US005592470A

United States Patent [19]

Rudrapatna et al.

[11] **Patent Number: 5,592,470**

[45] **Date of Patent: Jan. 7, 1997**

[54] **BROADBAND WIRELESS SYSTEM AND NETWORK ARCHITECTURE PROVIDING BROADBAND/NARROWBAND SERVICE WITH OPTIMAL STATIC AND DYNAMIC BANDWIDTH/CHANNEL ALLOCATION**

[75] Inventors: **Ashok N. Rudrapatna**, Basking Ridge; **Gopal K. Jaisingh**, Montville; **Robert R. Miller, II**, Morris Township, Morris County; **Jesse E. Russell**, Piscataway; **Robert E. Schroeder**, Morris Township, Morris County, all of N.J.

[73] Assignee: **AT&T**, Holmdel, N.J.

[21] Appl. No.: **361,355**

[22] Filed: **Dec. 21, 1994**

[51] **Int. Cl.**[6] **H04J 3/26**; H04L 5/22

[52] **U.S. Cl.** **370/320**; 348/7; 348/12; 348/13; 375/200; 370/468; 370/477; 370/907

[58] **Field of Search** 370/18, 26, 32, 370/35, 38, 45, 50, 91, 85.13, 85.14, 95.1, 95.3, 118, 60, 60.1, 94.1, 94.2; 375/200, 201, 202, 205, 211, 212; 348/6, 7, 12, 13, 5.5

[56] **References Cited**

U.S. PATENT DOCUMENTS

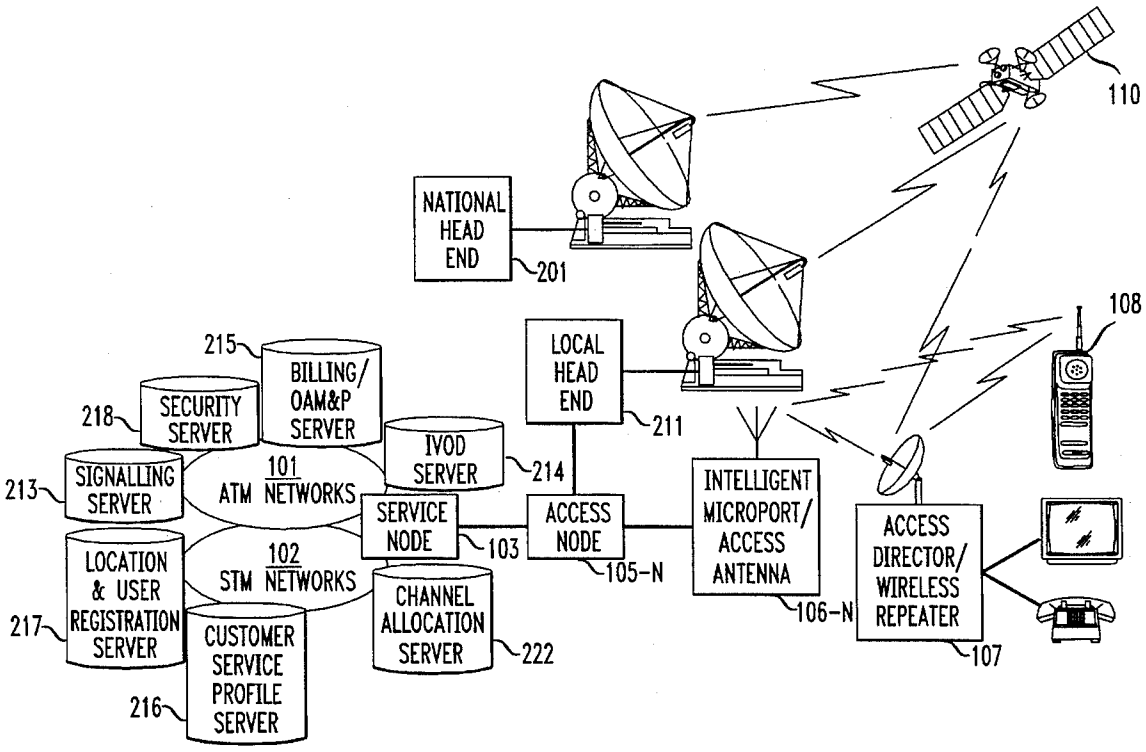
5,351,240	9/1994	Highsmith	370/84
5,371,734	12/1994	Fischer	370/18
5,384,777	1/1995	Ahmadi et al.	370/85.2
5,442,659	8/1995	Bauchot et al.	375/202

Primary Examiner—Alpus H. Hsu
Assistant Examiner—Ricky Q. Ngo
Attorney, Agent, or Firm—A. G. Steinmetz

[57] **ABSTRACT**

A wireless broadband communication system architecture is structured to provide an array of narrowband and broadband services to an end user on demand. The bandwidth of delivery is dynamically adjusted to deliver and satisfy service requirements by utilizing the appropriate bandwidth on demand. Bandwidth-on-demand is provided in accord with the invention by rearranging spectrum allocations so that a particular band spectrum is convertibly used to accomplish different purposes depending on present allocations and active applications of the system. The communications system is designed to utilize wireless communication for end point delivery to both fixed and potable terminals. The system supplies basic telephone service, wireless ISDN service, wireless data service, wireless multimedia service and various other wireless broadband service including types of interactive and broadcast video.

