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# United States Patent [19]

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Holt et al.

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[54] **ASSOCIATIVE TEXT SEARCH AND RETRIEVAL SYSTEM HAVING A TABLE INDICATING WORD POSITION IN PHRASES**

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[21] Appl. No.: **473,824**

[22] Filed: **Jun. 7, 1995**

### Related U.S. Application Data

[63] Continuation of Ser. No. 155,304, Nov. 22, 1993.

[51] Int. Cl.<sup>6</sup> ..... **G06F 17/30**; G06F 17/21

[52] U.S. Cl. .... **395/605**; 395/792; 395/793; 395/759; 395/760; 395/606; 395/603

[58] Field of Search ..... 395/605, 792, 395/793, 603, 606, 795, 760; 364/419.19

[57] **ABSTRACT**

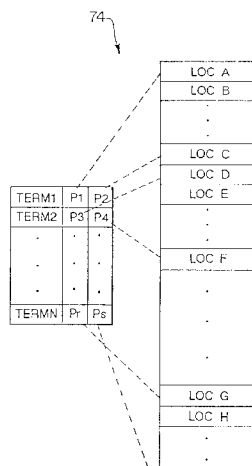
An associative text search and retrieval system uses one or more front end processors to interacting with a network having one or more user terminals connected thereto to allow a user to provide information to the system and receive information from the system. The system also includes storage for a plurality of text documents, and at least one processor, coupled to the front end processors and the document storage. The processor(s) search the text documents according to a search request provided by the user and provide to the front end processor a predetermined number of retrieved documents containing at least one term of the search request. The retrieved documents have higher ranks than documents not provided to the front end processor. The ranks are calculated using a formula that varies according to the square of the frequency in each of the text documents of each of the search terms.

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**15 Claims, 12 Drawing Sheets**



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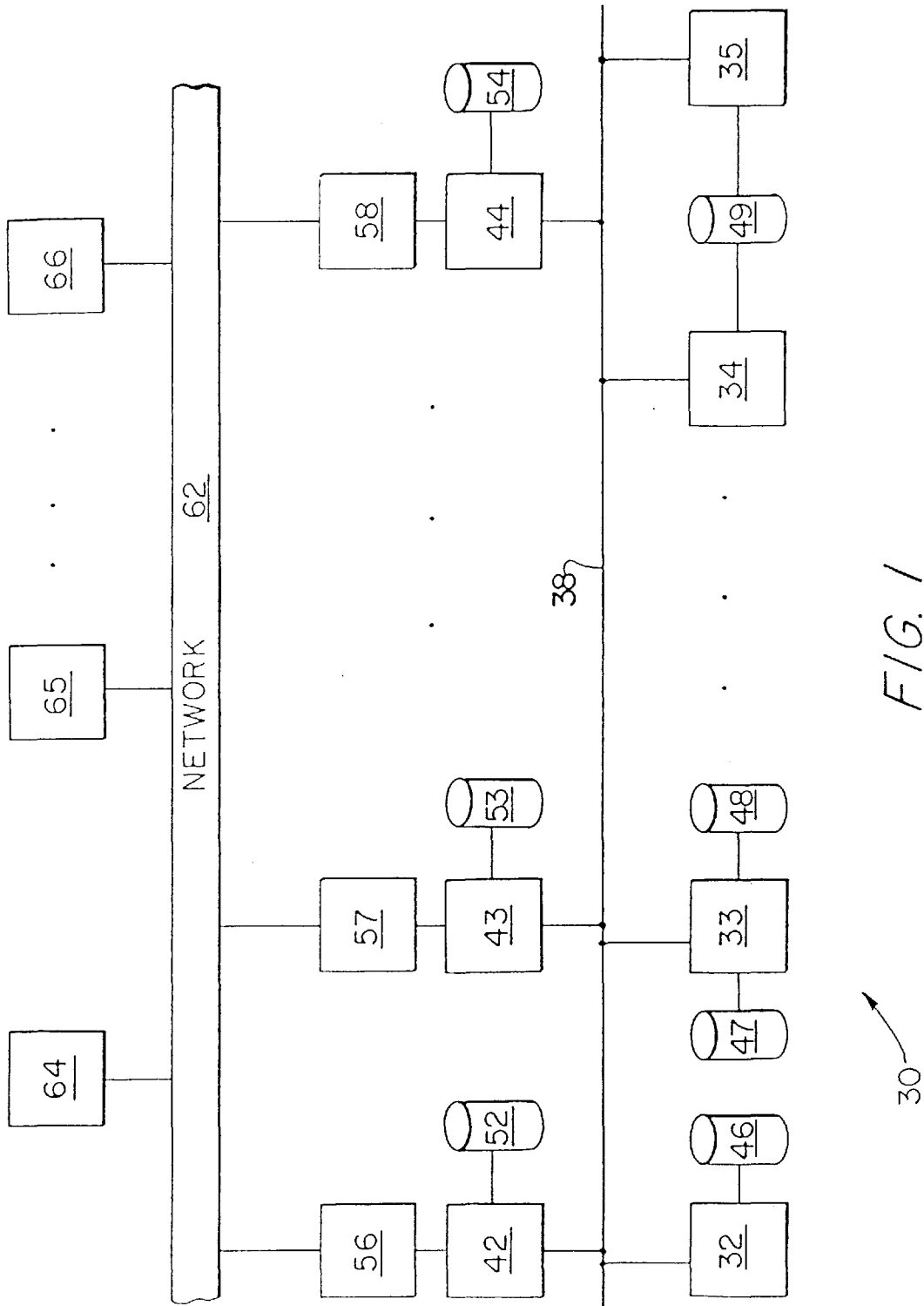


