United States Patent [19]

Egger

[54] **METHOD AND APPARATUS FOR INDEXING, SEARCHING AND DISPLAYING DATA**

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[21] Appl. No.: **76,658**

[22] Filed: **Jun. 14, 1993**

[51] Int. Cl.⁶ **G06F 17/30**

[51] Int. Cl.^{6} **G06F 17/30**

[52] U.S. Cl. **395/600**; 364/419.19; 364/DIG. 1; 364/282.1; 364/283.3

[58] **Field of Search** 395/600; 364/419.19, 364/419.13

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[57] **ABSTRACT**

A computer research tool for indexing, searching and displaying data is disclosed. Specifically, a computer research tool for performing computerized research of data including textual objects in a database and for providing a user interface that significantly enhances data presentation is described. Textual objects and other data in a database are indexed by creating a numerical representation of the data. The indexing technique called proximity indexing generates a quick-reference of the relations, patterns and similarity found among the data in the database. Proximity indexing indexes the data by using statistical techniques and empirically developed algorithms. Using this proximity index, an efficient search for pools of data having a particular relation, pattern or characteristic can be effectuated. The Computer Search program, called the Computer Search Program for Data represented in Matrices (CSPDM), provides efficient computer search methods. The CSPDM rank orders data in accordance with the data's relationship to time, a paradigm datum, or any similar reference. The user interface program, called the Graphical User Interface (GUI), provides a user friendly method of interacting with the CSPDM program and prepares and presents a visual graphical display. The graphical display provides the user with a two dimensional spatial orientation of the data.
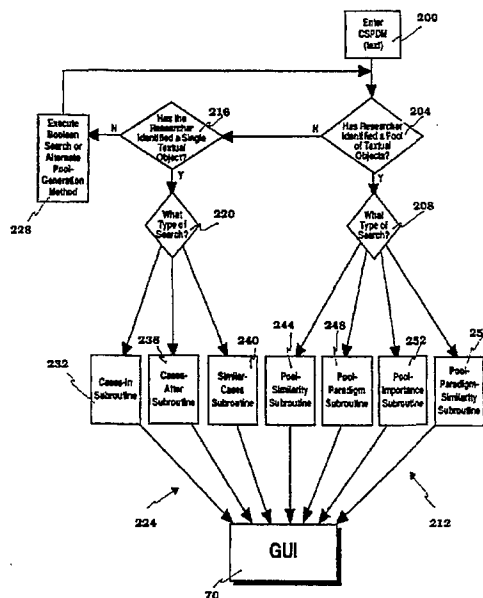
52 Claims, 24 Drawing Sheets
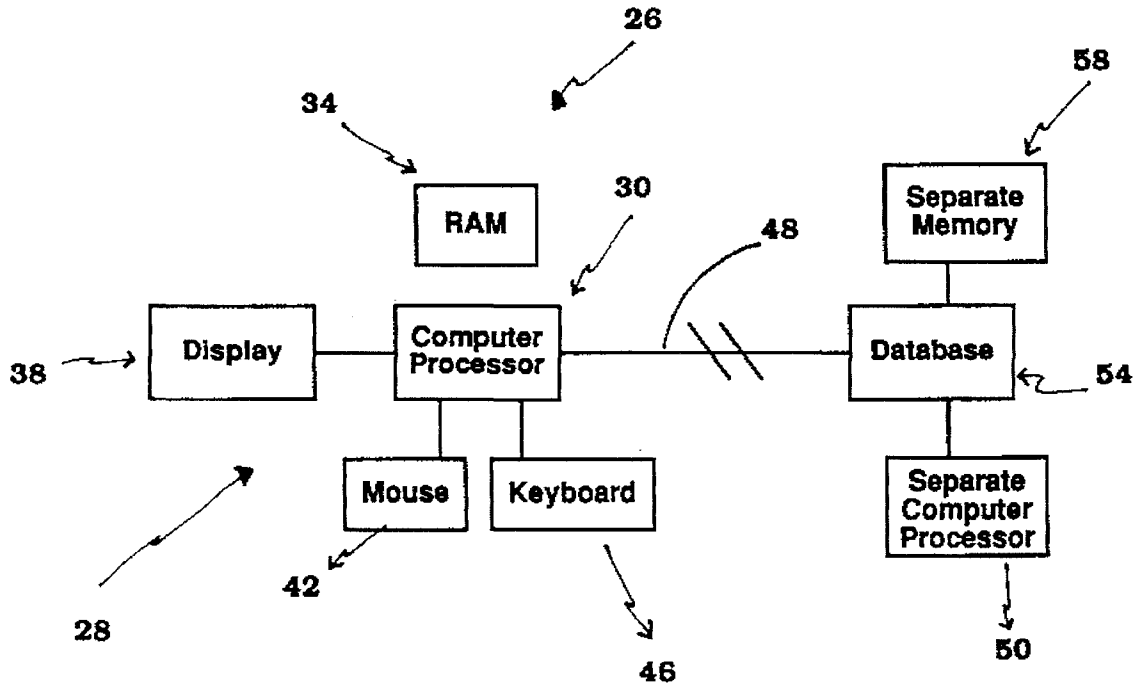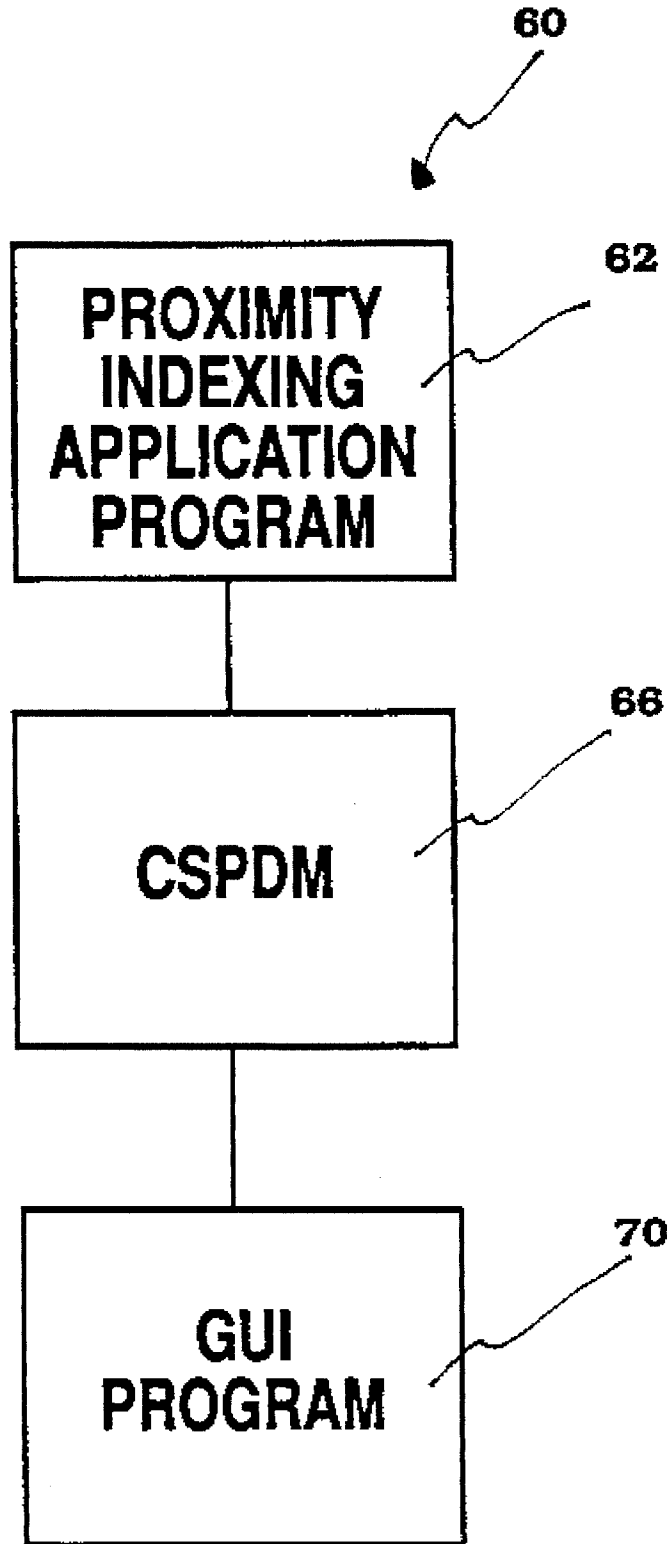

