



US006264987B1

(12) **United States Patent**  
**Wright et al.**

(10) **Patent No.:** **US 6,264,987 B1**

(45) **Date of Patent:** **Jul. 24, 2001**

(54) **METHOD FOR PREPARING  
MICROPARTICLES HAVING A SELECTED  
POLYMER MOLECULAR WEIGHT**

(75) Inventors: **Steven G. Wright**, Madeira; **Michael E. Rickey**, Loveland; **J. Michael Ramstack**, Lebanon; **Shawn L. Lyons**; **Joyce M. Hotz**, both of Cincinnati, all of OH (US)

(73) Assignee: **Alkermes Controlled Therapeutics Inc. II**, Cambridge, MA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/575,075**

(22) Filed: **May 19, 2000**

(51) **Int. Cl.**<sup>7</sup> ..... **A61K 9/14**; **A61K 9/50**;  
**B01J 13/02**

(52) **U.S. Cl.** ..... **424/489**; **424/497**; **424/484**;  
**264/41**; **264/46**; **427/213.3**; **427/213.36**

(58) **Field of Search** ..... **424/489**, **497**;  
**264/41**, **46**; **427/213.3**, **213.36**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,654,008 \* 8/1997 Herbert et al. .... 424/489

\* cited by examiner

*Primary Examiner*—Thurman K. Page

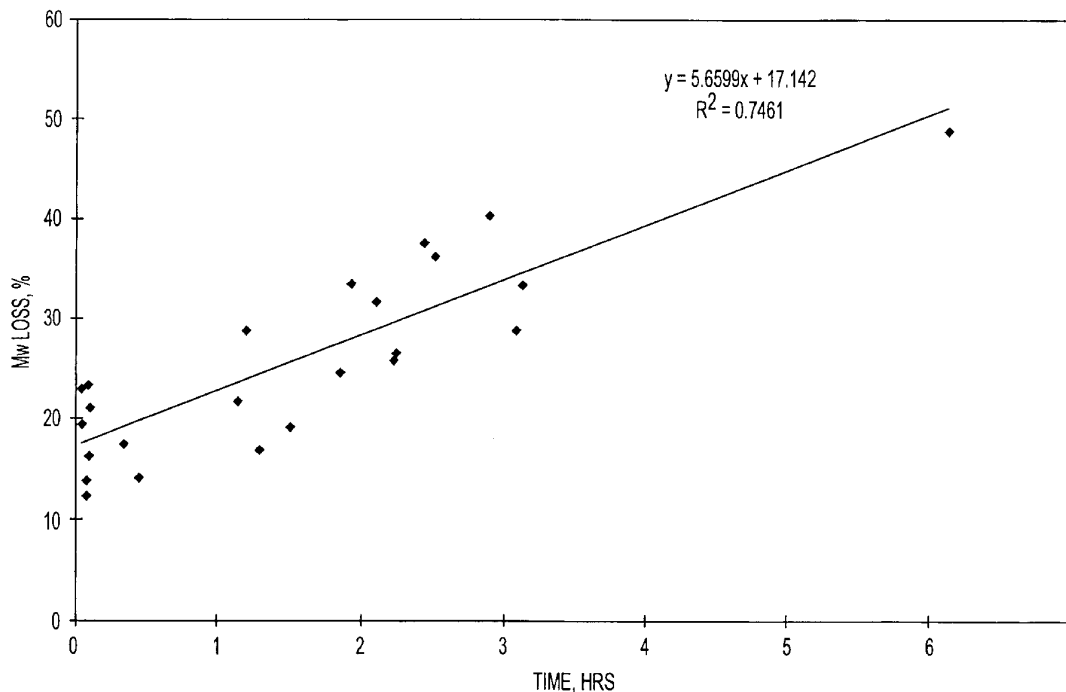
*Assistant Examiner*—Blessing Fubara

(74) *Attorney, Agent, or Firm*—Andrea G. Reister;  
Covington & Burling

(57) **ABSTRACT**

A method for preparing microparticles having a selected polymer molecular weight. The hold time and temperature of a solution containing a nucleophilic compound and a polymer having a starting molecular weight are controlled in order to control the molecular weight of the polymer in the finished microparticle product. In this manner, a selected polymer molecular weight in the finished microparticle product can be achieved from a variety of starting material molecular weights.

