

[54] UTILITY USAGE DATA AND EVENT DATA ACQUISITION SYSTEM

4,132,981 1/1979 White ..... 340/870.02  
4,315,251 2/1982 Robinson et al. .... 340/870.03

[75] Inventors: Ronald S. Jahr, Naperville, Ill.;  
Thomas H. Cowell, Corunna, Mich.

Primary Examiner—James L. Dwyer  
Attorney, Agent, or Firm—Malcolm R. McKinnon

[73] Assignee: Systems and Support, Incorporated,  
Owosso, Mich.

[57] ABSTRACT

[21] Appl. No.: 679,627

A utility usage data and event data acquisition system effective to acquire input serial data messages representing the amount of consumed utility services and/or binary event data from one or several external sources having differing drive signal requirements, the system also being effective to reformat the input data and append an identification code and an error detection code to the acquired data, and thereafter transmit messages comprising the identification code, the acquired data, the error detection code and other control information to a central location through the agency of coaxial cables, public switched telephone networks or other transmission facilities utilizing data terminals which accept serial binary messages at logic level voltages. Data message transmission is initiated either at random times by an algorithm within the control program of a microprocessor incorporated in the system or from an externally applied command signal.

[22] Filed: Dec. 10, 1984

Related U.S. Application Data

[62] Division of Ser. No. 310,054, Oct. 9, 1981, Pat. No. 4,504,831.

[51] Int. Cl.<sup>4</sup> ..... H04M 11/00; G08C 19/00

[52] U.S. Cl. .... 379/107; 340/870.03

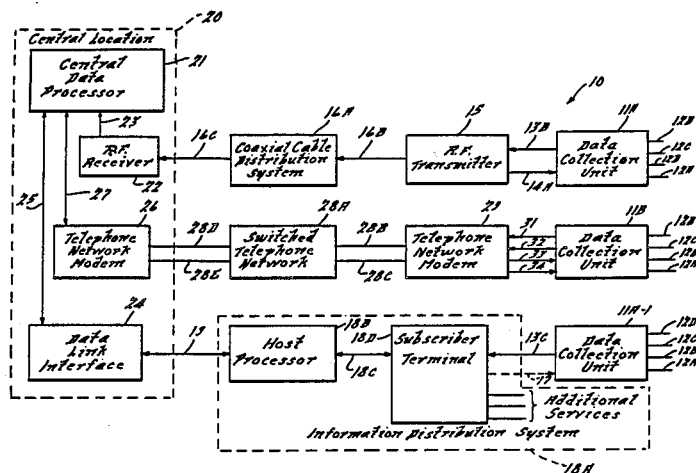
[58] Field of Search ..... 340/870.02, 870.03,  
340/870.11, 870.19, 310 A; 364/483; 179/2 A, 2  
AM; 379/106, 107, 92

