



[54] DATA PROCESSING APPARATUS HAVING SIMPLIFIED ICON DISPLAY

[75] Inventors: Tomoshi Hirayama; Hiroshi Yasuhara, both of Tokyo, Japan

[73] Assignee: Sony Corporation, Tokyo, Japan

[21] Appl. No.: 621,898

[22] Filed: Dec. 4, 1990

[30] Foreign Application Priority Data

Dec. 5, 1989 [JP] Japan 1-316109

[51] Int. Cl.⁶ G09G 1/06

[52] U.S. Cl. 345/120; 345/179

[58] Field of Search 340/706, 707, 709, 710, 340/712, 721, 723, 724; 178/18, 19; 345/119, 120, 163, 179, 182; 395/155, 157, 159

[56] References Cited

U.S. PATENT DOCUMENTS

4,686,522	8/1987	Hernandez et al.	340/721
4,720,703	1/1988	Schnarel et al.	340/721
4,763,356	8/1988	Day et al.	178/18
4,764,885	8/1988	Greanias et al.	340/708
4,899,136	2/1990	Beard et al.	340/706
4,987,411	1/1991	Ishigami	340/709
5,040,131	8/1991	Torres	345/156

FOREIGN PATENT DOCUMENTS

2193827 2/1988 United Kingdom .

OTHER PUBLICATIONS

Macintosh System Software User's Guide, Version 6.0—Apple, 1988.

Patent Abstracts of Japan, vol. 12, No. 138, Apr. 27, 1988, Shigeki Iguchi, "Data Managing Device".

IEEE Computer Graphics and Applications, vol. 8, No. 5, Sep. 1988, pp. 65-84; Brad A. Myers, "A Taxonomy of Window Manager User Interfaces".

Primary Examiner—Alvin E. Oberley

Assistant Examiner—Chanh Nguyen

Attorney, Agent, or Firm—Hill, Steadman & Simpson

[57] ABSTRACT

A data processing apparatus is provided, in which an information is inputted by using a pen from a display portion in which an input device (tablet) is stuck to a display device (display panel). If the user touches an icon displayed on this display portion for indicating various functions with a point of the pen and drags the pen along the surface of the display portion to a display position and releases the point of the pen from the panel surface of the display portion, an enlarged processing display form (i.e. window) is automatically displayed at a desired position of the display portion. Further, if the user touches the window with the point of the pen and drags the pen along the panel surface of the display portion up to the position of a desired icon, the enlarged window is automatically reduced and is stored in a vacant icon.