EXHIBIT 2006

Facebook, Inc. et al.

v.

FIG. 1

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PROXIMITY INDEXING APPLICATION PROGRAM

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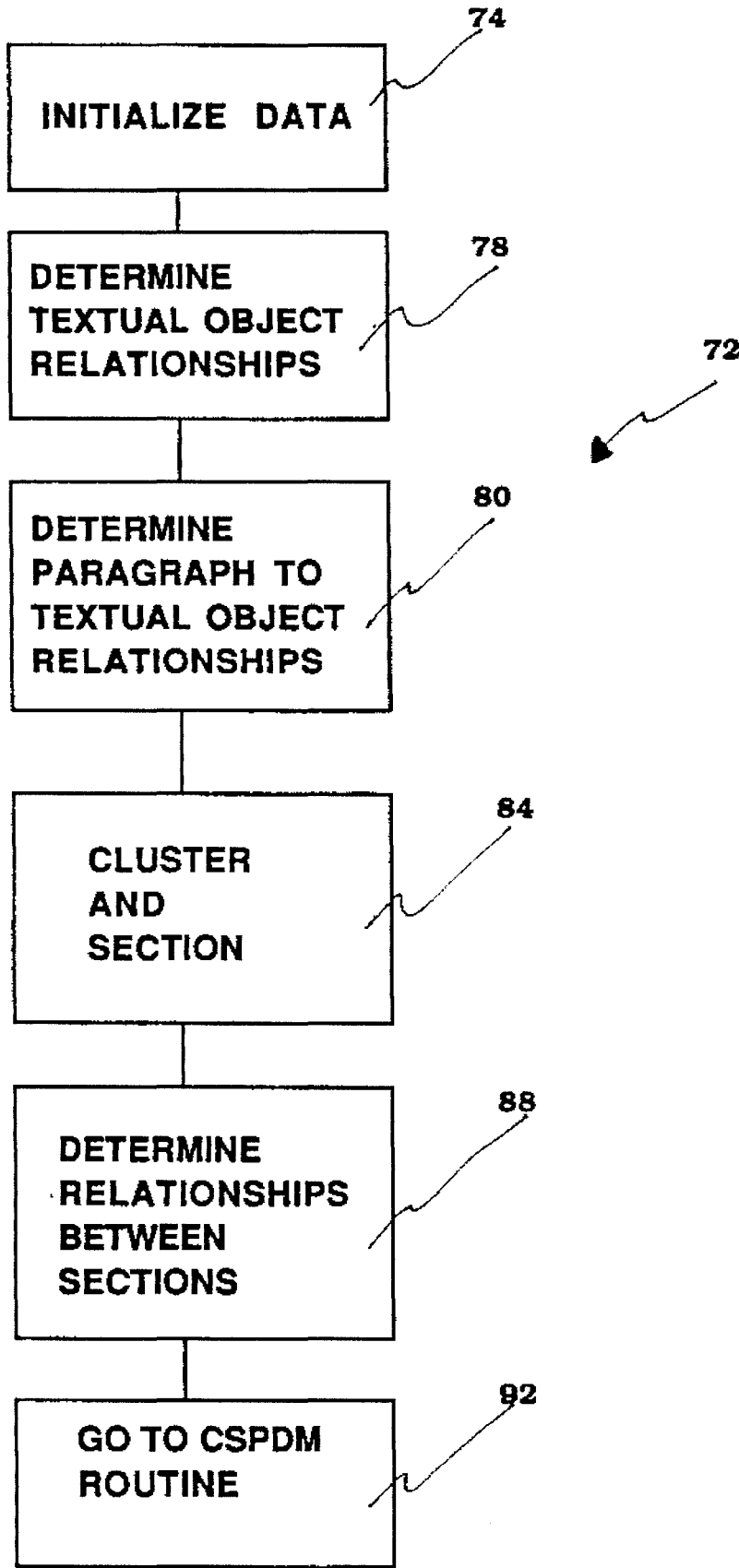## CSPDM

