



[54] ROW REDUNDANCY CIRCUIT SHARING A FUSE BOX

[56] References Cited

U.S. PATENT DOCUMENTS

[75] Inventor: Kyu-Chan Lee, Ahnsan, Rep. of Korea

4,660,179 4/1987 Aoyama 365/200
4,727,516 2/1988 Yoshida et al. 365/200
5,255,234 10/1993 Seok 365/200 X

[73] Assignee: Samsung Electronics Co., Ltd., Kyungki-do, Rep. of Korea

Primary Examiner—Joseph A. Popek
Attorney, Agent, or Firm—Cushman, Darby & Cushman

[21] Appl. No.: 90,691

[57] ABSTRACT

[22] Filed: Jul. 13, 1993

The present invention discloses a row redundancy circuit in which, when the number of word lines containing defective memory cells in a first normal memory cell array is greater than the number of redundant word lines in a first redundant memory cell array, an adjacent redundant row address decoder and associated adjacent redundant word lines are used to repair such excess number of defects. Therefore, there is no need to increase the number of redundant row address decoders and redundancy efficiency is greatly increased.

[30] Foreign Application Priority Data

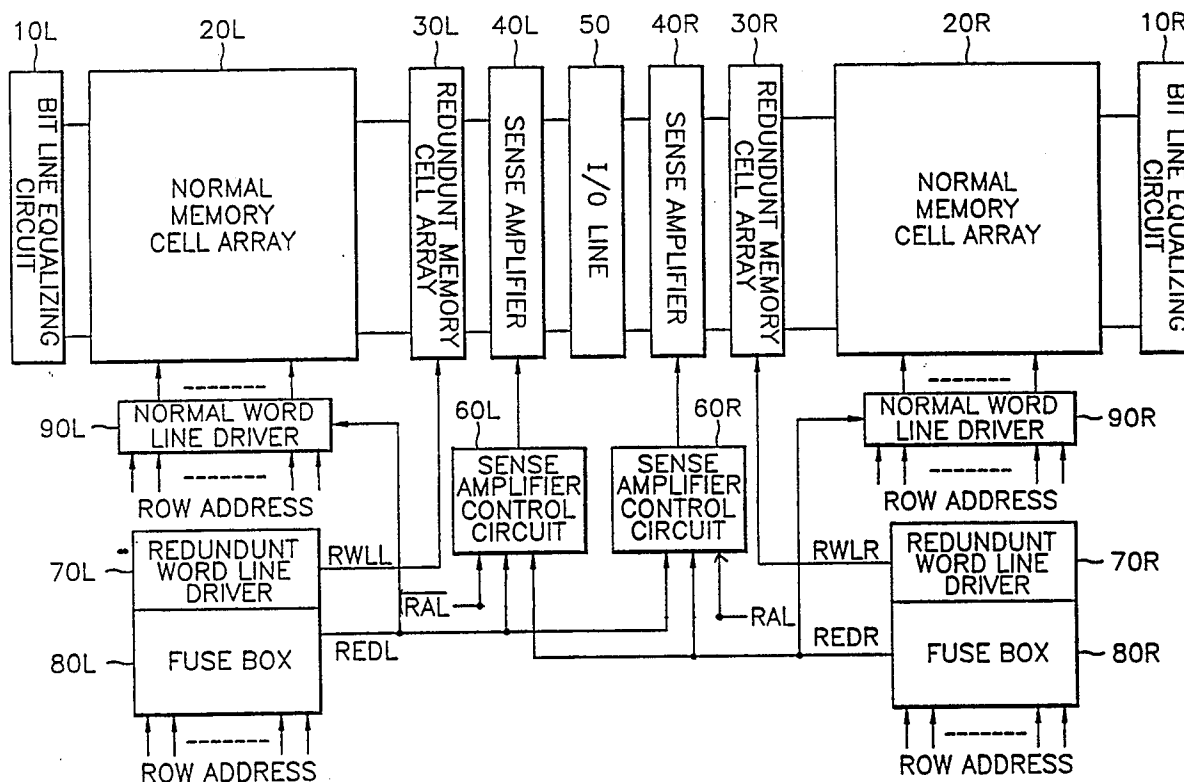
Jul. 13, 1992 [KR] Rep. of Korea 12436

[51] Int. Cl.⁵ G11C 7/00

[52] U.S. Cl. 365/200; 365/225.7; 371/10.3

[58] Field of Search 365/200, 230.03, 225.7; 371/10.3, 10.1

12 Claims, 8 Drawing Sheets



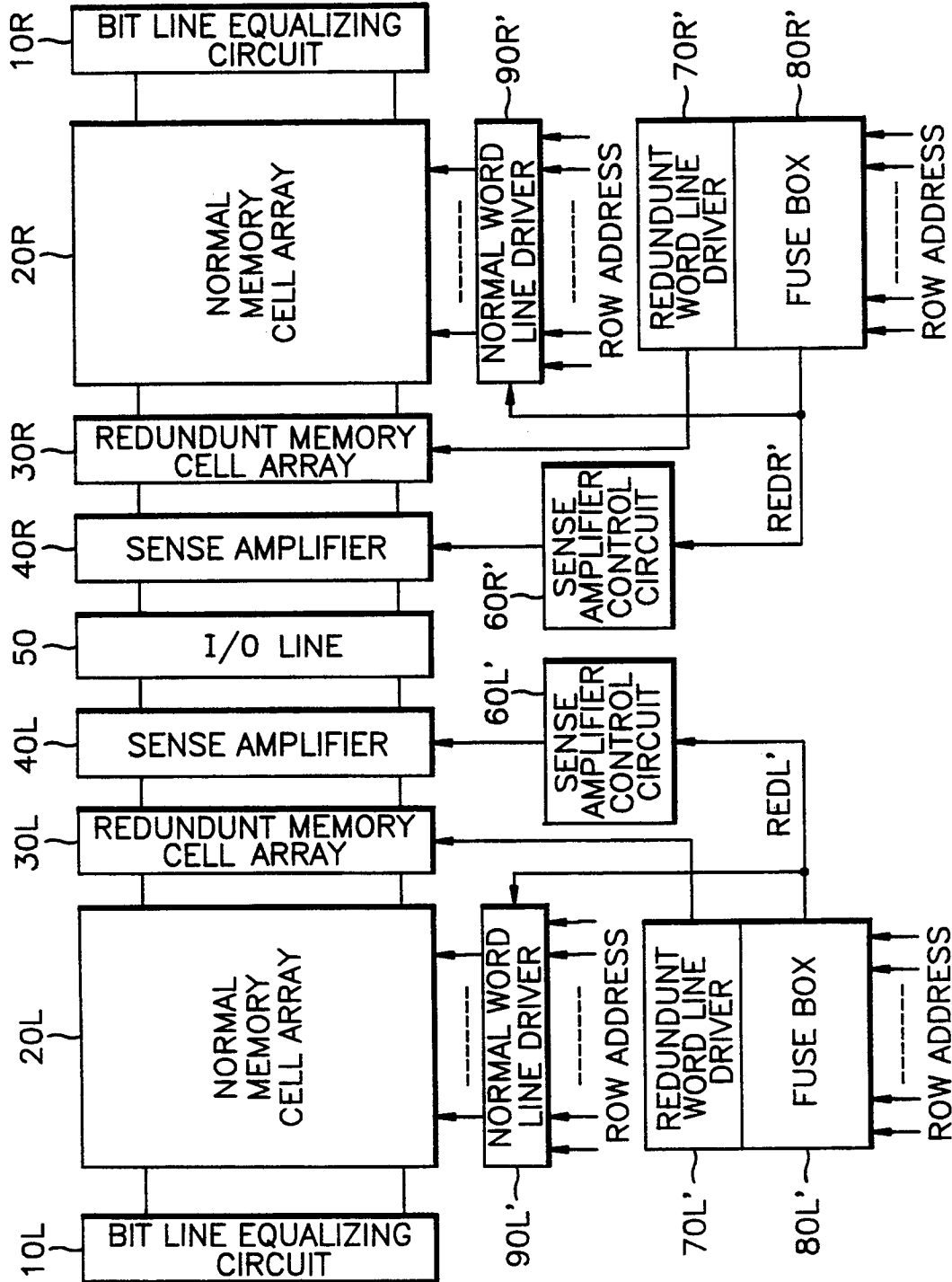
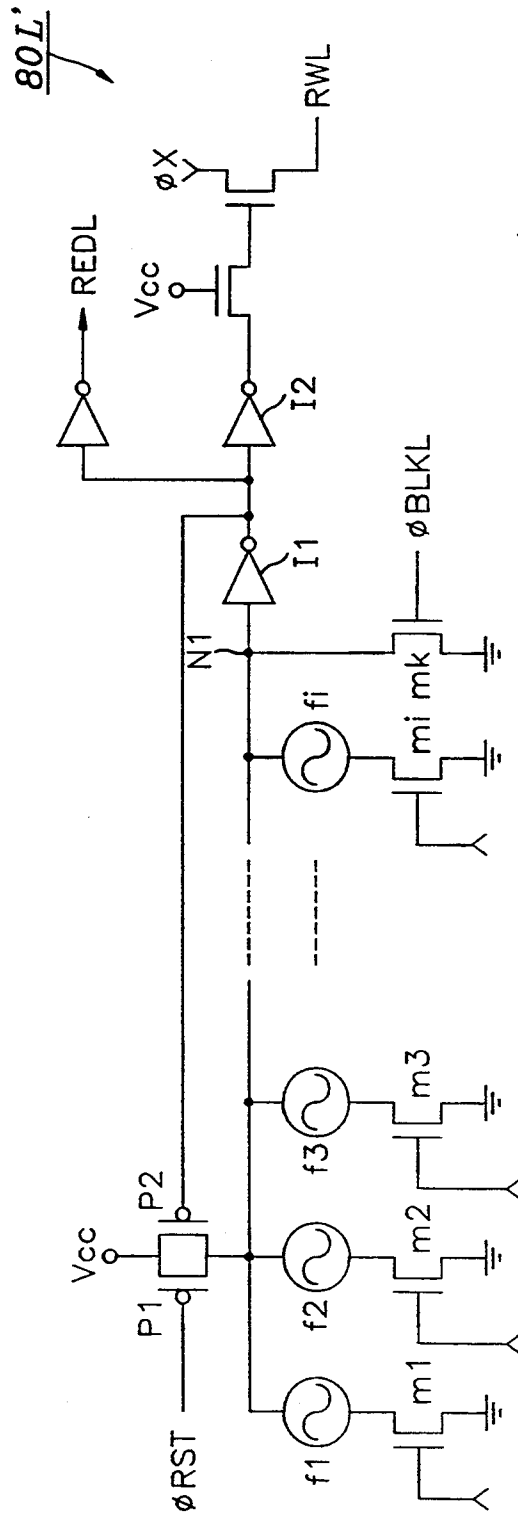