**50 Claims, 4 Drawing Sheets**



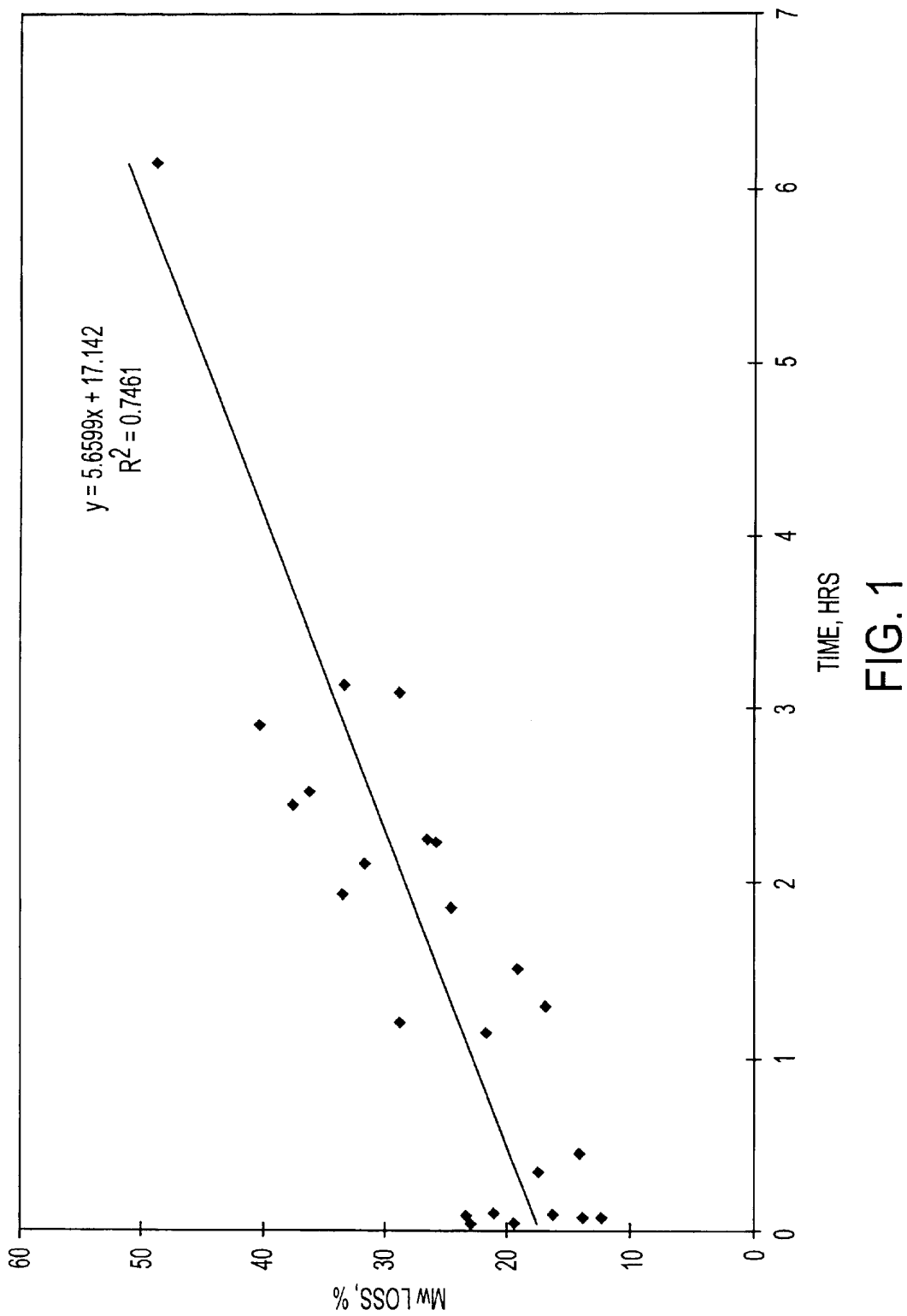