FIG. 1

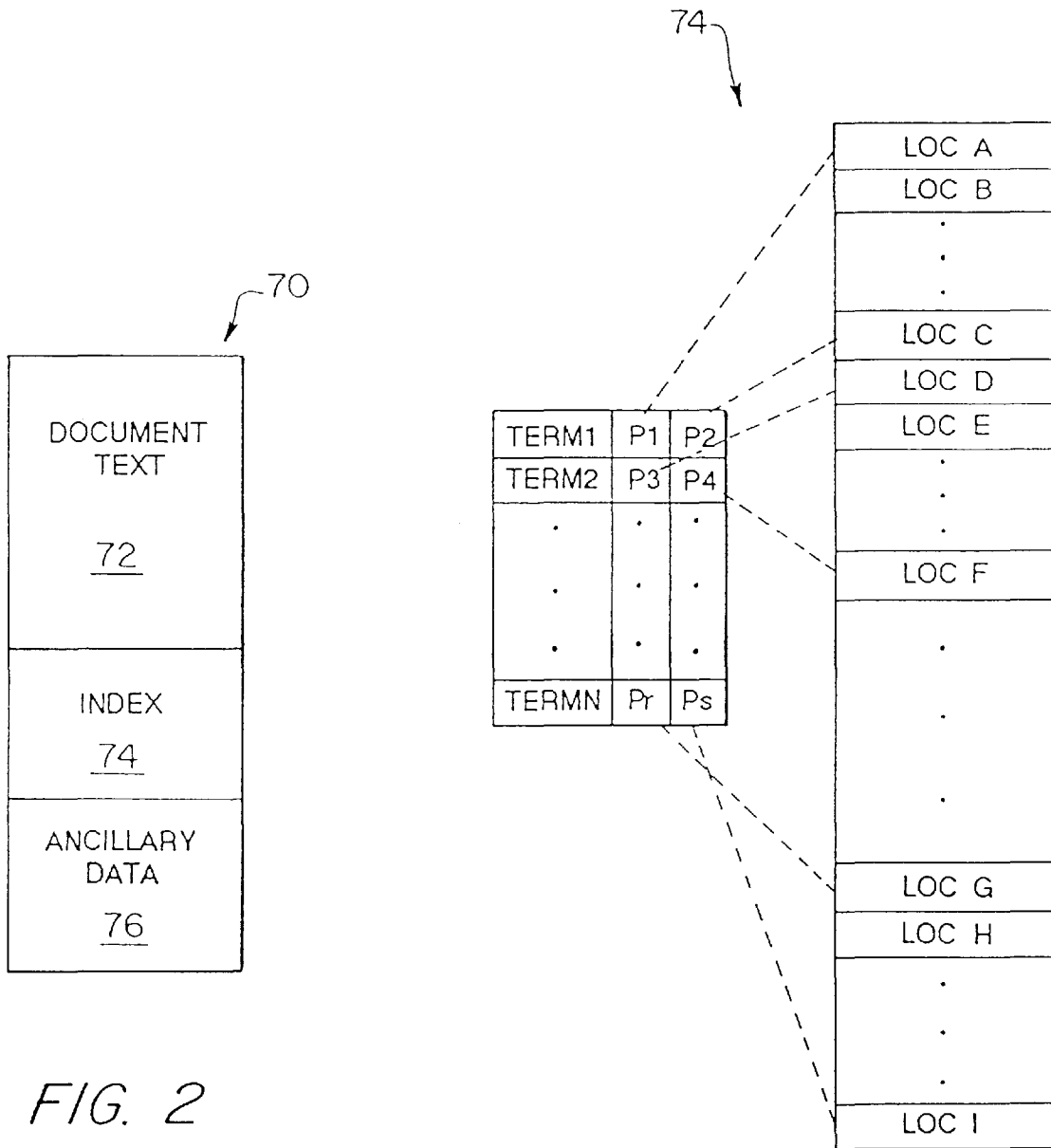


FIG. 2

FIG. 3

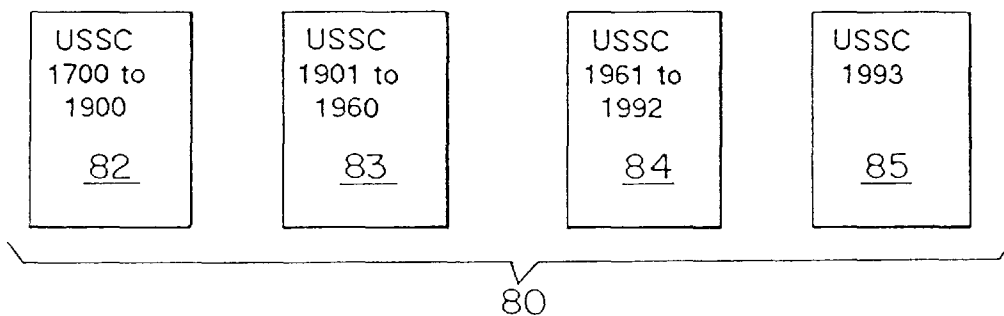