FIG. 1 (PRIOR ART)



(PRIOR ART)

FIG. 2

ROW ADDRESS

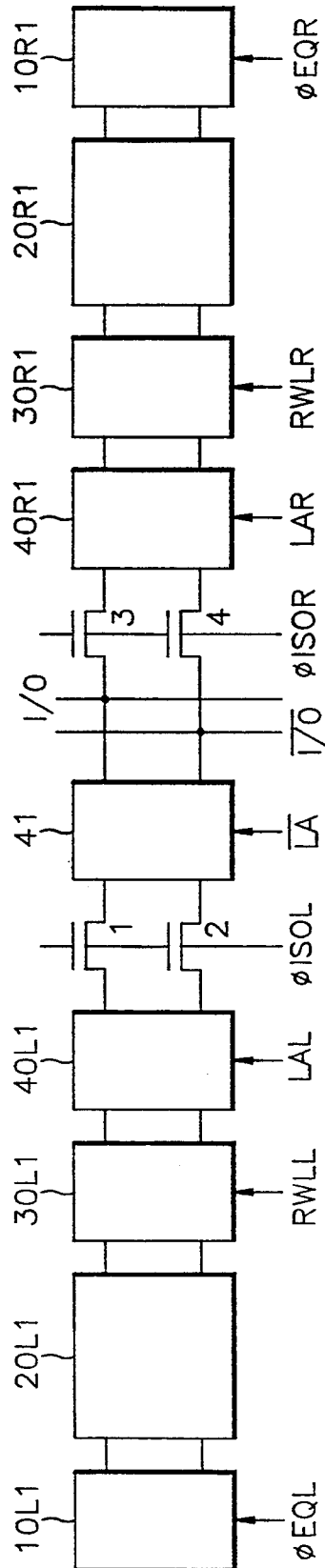


FIG. 4

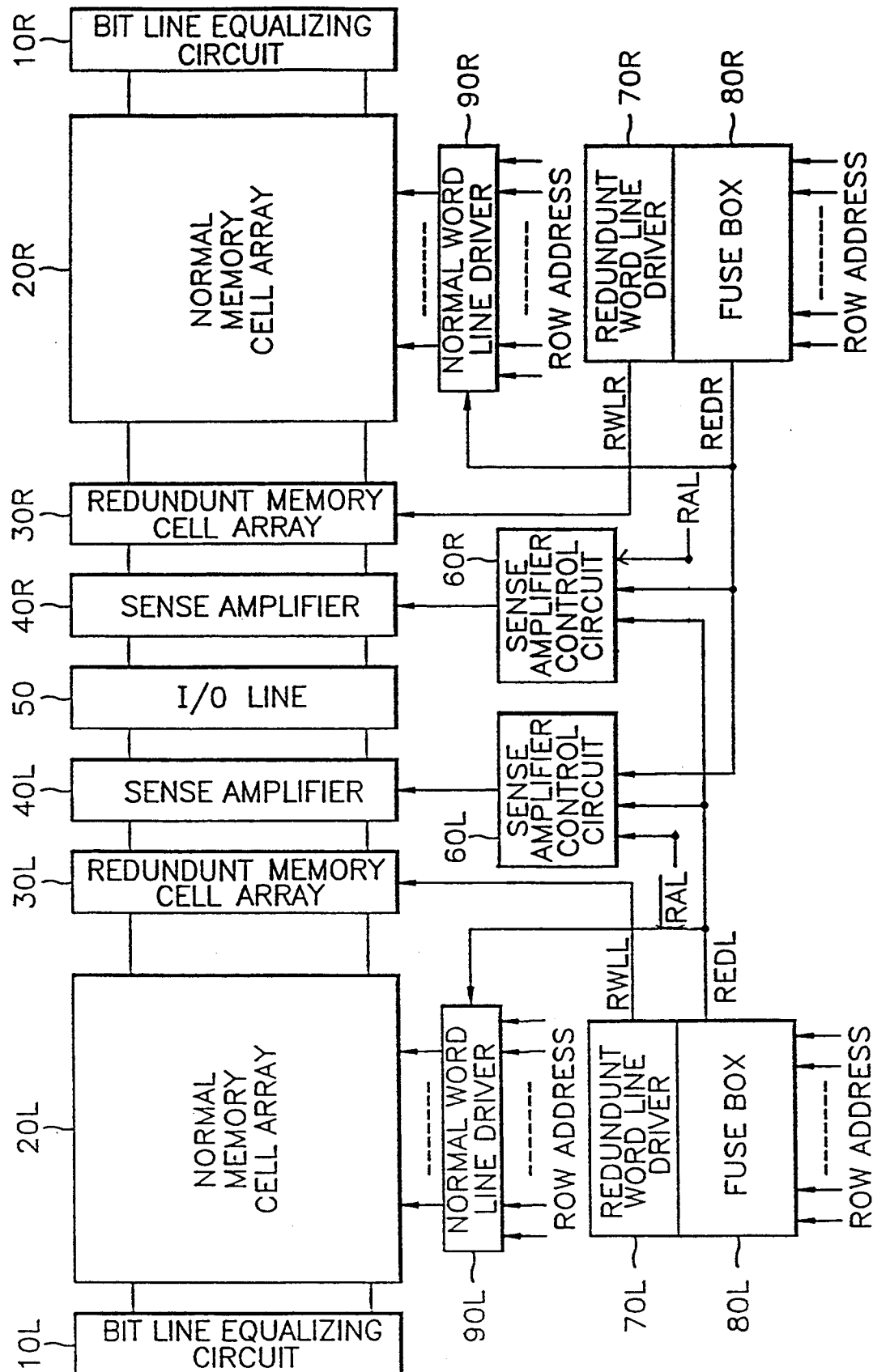


FIG. 3