7 Claims, 6 Drawing Sheets

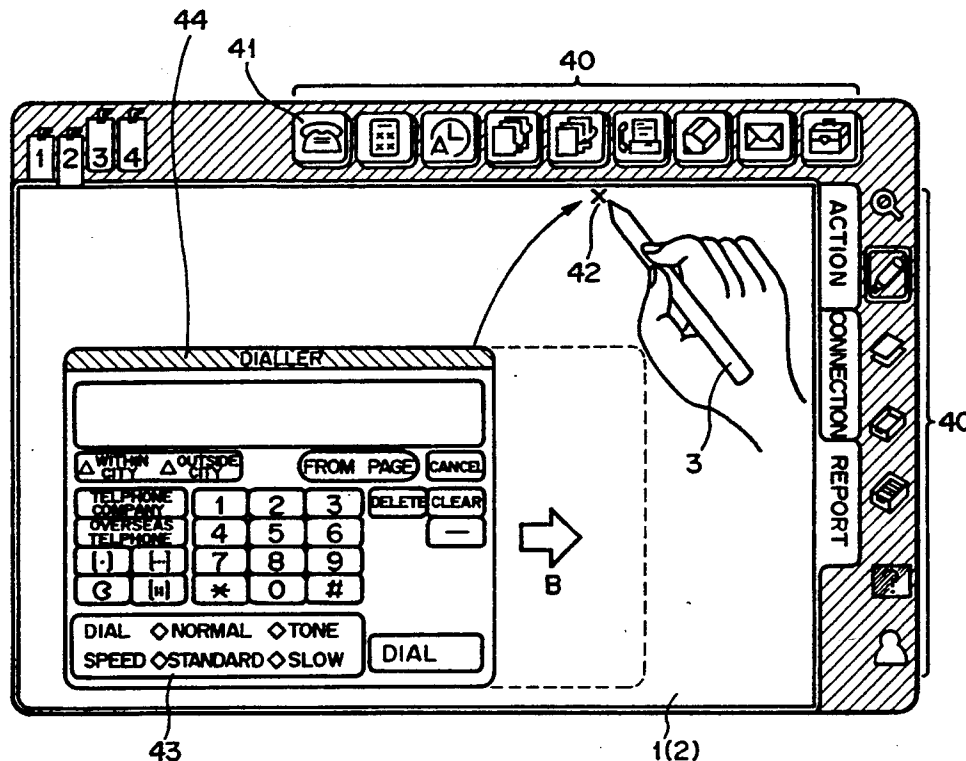


FIG. 1

