



US005081667A

United States Patent [19]

[11] Patent Number: 5,081,667

Drori et al.

[45] Date of Patent: Jan. 14, 1992

[54] SYSTEM FOR INTEGRATING A CELLULAR TELEPHONE WITH A VEHICLE SECURITY SYSTEM

[75] Inventors: Ze'ev Drori, Los Angeles; Robert M. Woskow, Encino, both of Calif.

[73] Assignee: Clifford Electronics, Inc., Chatsworth, Calif.

[21] Appl. No.: 497,107

[22] Filed: Mar. 20, 1990

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 345,654, May 1, 1989, abandoned.

[51] Int. Cl.<sup>5</sup> ..... H04M 11/00

[52] U.S. Cl. .... 379/59; 379/44; 340/426; 340/539; 340/993; 290/38 C

[58] Field of Search ..... 290/38 C; 340/441, 425.5, 340/426, 531, 539, 825.31, 993; 379/57-60, 63, 39, 41, 44; 455/33, 54

[56] References Cited

U.S. PATENT DOCUMENTS

Re. 32,856	2/1989	Millsap	340/539
2,698,391	12/1954	Braden et al.	
2,748,759	6/1956	Schiffer	
2,836,732	5/1958	Newlin	
2,975,296	4/1961	Dominguez	
3,078,834	2/1963	Wright	
3,357,417	12/1967	Baumann	
3,455,403	7/1969	Hawthorne	
3,530,846	9/1970	Bean et al.	
3,538,898	11/1970	Edgemir	
3,633,040	1/1972	Baxter	
3,657,720	4/1972	Audenko et al.	290/38 C
3,696,333	10/1972	Mott	
3,718,899	4/1971	Rollins	340/993
3,859,540	1/1975	Weiner	
4,177,466	12/1979	Reagan	340/63
4,200,080	5/1980	Cook et al.	
4,236,594	12/1980	Ramsperger	
4,345,554	8/1982	Hildreth et al.	
4,392,059	7/1983	Nespor	
4,606,307	8/1986	Cook	
4,674,454	6/1987	Phairr	
4,688,244	8/1987	Hannon et al.	379/44

4,718,080	1/1988	Serrano et al.	379/59
4,736,461	4/1988	Kawasaki et al.	455/38
4,750,197	6/1988	Dewekamp et al.	379/59
4,754,255	6/1988	Sanders et al.	340/64
4,794,649	12/1988	Fujiwara	455/38
4,809,316	2/1989	Namekawa	379/58
4,821,309	4/1989	Namekawa	379/58
4,860,336	8/1989	D'Avello et al.	379/63
4,887,064	12/1989	Drori et al.	340/426
4,893,240	1/1990	Karkouti	290/38 C
4,904,983	2/1990	Mitchell	379/41
4,905,271	2/1990	Namekawa	379/58
4,910,493	3/1990	Chambers et al.	340/426
4,928,778	5/1990	Tin	

FOREIGN PATENT DOCUMENTS

0128861 8/1986 Japan

OTHER PUBLICATIONS

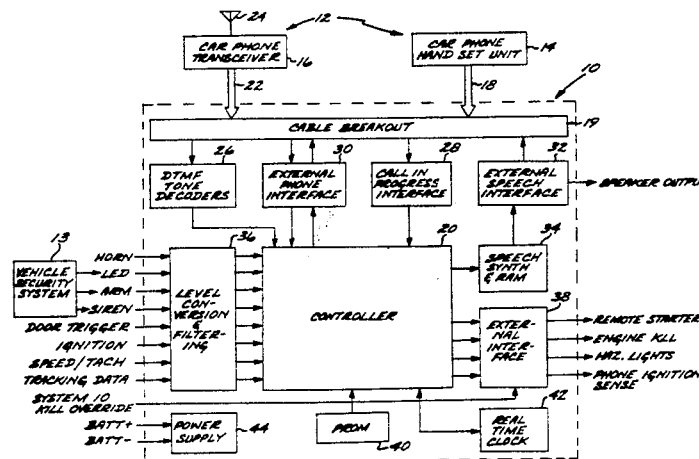
Motorola publication, "DYNAT-A-C 6000x Universal Mobile Telephone", 1984, pp. 1-6. "AB3X Cellular Interface-Owner's Manual," Morrison & Dempsey Communications Inc, 1987.