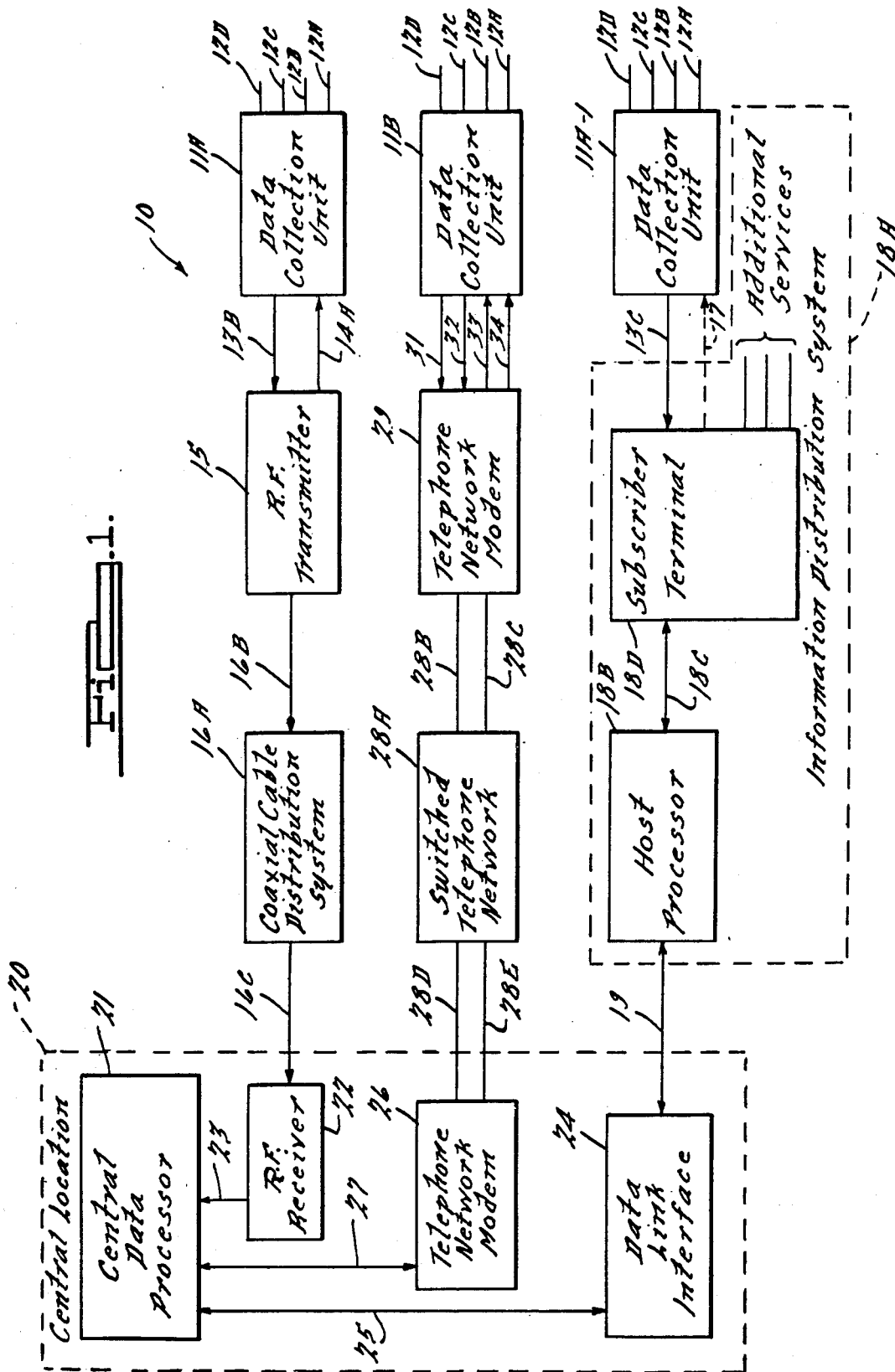
[56] References Cited

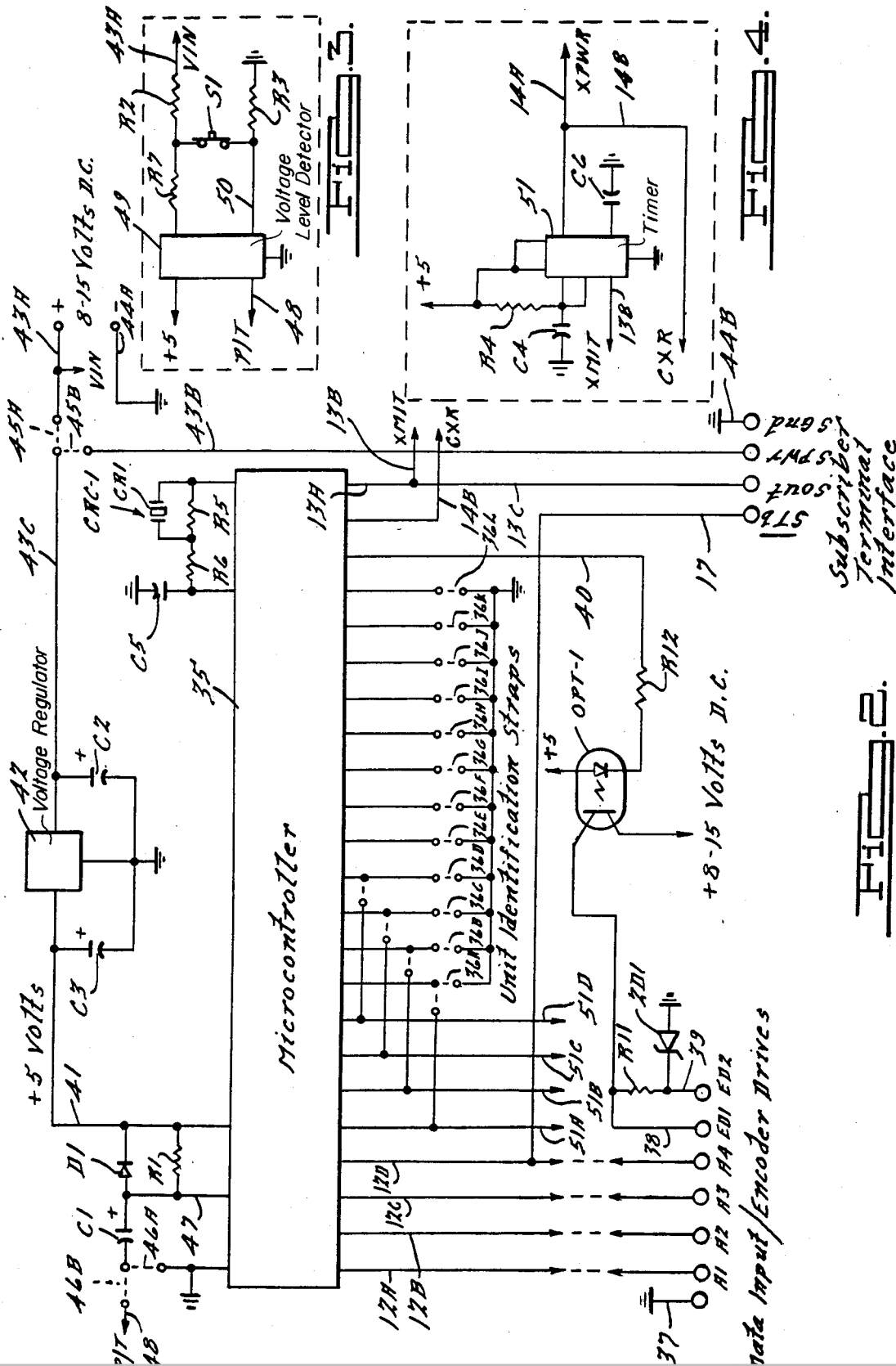
U.S. PATENT DOCUMENTS

3,114,900 12/1963 Anderson ..... 340/870.11  
3,688,271 8/1972 Rouse ..... 340/870.03  
3,820,073 6/1974 Vercellotti et al. .... 340/870.03