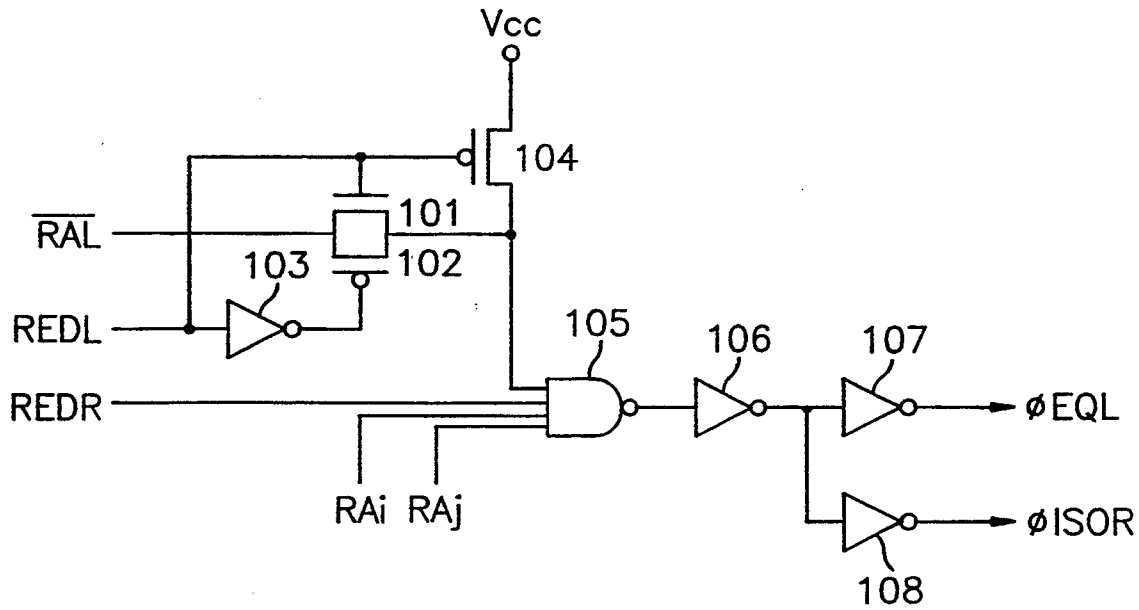


FIG. 5A

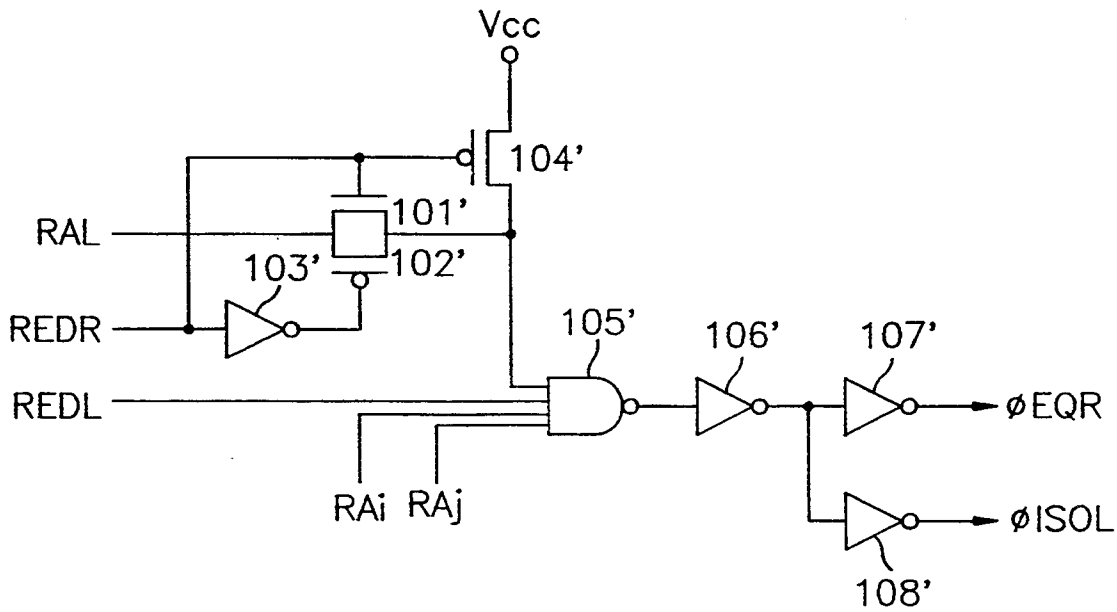


FIG. 5B

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.