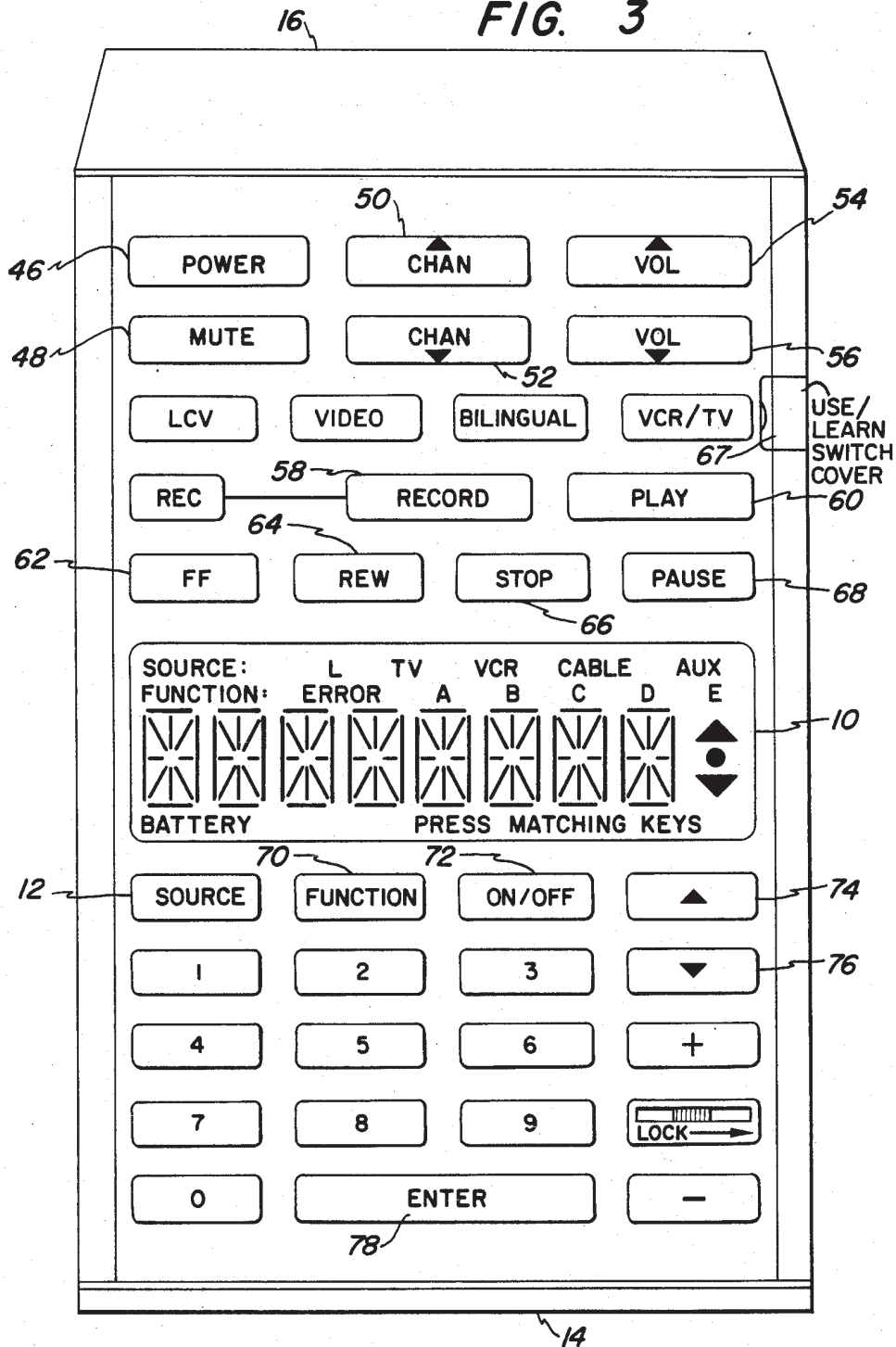


FIG. 3



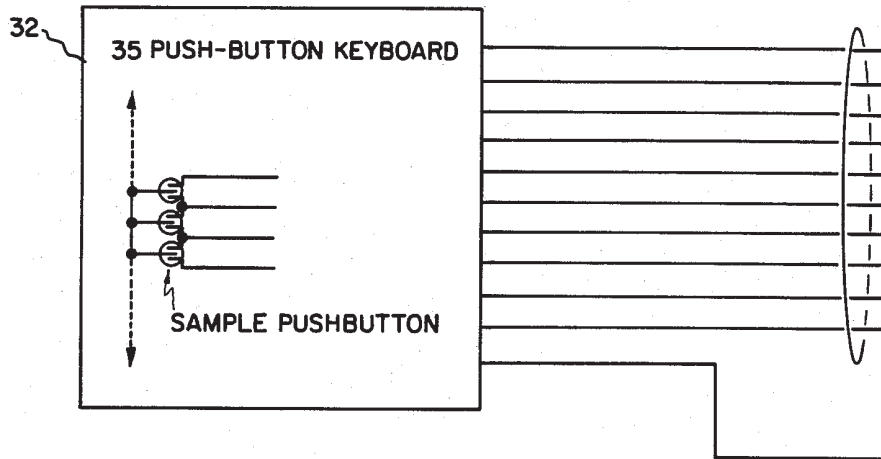
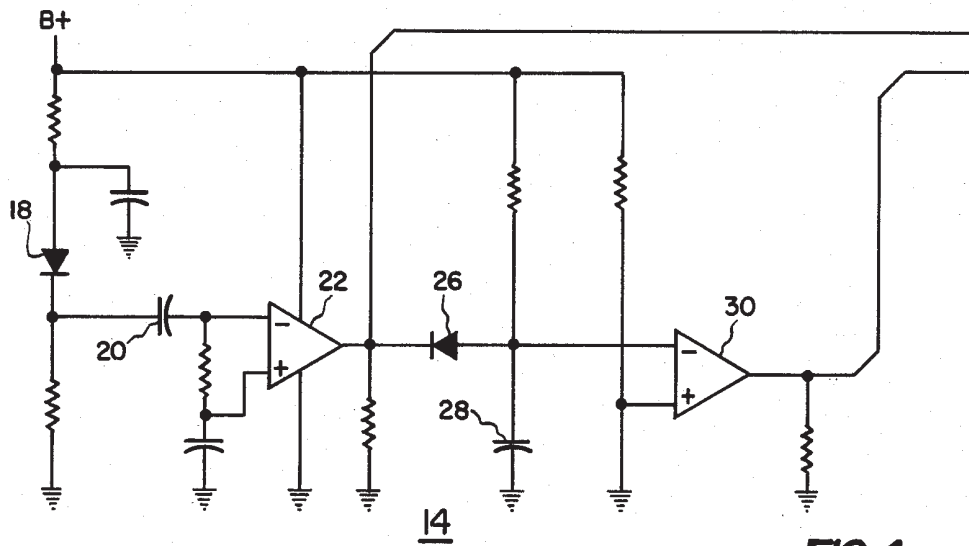
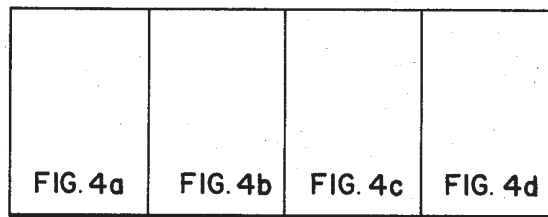


FIG. 4e



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.