Primary Examiner—James L. Dwyer  
Assistant Examiner—Dwayne D. Bost  
Attorney, Agent, or Firm—Roberts and Quiogue

[57] ABSTRACT

An interfacing system for integrating a wide variety of cellular communication systems with most vehicle security systems. The system includes a controller and an interfacing arrangement for matching the cellular telephone to the controller. The interfacing arrangement includes a library, stored in memory, having a plurality of unique translation tables corresponding to the protocols of a plurality of unique cellular communication systems. The interfacing arrangement further includes an initializing capability for selecting an operating protocol for the interfacing system from the library which is compatible with the protocol of the cellular communication system. Hardware and software are included for interfacing the vehicle security to the controller and for interfacing the controller to the vehicle. In a specific embodiment, the selection of cellular telephone type or make is made from the keypad of the cellular telephone.

92 Claims, 46 Drawing Sheets



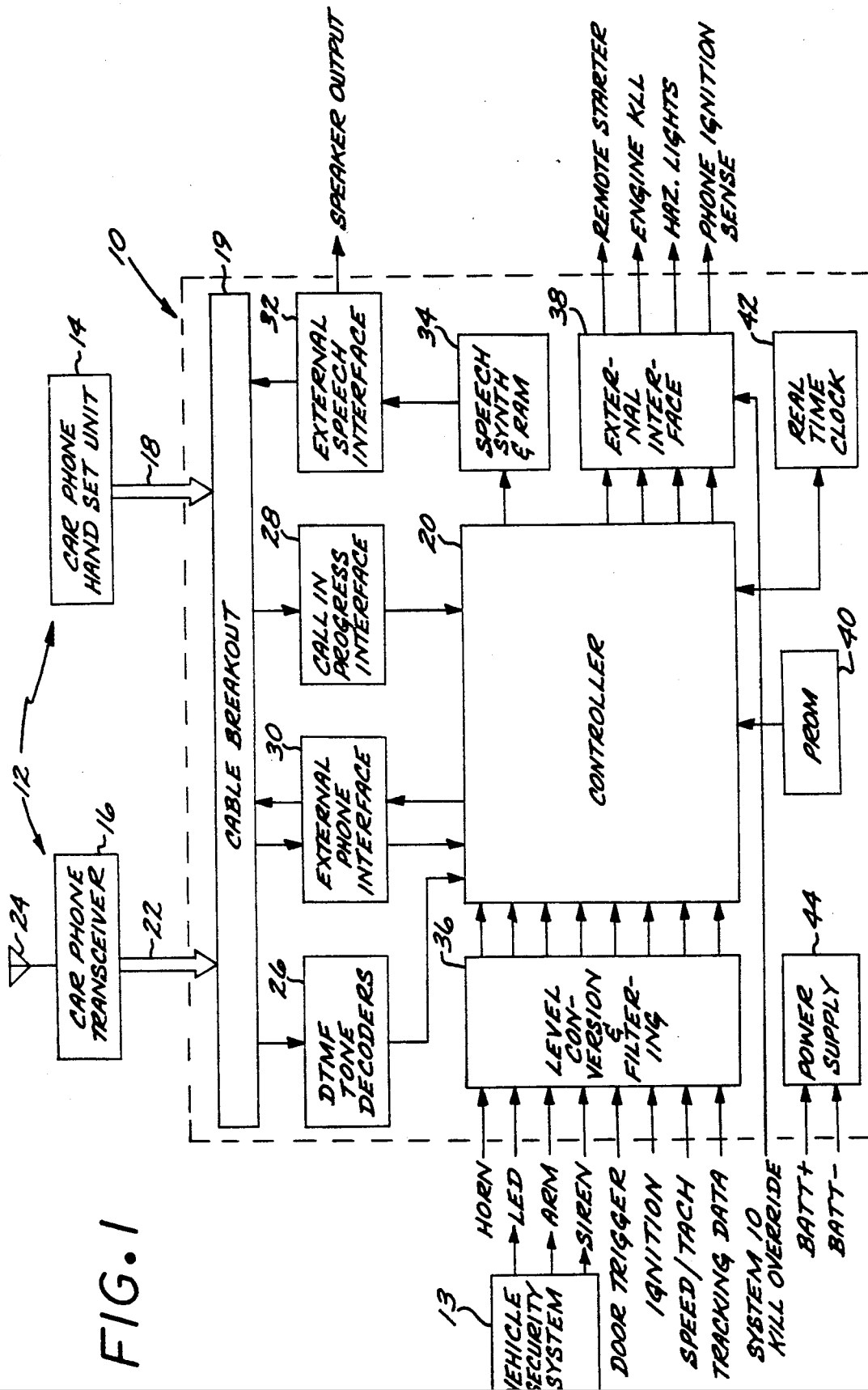


FIG. 1

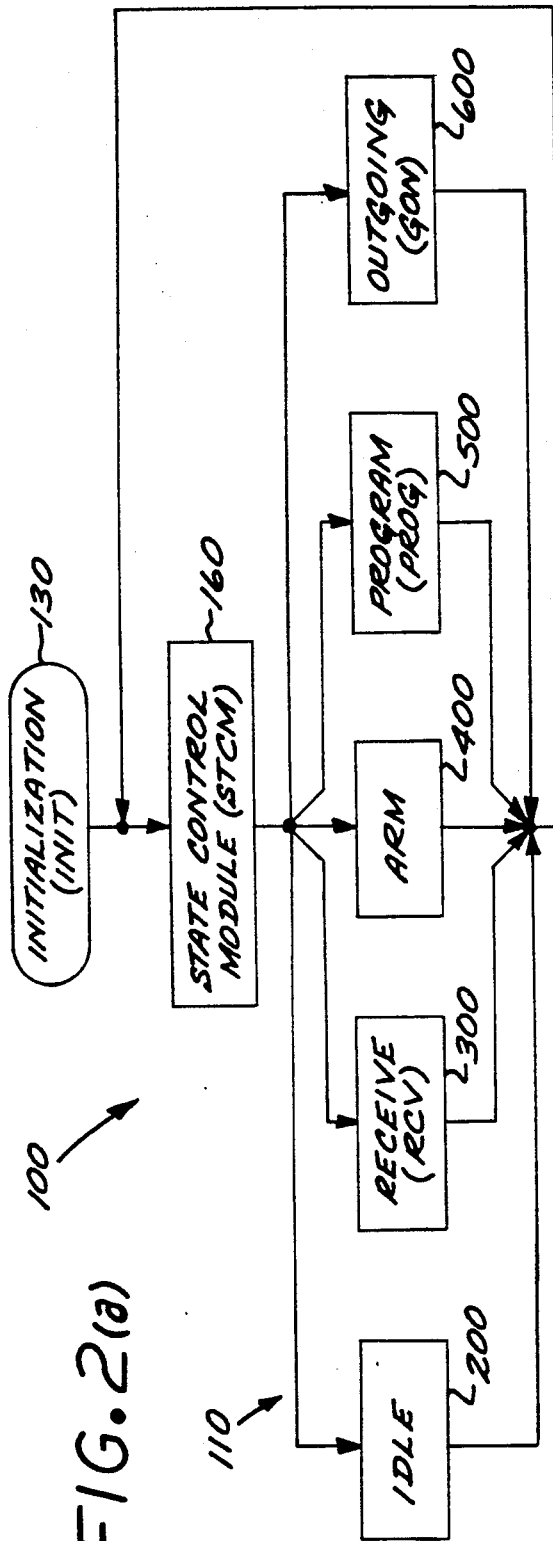


FIG. 2(a)