28 Claims, 8 Drawing Sheets



DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

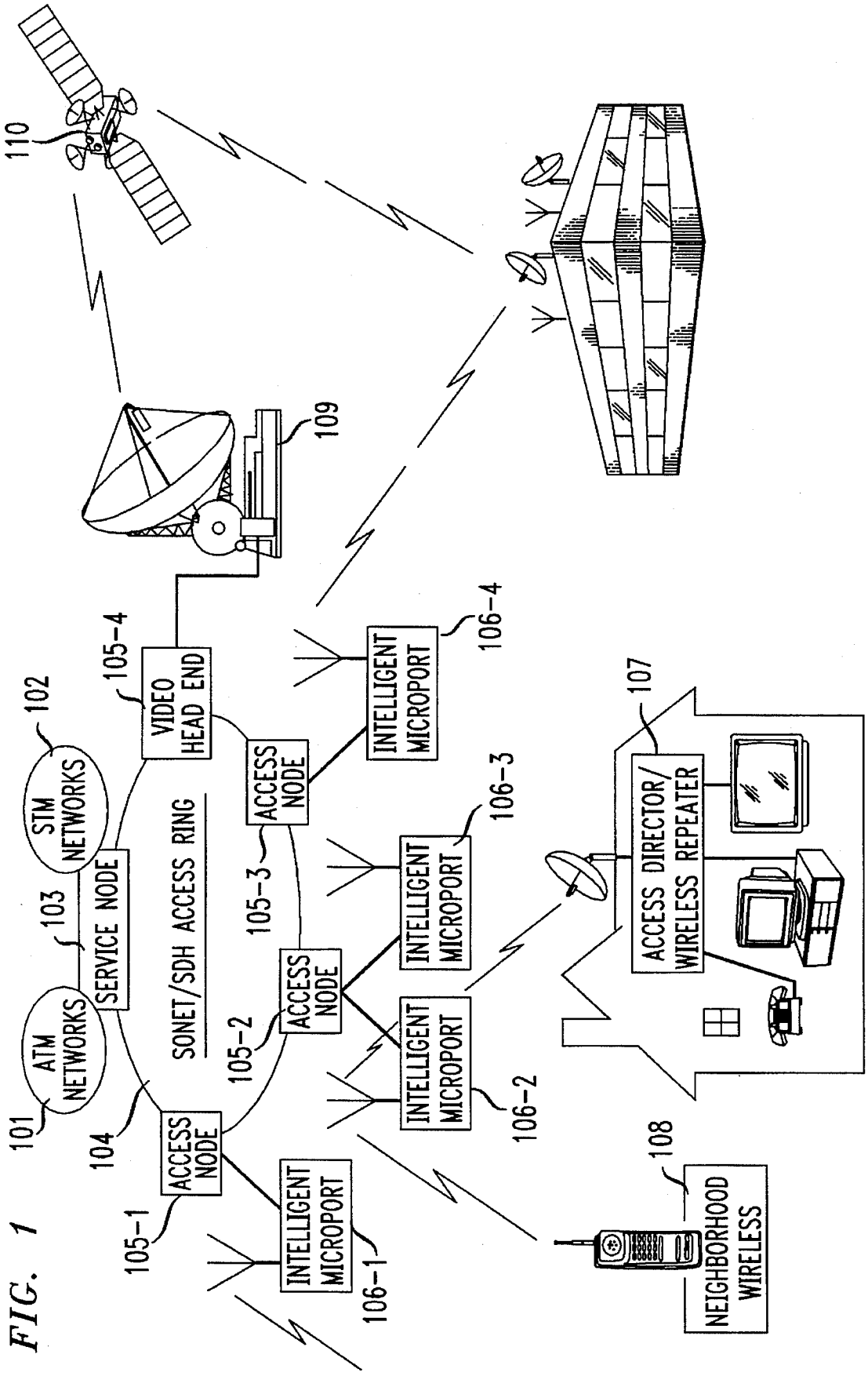


FIG. 1

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