38 Claims, 6 Drawing Figures







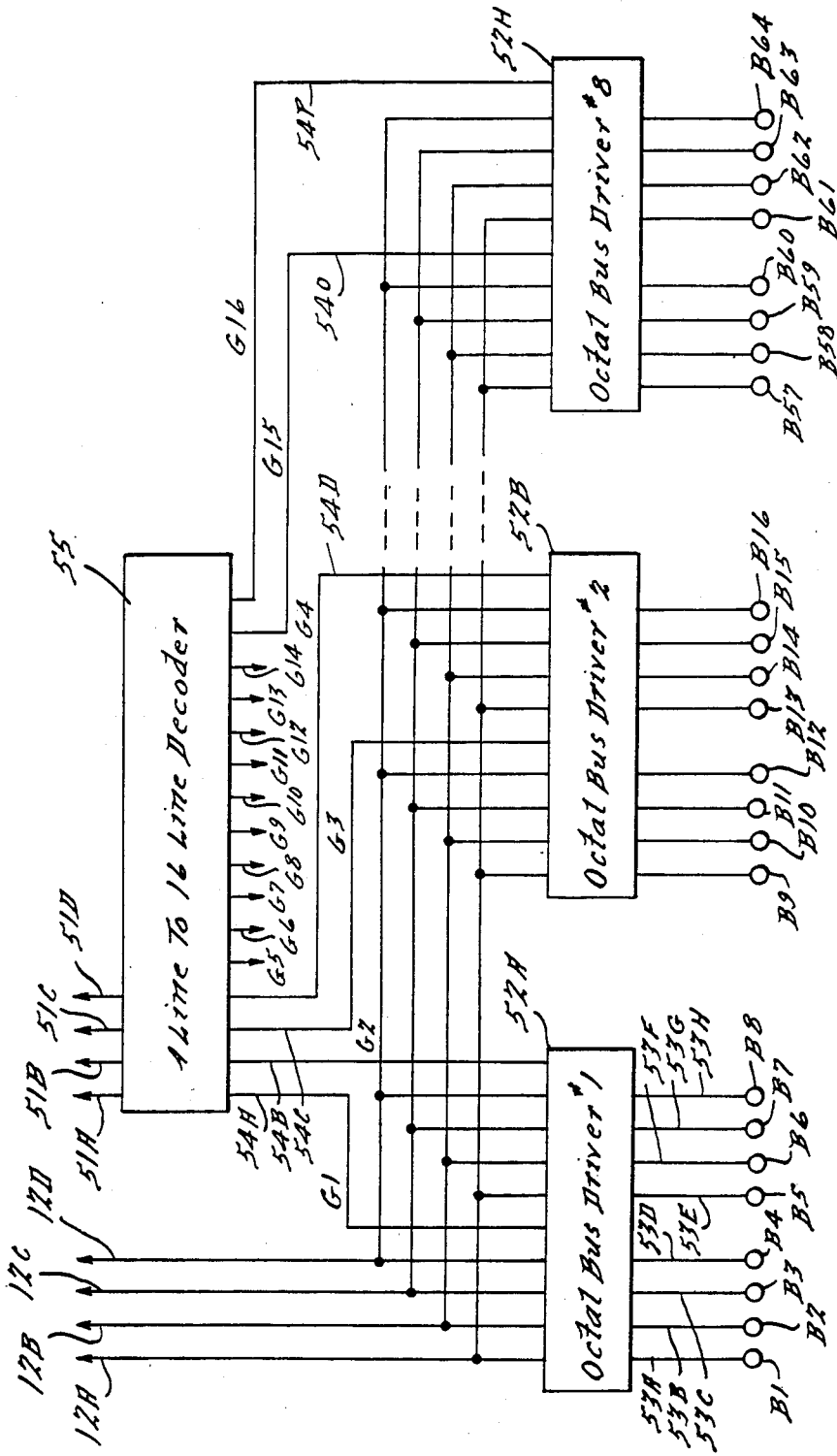
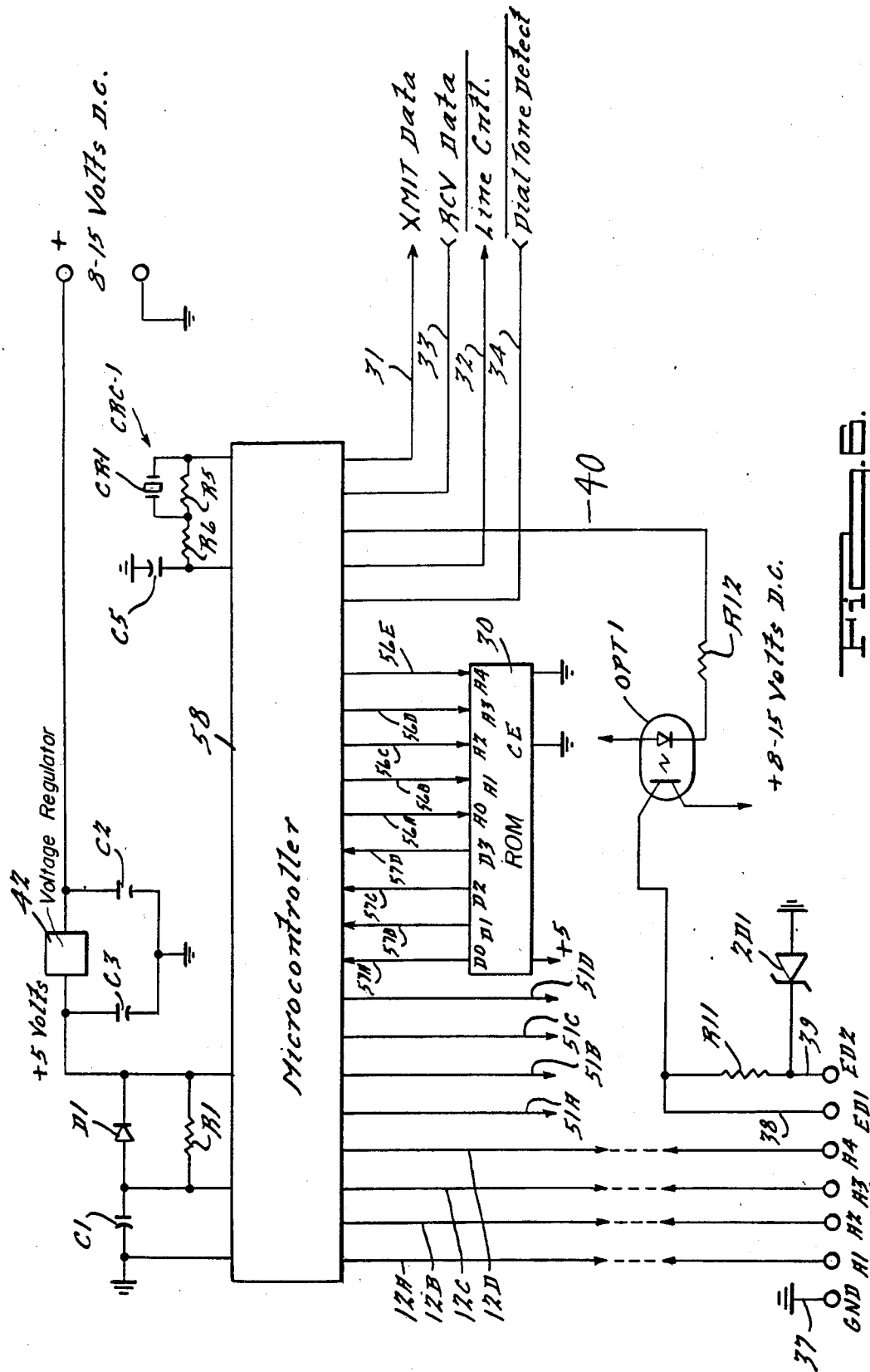


FIG. 3.



H.I.C.B.

# 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.