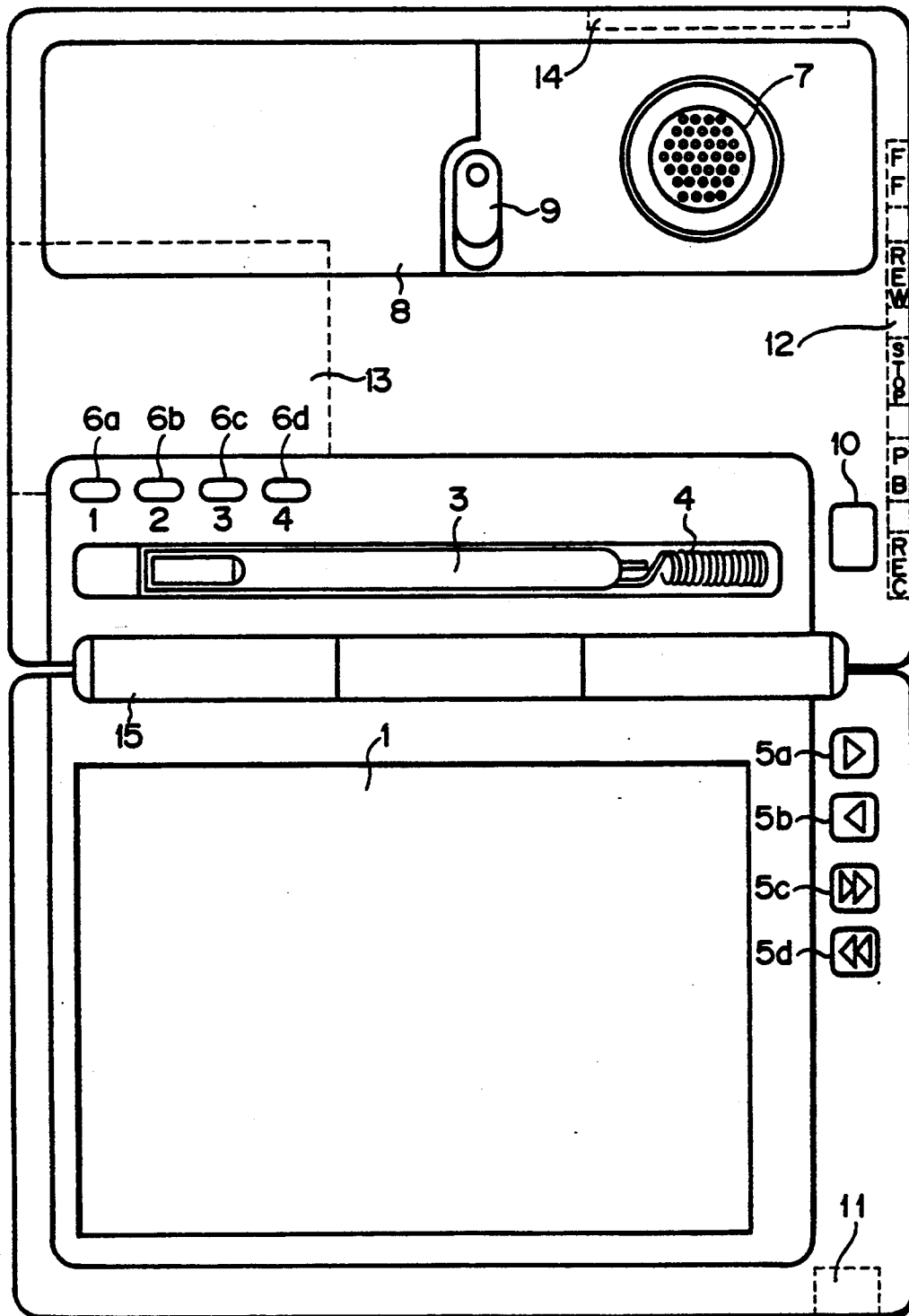


FIG. 2

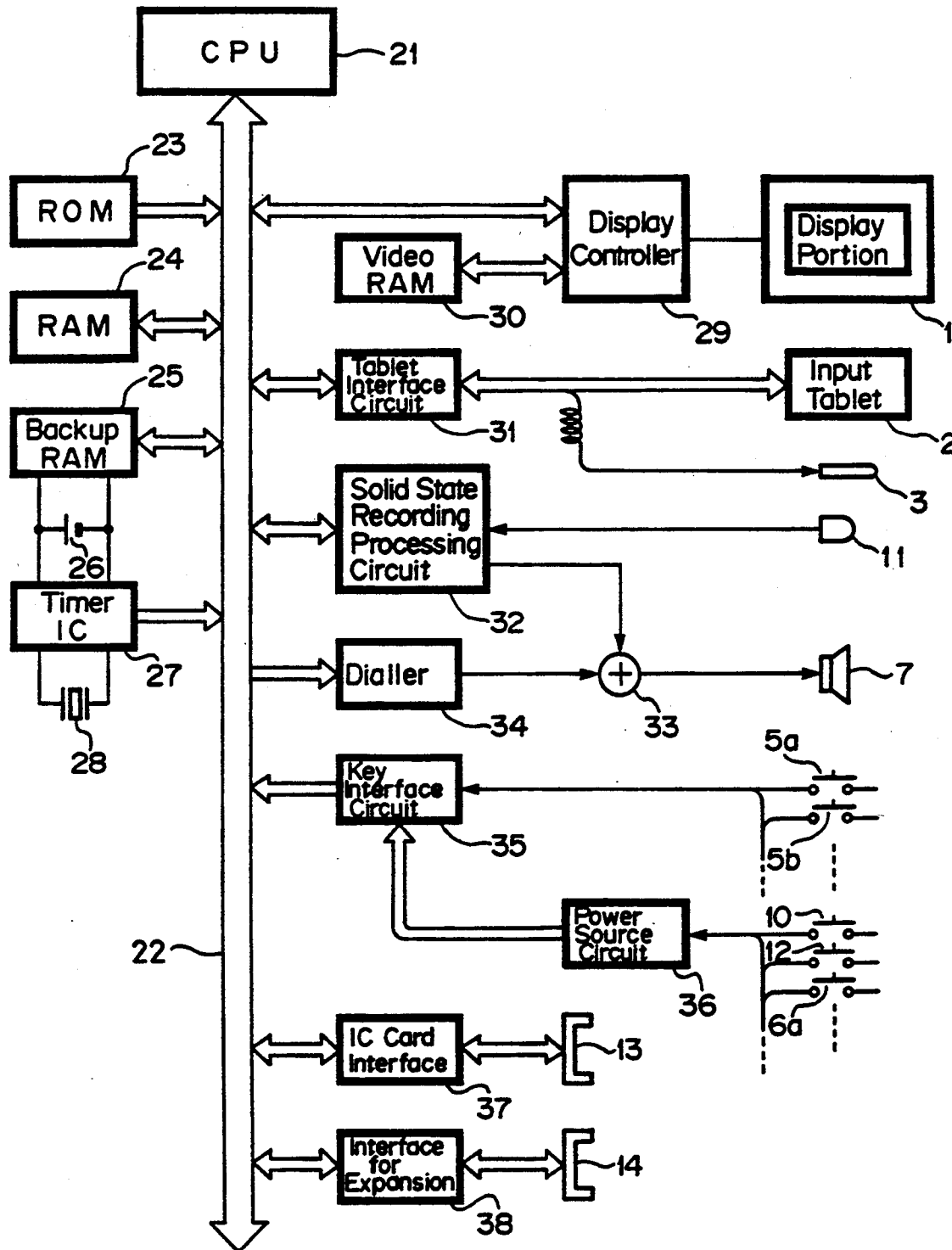