FIG. 4

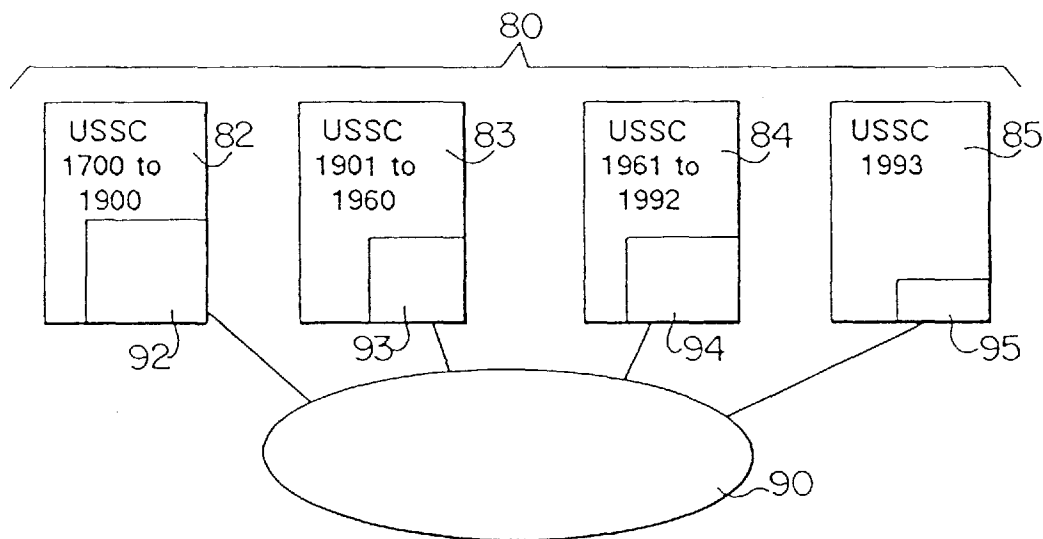


FIG. 5

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