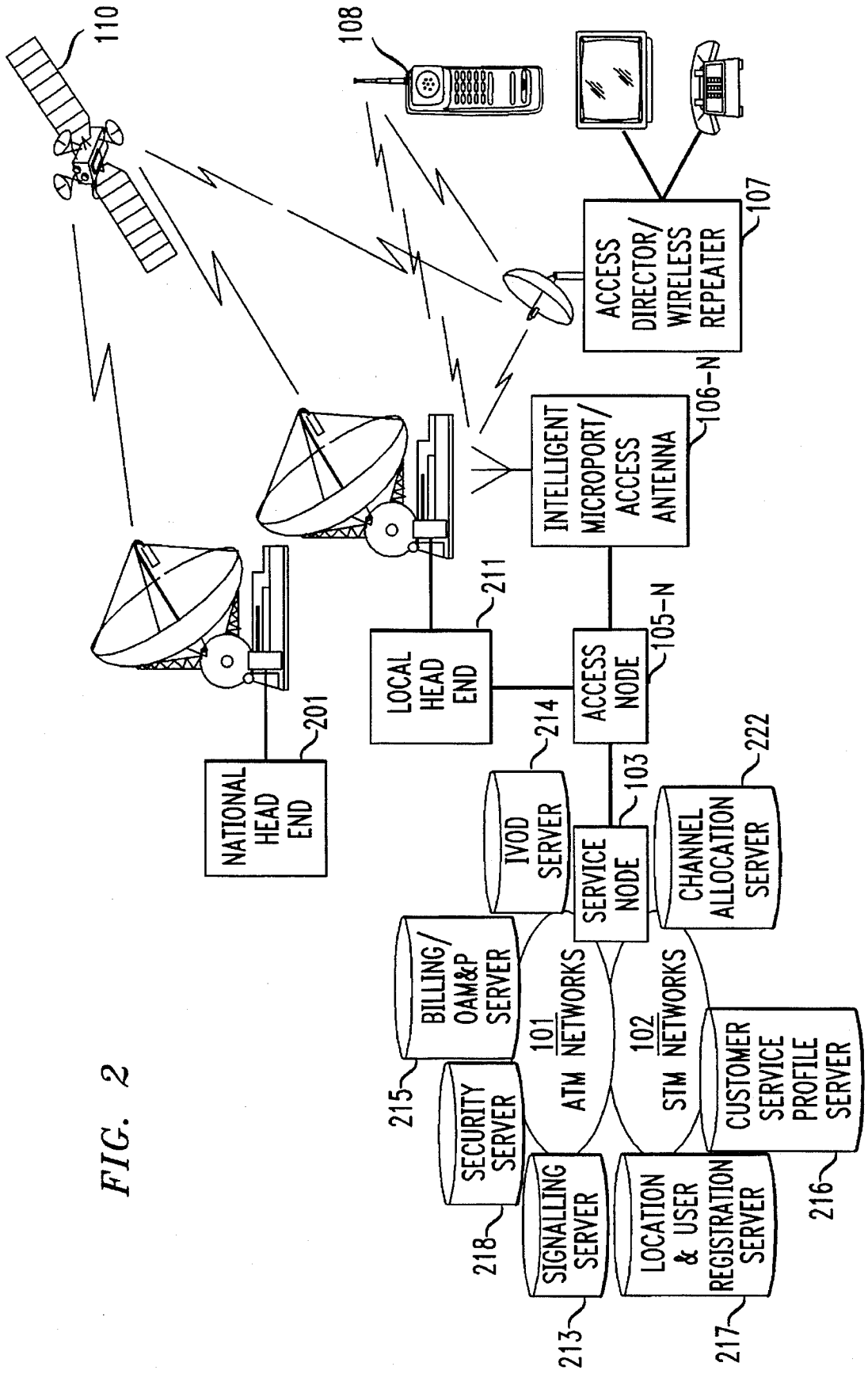


FIG. 2

DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

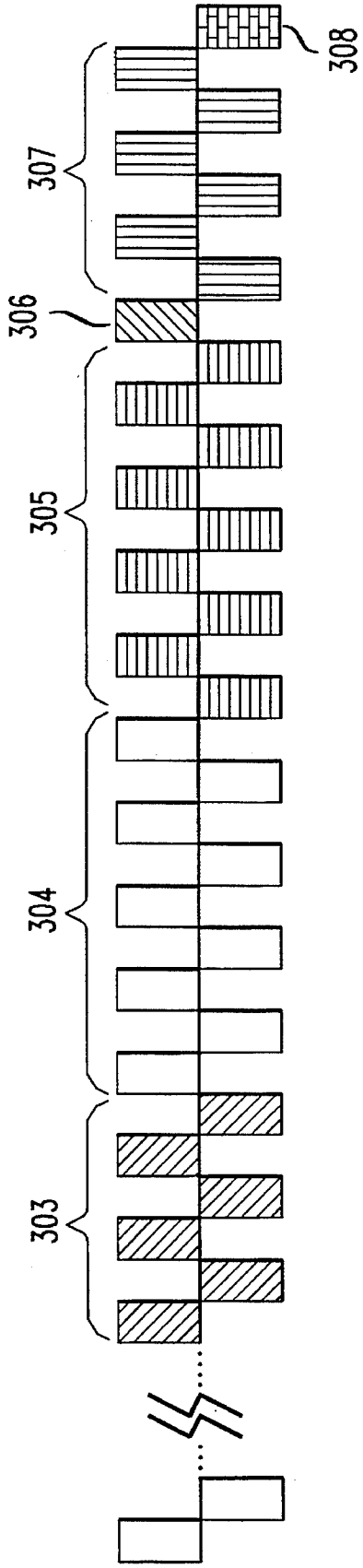