FIG. 1

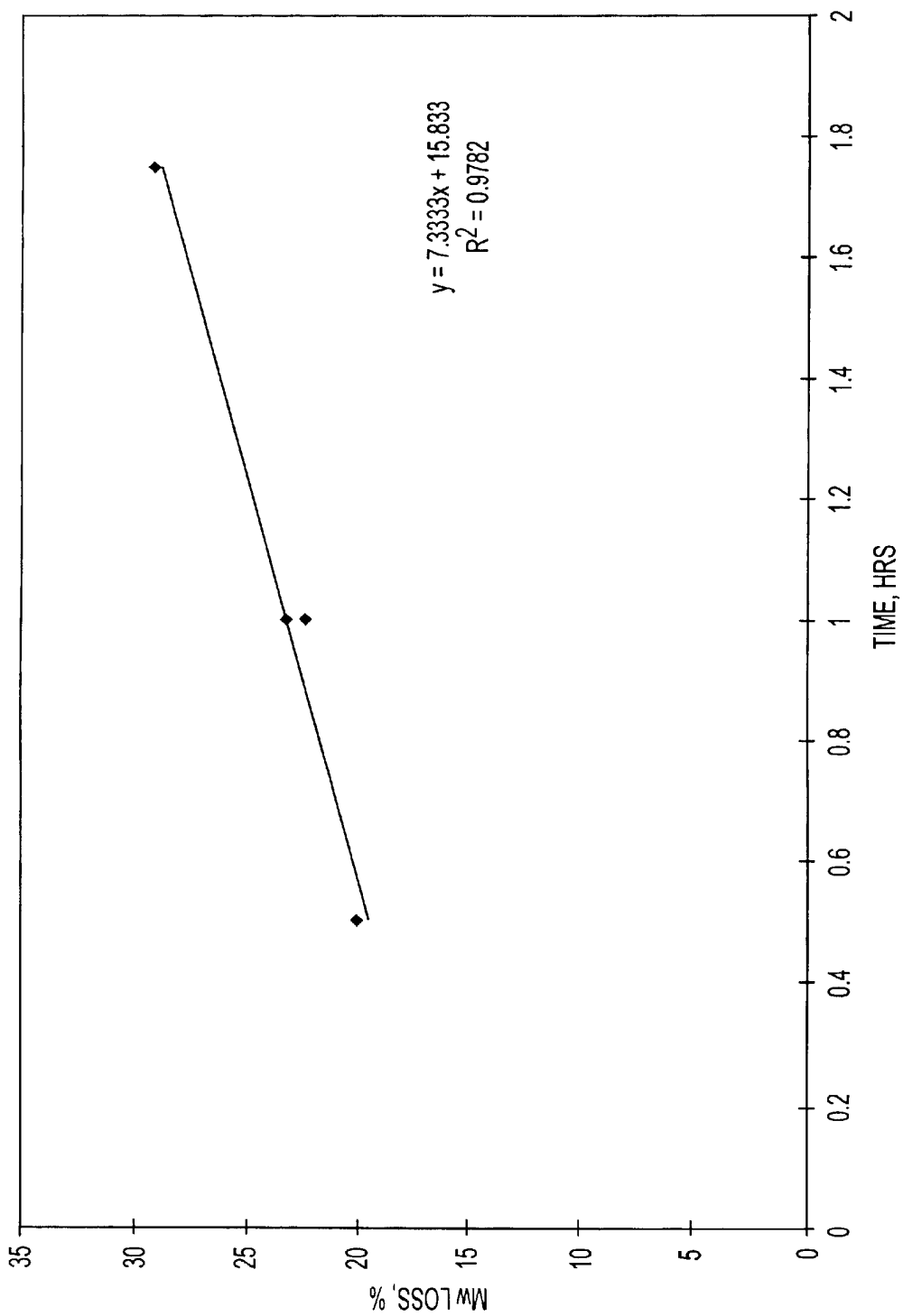


FIG. 2