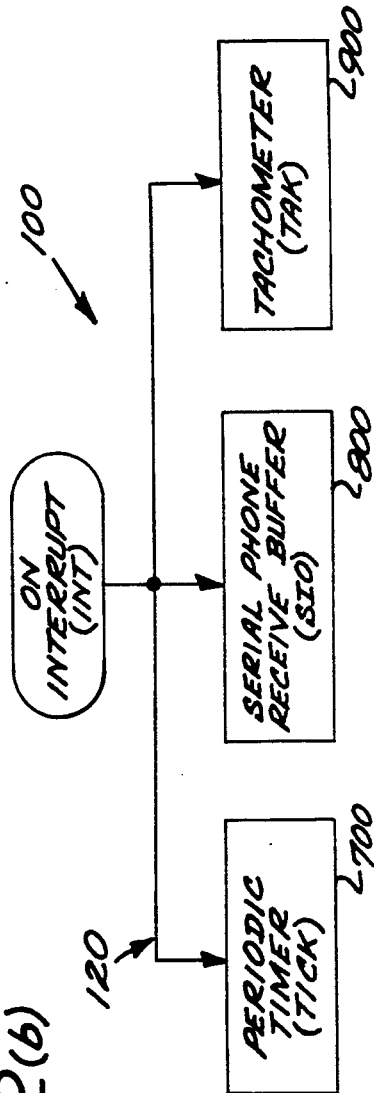


FIG. 2(b)

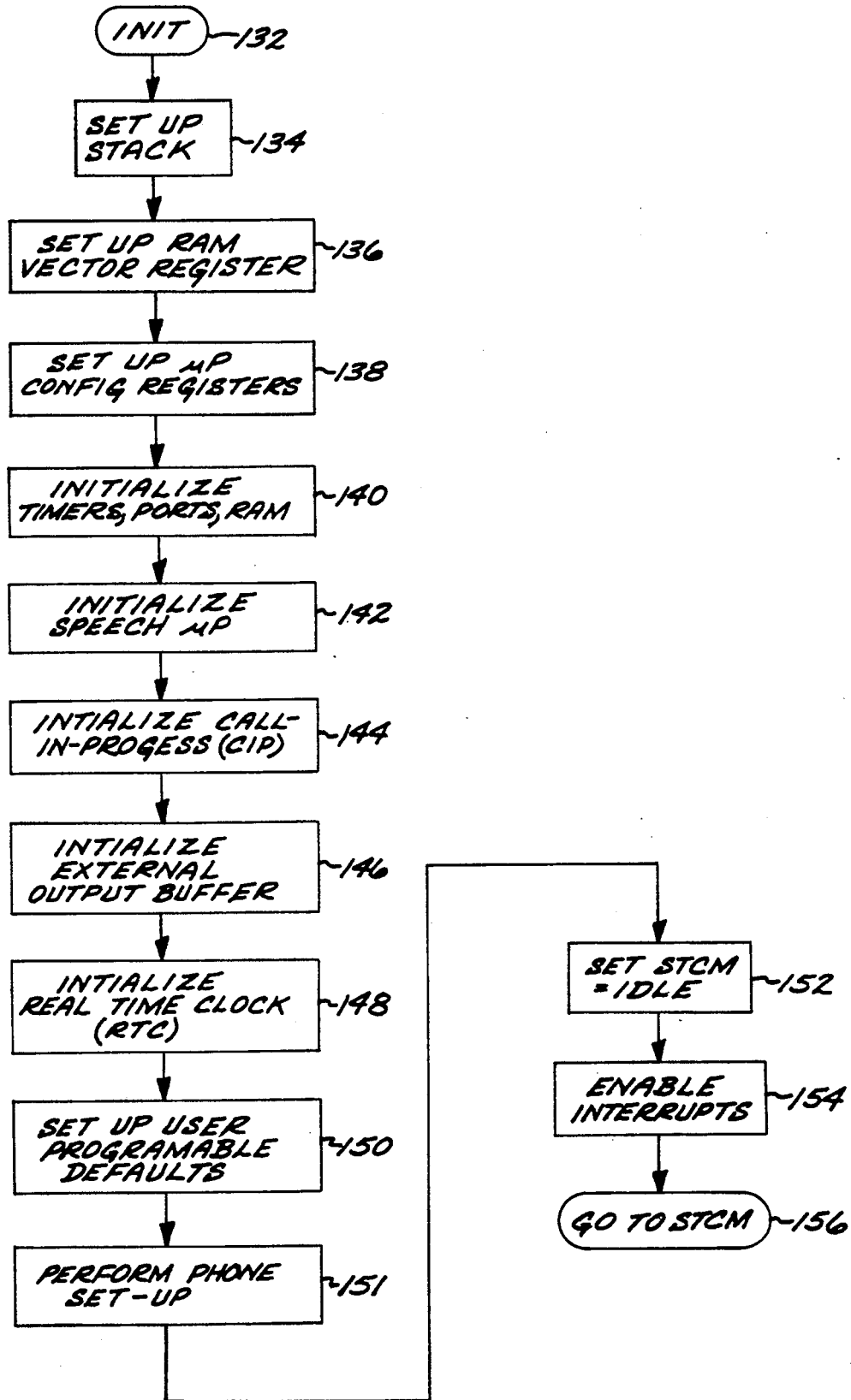


FIG. 3(a)

