United States Patent [19]

Doner et al.

[54] **APPARATUS AND METHOD FOR RETRIEVING AND GROUPING IMAGES REPRESENTING TEXT FILES BASED ON THE RELEVANCE OF KEY WORDS EXTRACTED FROM A SELECTED FILE TO THE TEXT FILES**

[75] Inventors: **Christopher G. Doner**, San Francisco; **Lawrence G. Miller**, Saratoga; **Ian D. Emmons**, Richmond; **Michael R. Barnes**, Berkeley, all of Calif.

[73] Assignee: **Caere Corporation**, Los Gatos, Calif.

[56] **References Cited**

U.S. PATENT DOCUMENTS

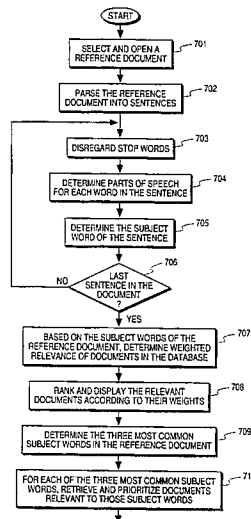|			
4,359,824	11/1982	Glickman et al.	364/419.19
4,839,853	6/1989	Deerwester et al.	395/600
4,868,733	9/1989	Fujisawa et al.	395/600
5,020,019	5/1991	Ogawa	395/600
5,060,135	10/1991	Levine et al.	364/200
5,062,074	9/1991	Kleinberger	395/600
5,211,563	5/1993	Haga et al.	434/322
5,263,159	11/1993	Mitsui	395/600
5,276,616	1/1994	Kuga et al.	364/419.8
5,297,042	3/1994	Morita	364/419.19

OTHER PUBLICATIONS

Salton et al., "Parallel Text Search Methods", *Communications of the ACM* vol. v31 Issue N2 p. 202(14), Feb. 1988.

Kimoto et al "A Dynamic Thesaurus and Its Application to Associated Information Retrieval" Jul. 1991 IJCNN–91–Seattle IEEE Press pp. 19–29 vol. 1.

Churbuck, "Haystack Searching", Forbes, v. 149, n. 4 Feb. 17, 1992, pp. 130 (2).

Donna Harman and Gerald Candela, "Retrieving Records from a Gigabyte of Text on a Minicomputer Using Statistical Ranking", Dec. 1990, pp. 581–589.

Kimoto et al., "Automatic Indexing System for Japanese Text" 1989, Review of the Electrical Communications Laboratories, V. 37, No. 1, pp. 51–56.

Al-Hawamdeh, S. et al., "Compound Document Processing System", Proc. of the Fifteenth Annual International Computer Software and Applications Conf., pp. 640–644 Sep. 1991.

Salton, G. et al., "The SMART Automatic Document Retrieval System—An Example", Communications of the AMC, vol. 8 No. 6, pp. 391–398 Jun. 1965.