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GUI PROGRAM

FIG. 2

FIG. 3A

FIG. 3B

DOCKET ALARM
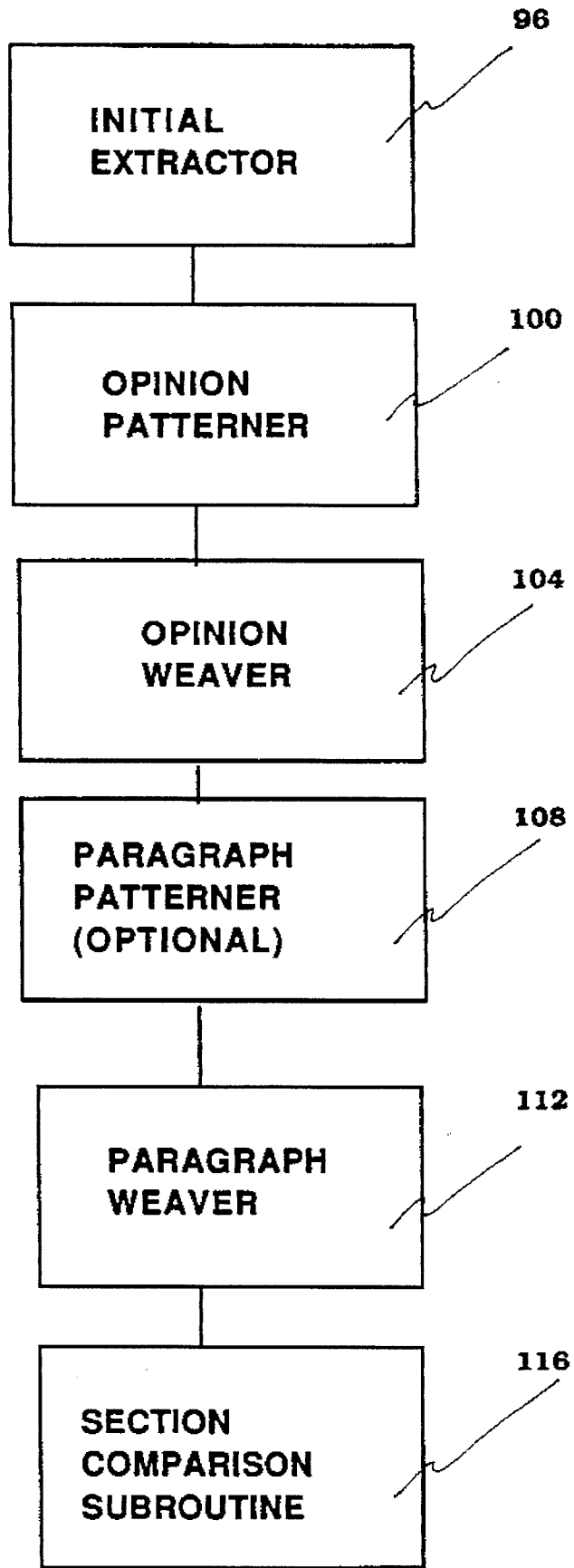
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