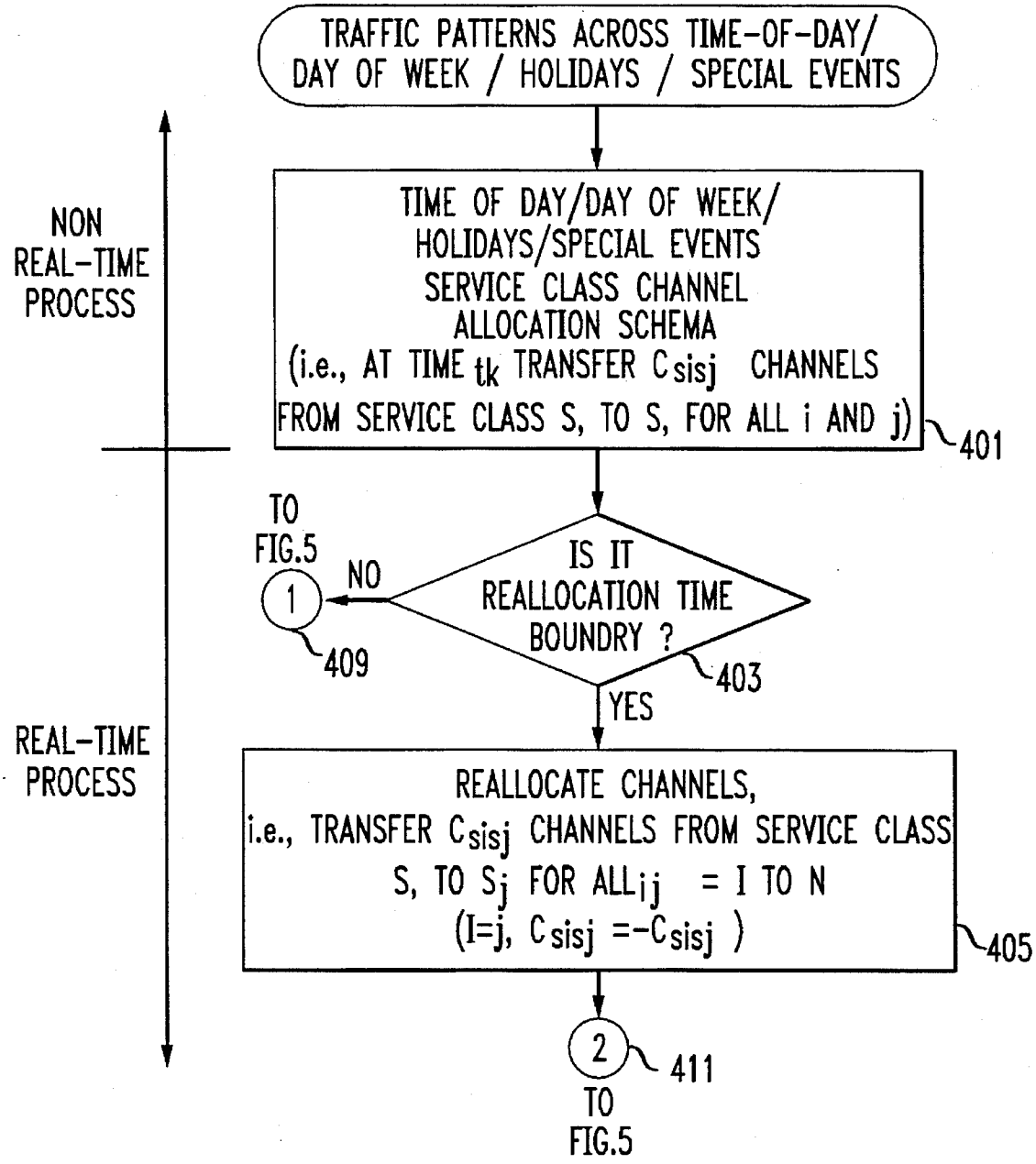


FIG. 3

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

FIG. 4



DOCKET ALARM Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.