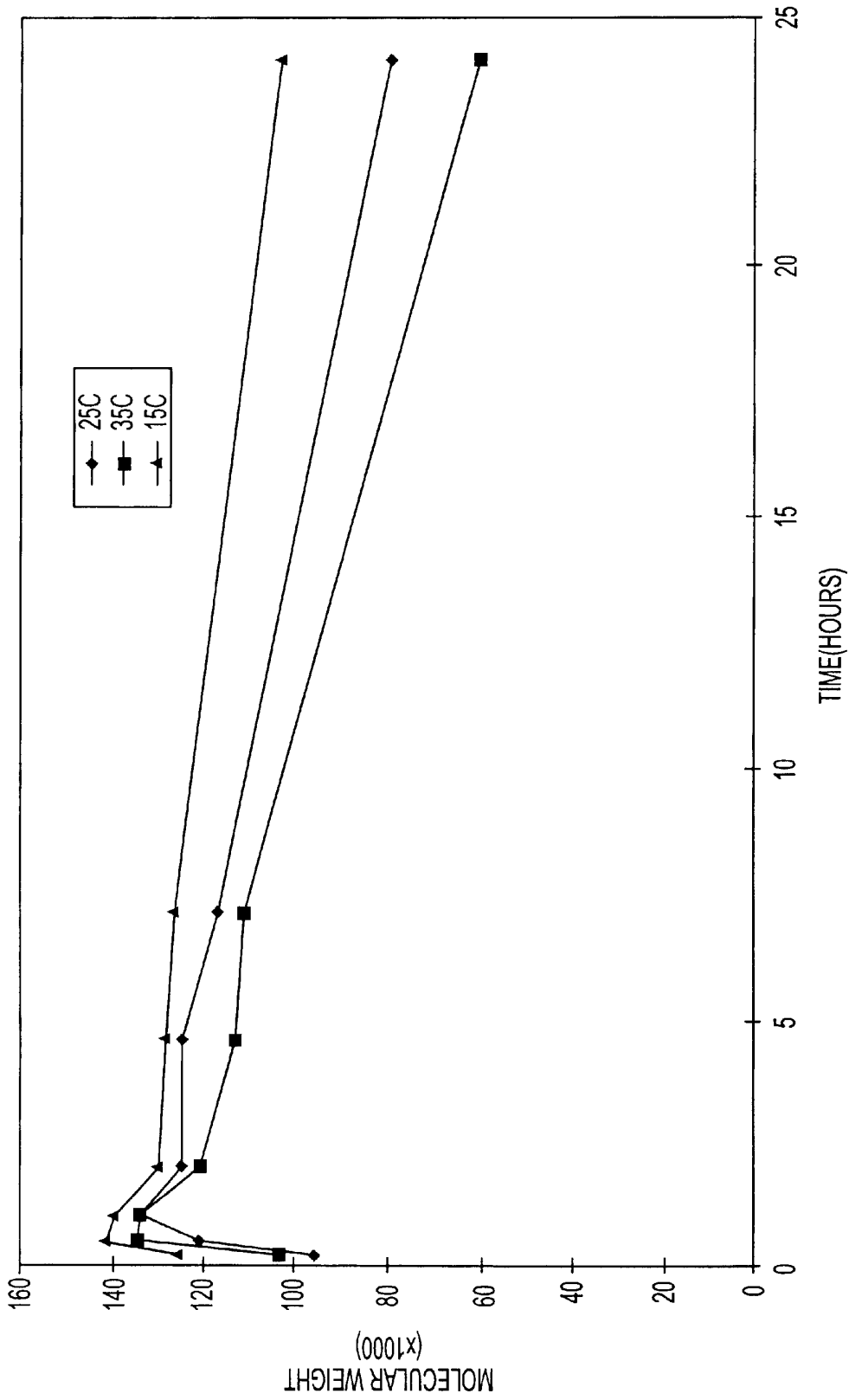


FIG. 3

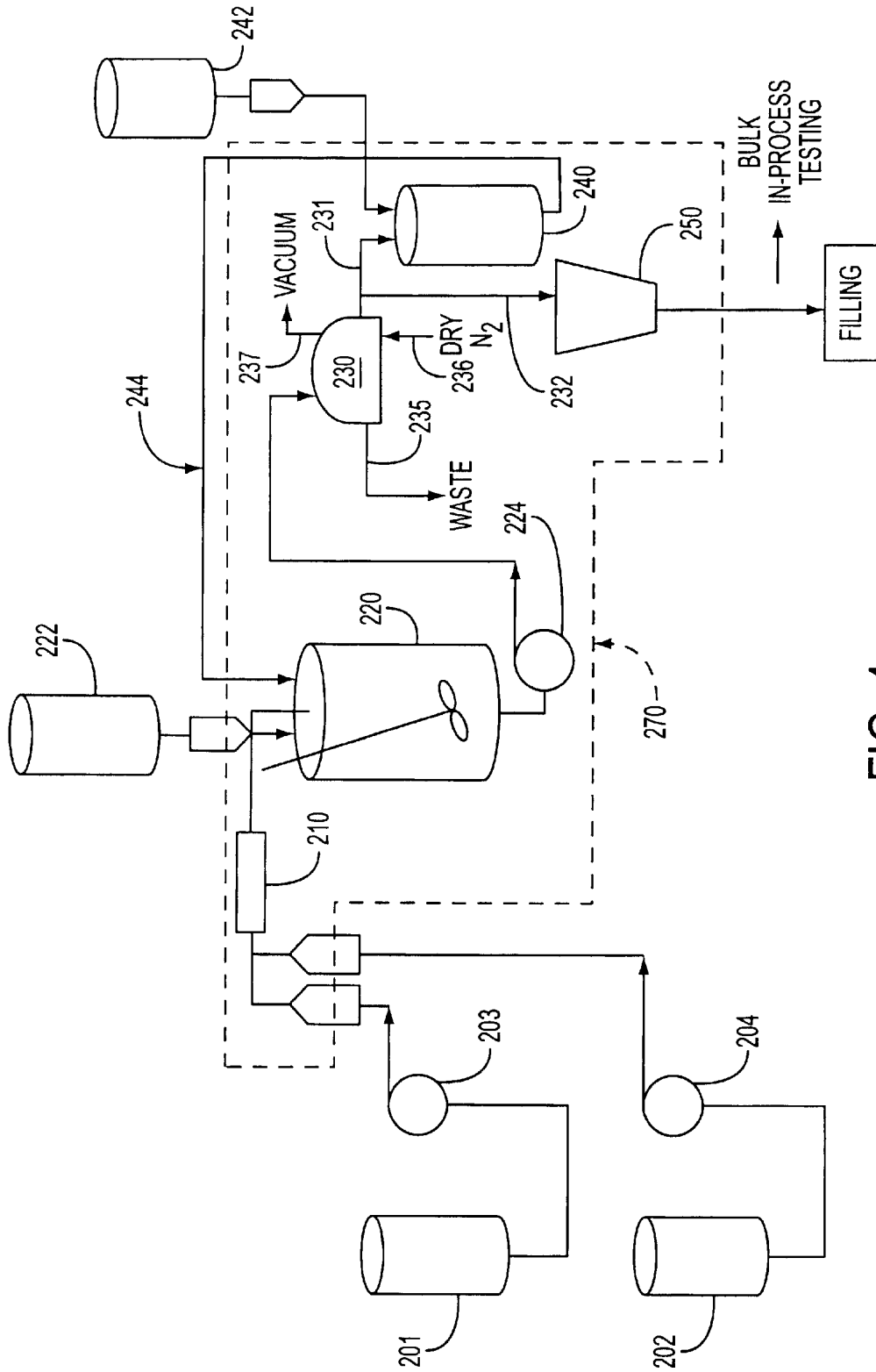


FIG. 4

# 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.