FIG. 3A

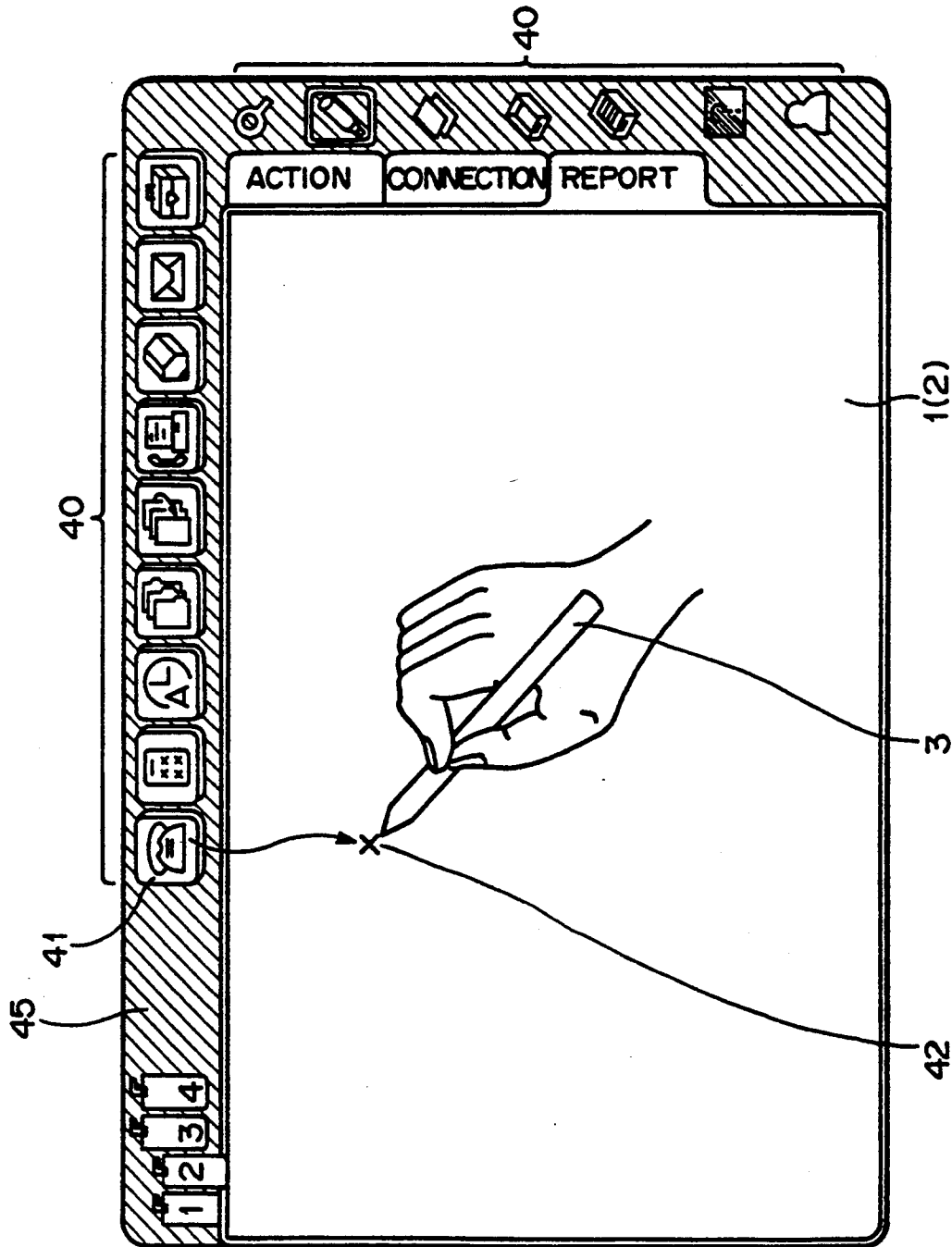
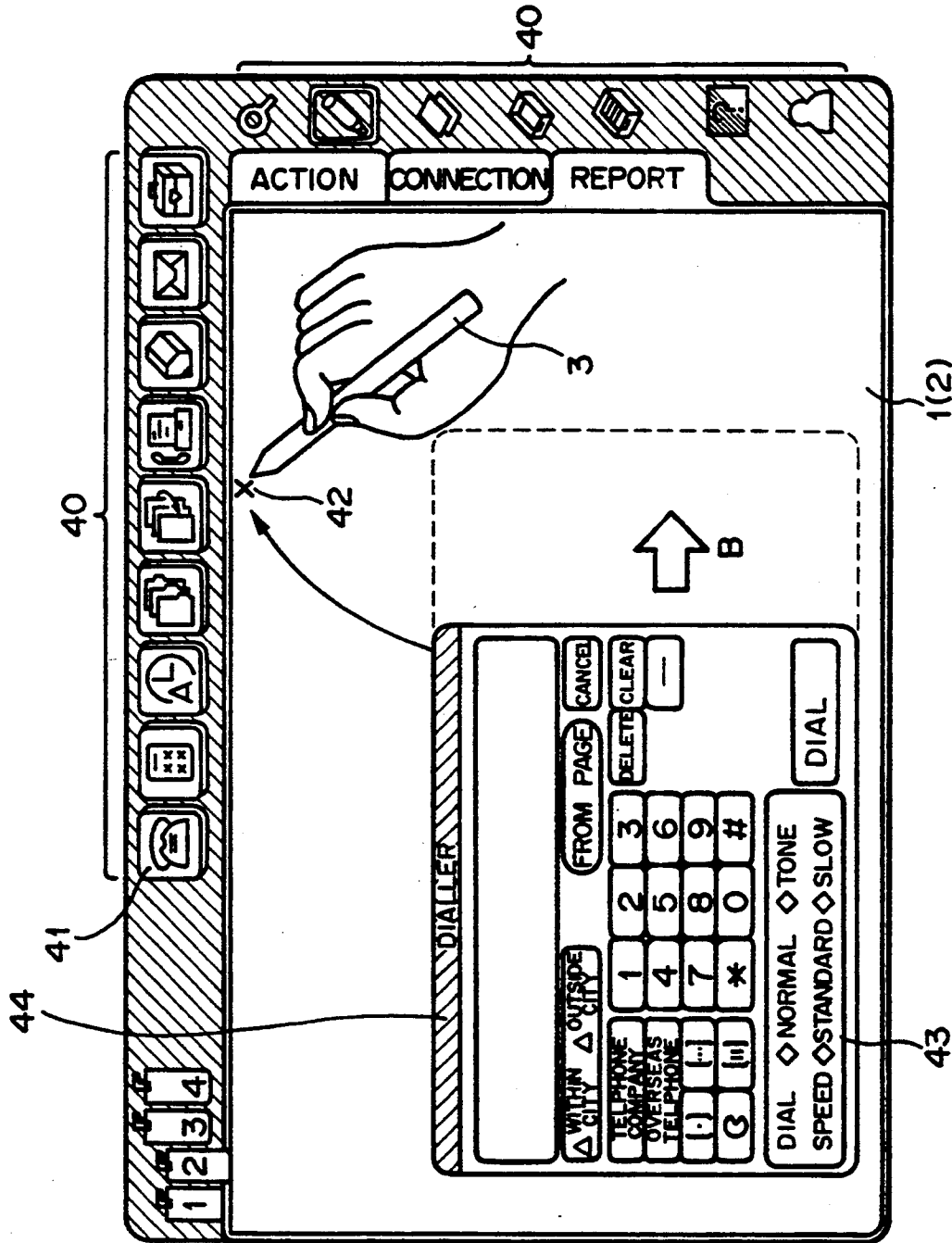


FIG. 3B



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.