[57] **ABSTRACT**

An apparatus for searching and retrieving files in a database without a user being required to provide keywords or query terms. A user first selects and opens a reference file. A natural language recognition algorithm is used to determine the subject words of the selected file. Next, a statistical comparison between the subject words and the contents of files in a database is performed. Based on the statistical comparison, files are assigned weighted relevancies. Relevant files are prioritized and displayed to the user in groups. The groups are formed based on the retrieved files relevance to specific subject works of the selected file. The groups of retrieved files are displayed in associating with the subject word they are relevant to.
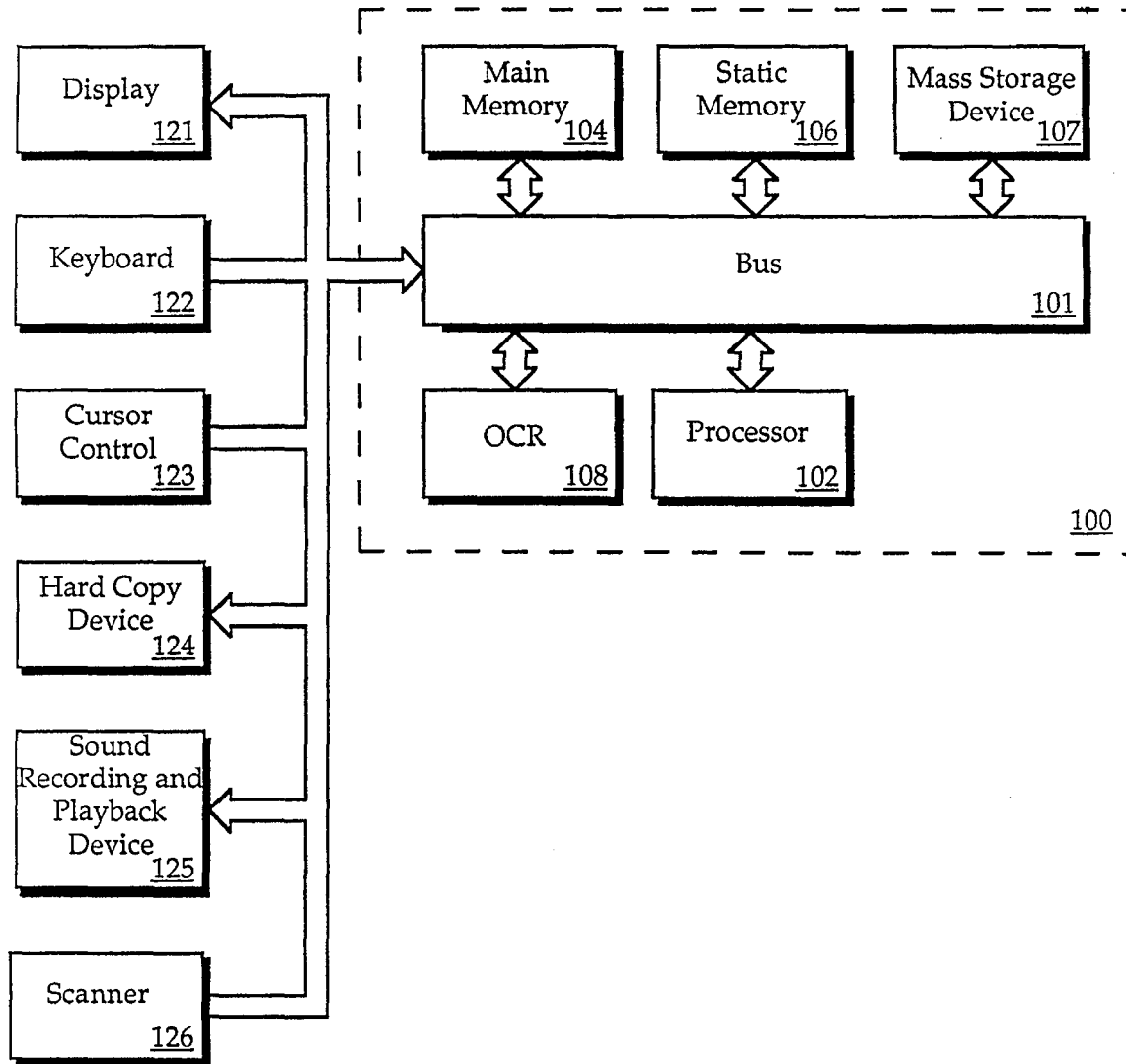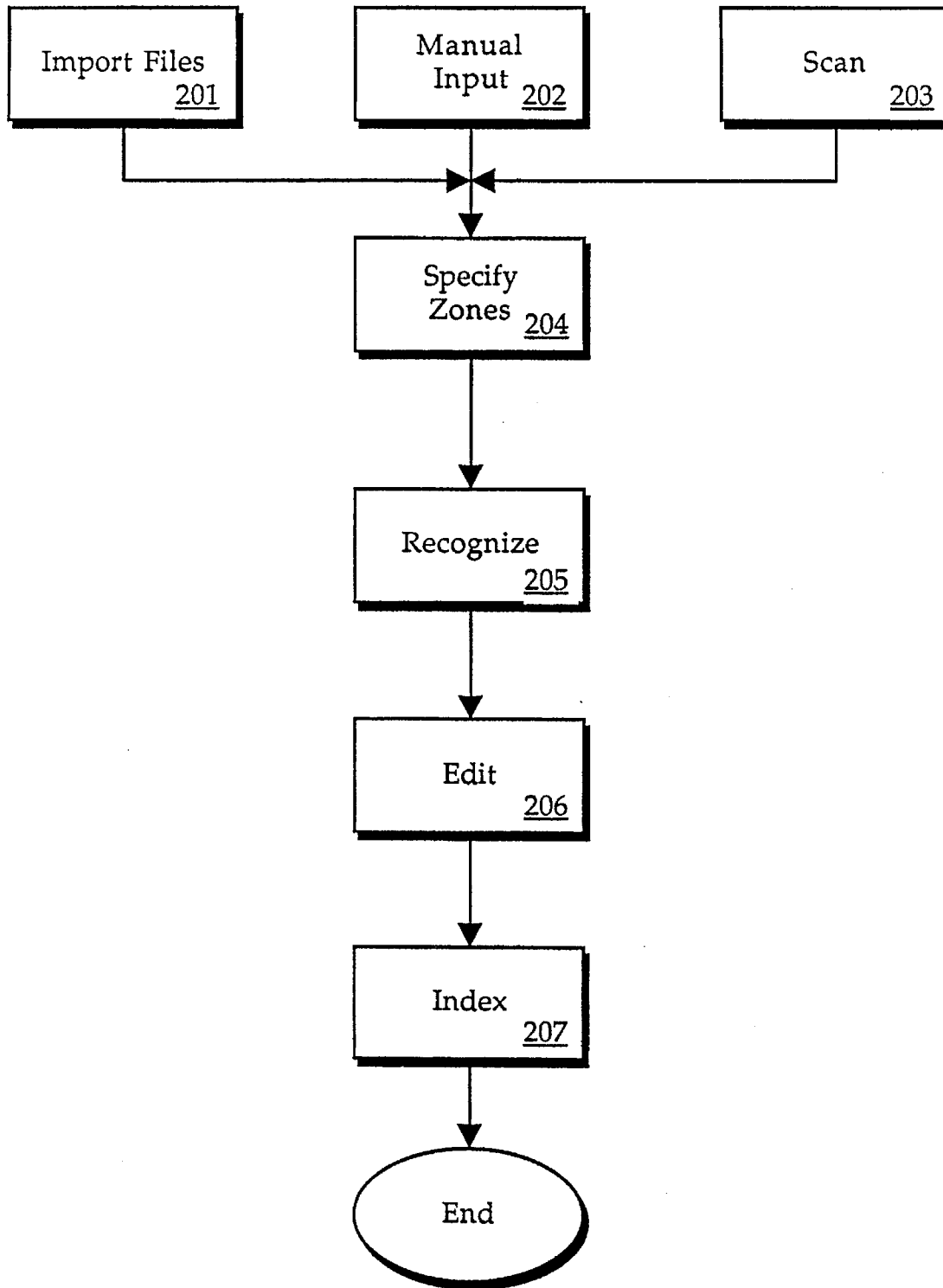
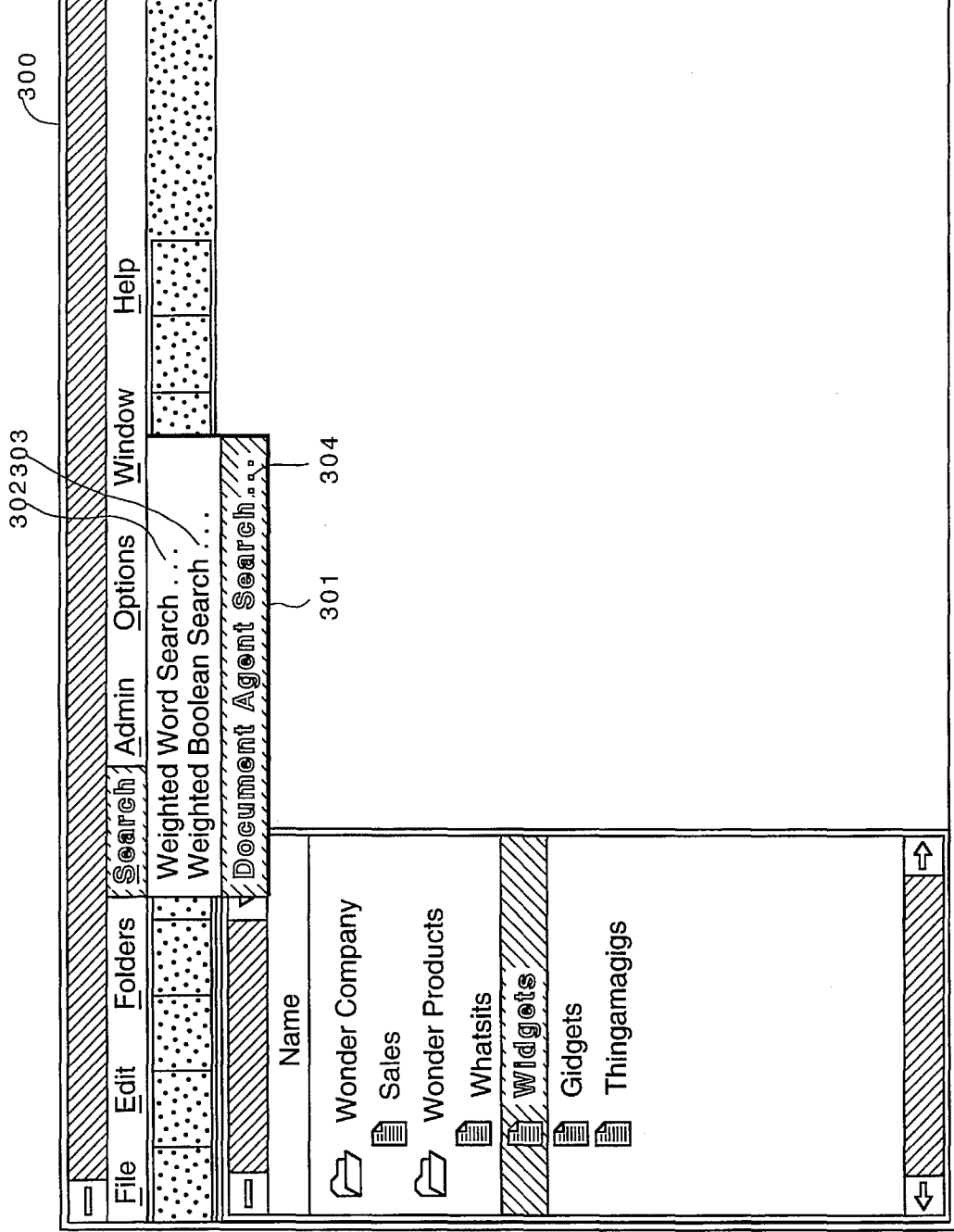**30 Claims, 8 Drawing Sheets**