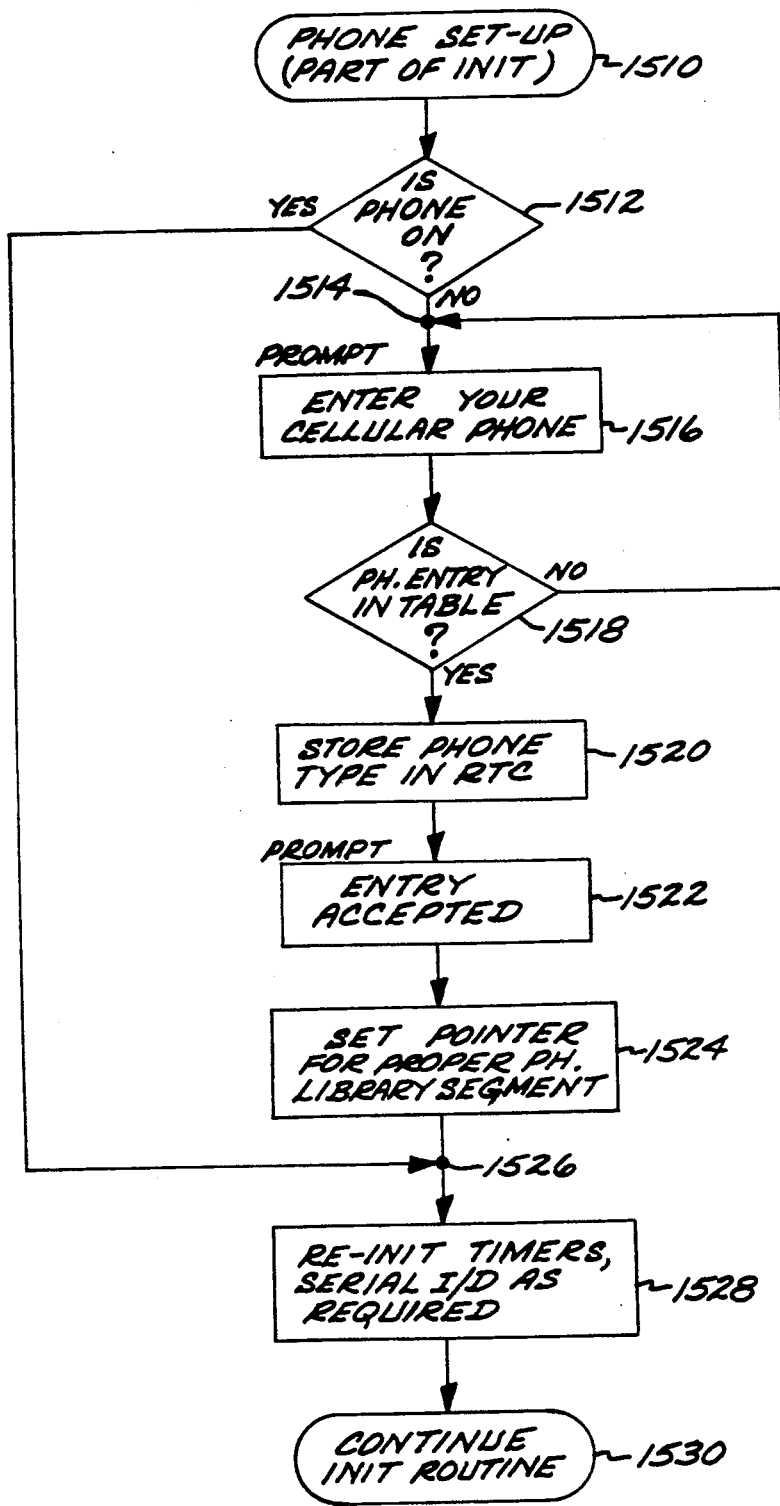


FIG. 3(b)

# 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.