

US005467471A

## United States Patent [19]

Bader

[11]

**Patent Number:** 

5,467,471

**Date of Patent:** [45]

Nov. 14, 1995

[54] MAINTAINING DATABASES BY MEANS OF HIERARCHICAL GENEALOGICAL TABLE

Inventor: David A. Bader, 161 Cherry Hill Rd.,

Nazareth, Pa. 18064

[21] Appl. No.: 29,268

[22] Filed: Mar. 10, 1993

[51] Int. Cl.6 ...... G06F 17/30 **U.S. Cl.** ...... **395/600**; 364/419.07; 364/974;

> 364/974.3; 364/974.4; 364/283.2; 364/283.4; 364/DIG. 1; 364/DIG. 2

395/500, 425; 364/419.07

#### [56] References Cited

### U.S. PATENT DOCUMENTS

5,062,074	10/1991	Kleinberger	345/600
5,086,504	2/1992	Nemeth-Johannes et al	395/700
5,295,256	3/1994	Bapat	395/500
5,295,261	3/1994	Simonetti	395/600

### OTHER PUBLICATIONS

Korth & Silbertschatz, Database System Concepts, McGraw-Hill, (New York, 1986), pp. 44-105.

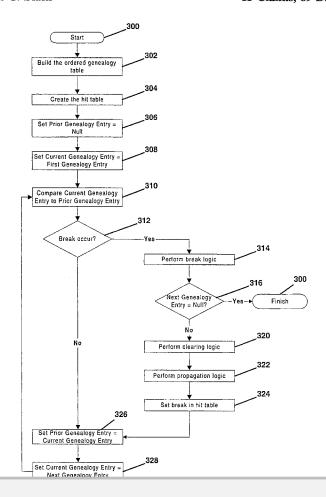
Primary Examiner—Thomas G. Black

Assistant Examiner-Paul R. Lintz Attorney, Agent, or Firm-Meltzer, Lippe, Goldstein

#### [57] ABSTRACT

The present invention describes a system and method for maintaining databases. An ordered genealogy table is provided for implying hierarchical relations on an as-needed basis. The invention further provides relational search capabilities to a hierarchical database. The invention also allows a database that is maintained on a computer system in a hierarchical structure to be converted into a database that is maintained in a relational structure, and vice versa. In addition, the invention may be used with currently existing hierarchical and relational databases. The invention provides a plurality of records; a unique identifier for each of the records; a database for maintaining the records; and a table which contains one or more table entries, wherein each table entry contains a genealogy including the unique identifier of a particular record and the unique identifiers of any records that can be considered ancestors of that particular record in a hierarchy, and wherein the table entries are sorted in collating sequence according to their genealogies.

## 15 Claims, 69 Drawing Sheets





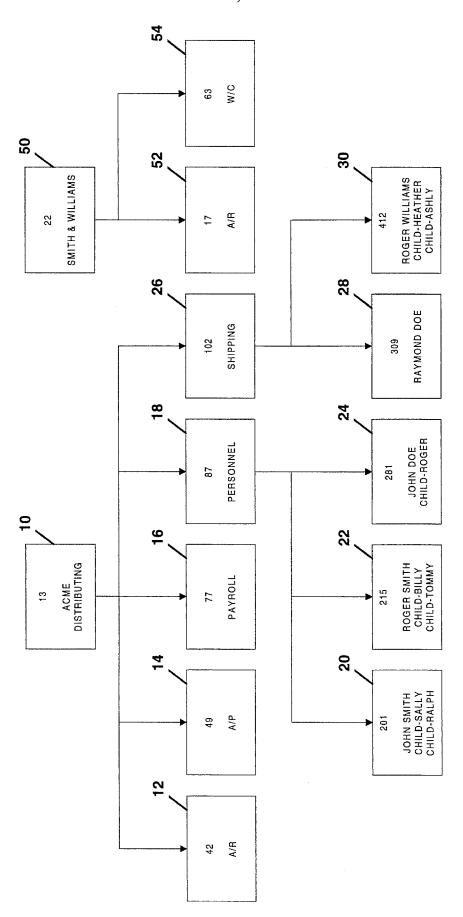
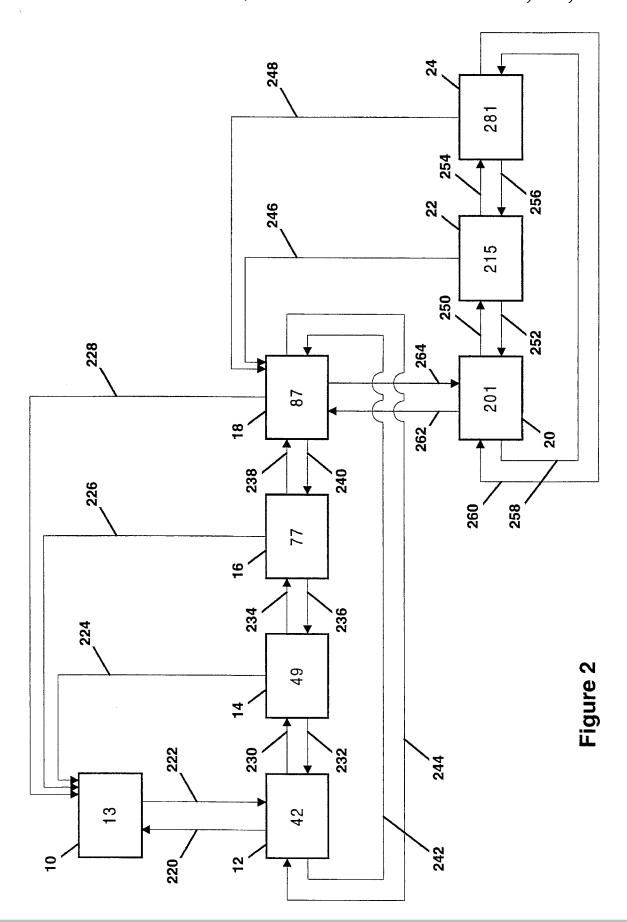


Figure 1a





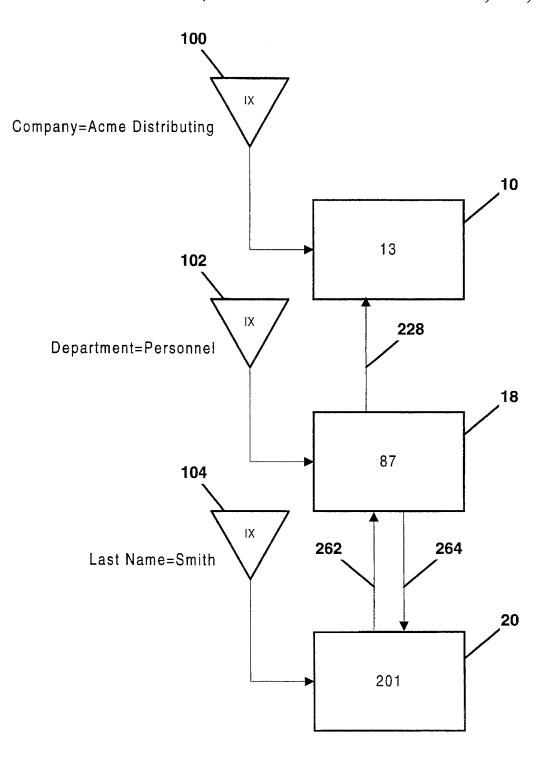


Figure 3



# DOCKET A L A R M

# 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.