Figure 1

Figure 2

FIG_3

FIG_4

DOCKET ALARM
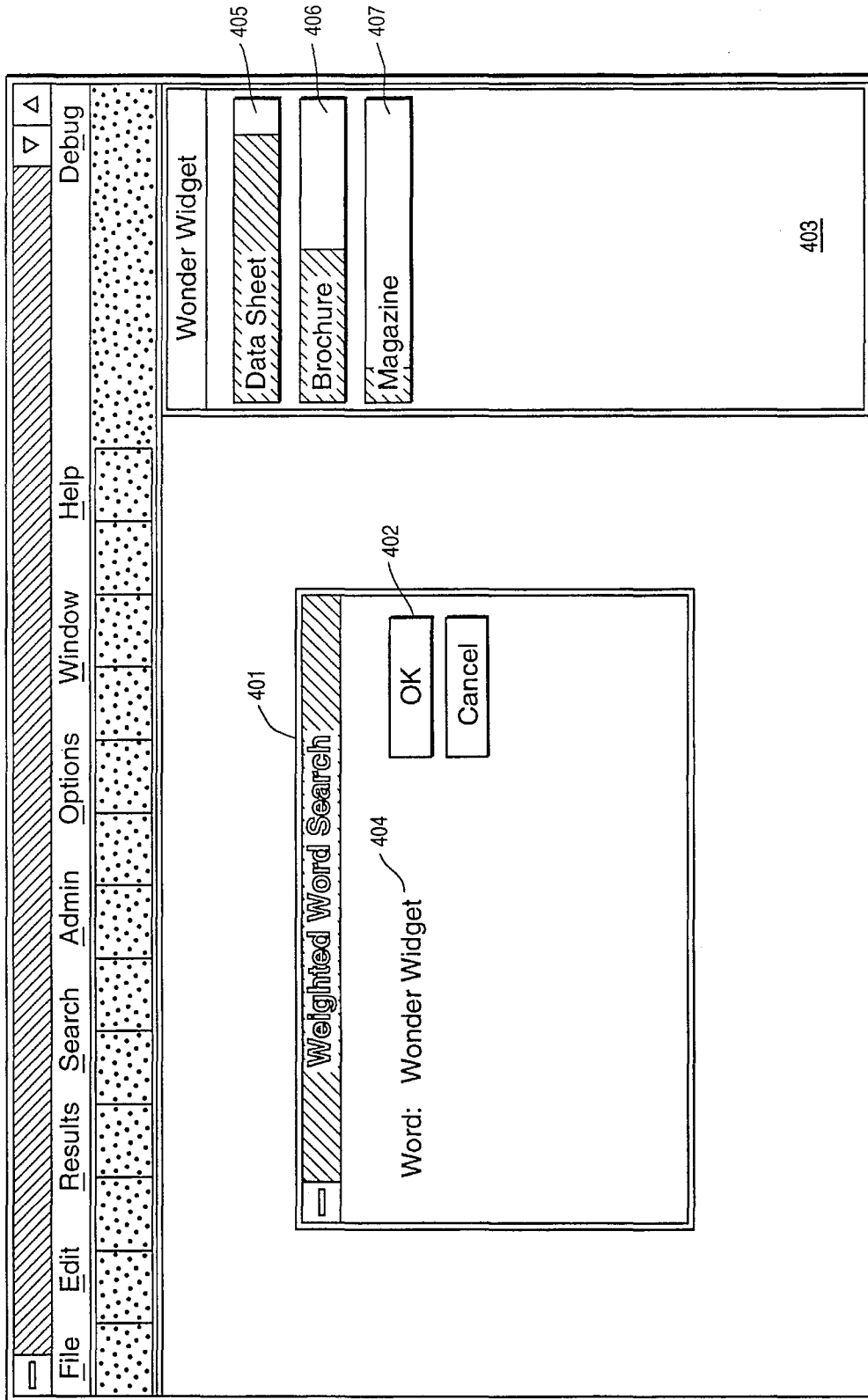
Explore Litigation Insights

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.

fastcase®
Smarter legal research.