

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEPHEN P. CAPPS
and JOHN R. MEIER

Appeal No. 94-3603
Application 08/001,121¹

ON BRIEF

Before HAIRSTON, KRASS, and BARRETT, Administrative Patent Judges.
BARRETT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the

¹ Application for patent filed January 5, 1993, entitled "Method For Locating And Displaying Information In A Pointer-Based Computer System," which is a continuation-in-part of Application 07/889,660, filed May 27, 1992.

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final rejection of claims 1-4 and 6-36, all of the claims pending in the application. Claim 5 has been cancelled. A related decision has been entered in parent application 07/899,660, Appeal No. 94-3636. We reverse.

The disclosed invention is directed to a method and system for searching and displaying results of a string search in a pointer-based computer system. As shown in figure 2, the computer has a screen 42 and a keypad 24 including a number of buttons corresponding to application programs, such as Names (address book), Dates (calendar), and Drawer (for other application programs). These buttons represent corresponding files, where each file has one or more records contained therein. A Find button is used to initiate a search for information. When the Find button is depressed, a find dialog box 72 opens and a string of characters to be searched can be entered on line 73. The search can be local (limited to one application) or global (all applications). The hits may be summarized according to application file and number of hits as shown in figure 4.

Claim 1 is reproduced below.²

² It is noted that claim 1 in the amendment received October 4, 1993 (Paper No. 8), has some missing language from the global search mode subparagraph of paragraph e. This should be corrected so that the correct claim can be printed.

1. A method of controlling a display screen for searching the contents of a memory device associated with a pointer-based computer system and displaying the search results on the display screen associated with the computer system, the computer system having a processor and a plurality of applications, at least one of which is running on the processor, wherein the contents of the memory device include a plurality of searchable application files that are each associated with at least one of the plurality of applications and each capable of containing a plurality of records, the method comprising the steps of:

- a) receiving a find command;
- b) displaying a find dialog box on the display screen;
- c) receiving a search string selection input by interaction of a pointer with the display screen, and displaying the search string in the find dialog box;
- d) determining whether a global search mode or a local search mode has been selected by interaction of the pointer with the display screen;
- e) executing the selected search, wherein,

when the local search mode is selected, a search is made through the contents of each record in an application file that is associated with an application program that is currently running on the processor, and

when the local search mode is selected, a search is made through each of the searchable application files and a list is made of the application files searched and the number of records within each application file that contain the search string; and

- f) displaying at least a portion of the search results on the display screen.

The examiner relies on the following references:

Crandall et al. (Crandall) 5,165,012 November 17, 1992
(filed October 17, 1989)

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Kita et al. (Kita) 5,172,245 December 15, 1992
(effective filing date October 16, 1987)

Kita discloses an image storage and retrieval system using hierarchical category and sub-category menus. The data storage arrangement is shown in figure 5. The bit data storage region 82 stores primary information 82a such as image information. The code data storage region 81 stores secondary information, which is retrieval information for retrieving the primary information, and is formed of areas 81a for storing broad sort names such as a primary menu, areas 81b for storing detailed sort names such as a secondary menu, and areas 81c for storing retrieval items (column 3, lines 35-45). Information is retrieved by an operator as shown in figure 6 (where the lower boxes 42-45 represent screen displays) in a manner that corresponds to information retrieval in a file cabinet (column 4, lines 29-42). Registration (initial storage) of information in the system is described, in part, as follows (column 6, lines 47-51, referring to figure 12): "the operator inputs secondary information formed by a title and a keyword corresponding to the primary information from a keyboard 1, and inputs a registration run command from the keyboard 1 at a step S35."

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Crandall discloses a software reminder procedure that allows a user to save a screen display of a currently executing process as part of a reminder message for later recall.

Pursuant to a remand entered August 1, 1995 (Paper No. 21), to consider the rejection under 35 U.S.C. § 101 in view of proposed guidelines which issued as Examination Guidelines for Computer-Related Inventions, 1184 Off. Gaz. Pat. & Trademark Office 87 (March 26, 1996), the section 101 rejection has been withdrawn (Supp. Examiner's Answer, Paper No. 22, page 9).

Claims 1-4 and 6-36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kita and Crandall. The examiner's rejection is stated in the Examiner's Answer, pages 9-13, and is repeated in the Supp. Examiner's Answer, pages 4-8. Appellants' position is set forth in the Brief and in the Reply Brief.

OPINION

Grouping of claims

After withdrawal of the rejection under 35 U.S.C. § 101, the claims stand grouped into four groups: (1) claims 1, 6-9, 15, 18-19, and 29-32; (2) claims 2-4 and 21-22, which recite that the pointer is a stylus of a pen-based computer system; (3) claims 10-14, 16-17, 20, and 23-28, which include displaying the application files in which records were found and displaying the number of occurrences of the search string in each

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application file; and (4) claims 33-36, which are directed to apparatus in means-plus-function language. The examiner's statement that appellants have failed to present arguments in support of the separate groups (Examiner's Answer, page 2) is in error for the reasons stated by appellants (Reply Brief, page 3). Nevertheless, since the examiner generally addresses the claim limitations, we decide the case rather than remanding it.

Obviousness

Appellant argues that Kita fails to teach nearly every element of the claims but limits the discussion to a few significant elements (Brief, page 10): "Specifically, the patent to Kita et al. fails to reasonably suggest the following elements of all the claims: (1) 'executing a selected search' (global or local) as detailed in the claims, and (2) 'receiving a search string selection input by interaction of a pointer with the display screen.'" With respect to limitation (1), we note that independent claim 20 recites only a string search, not a global or local string search. With respect to limitation (2), we note that independent claim 33 does not recite "receiving a search string selection input by interaction of a pointer with the display screen" but does recite a string search.

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As we discussed in our decision in parent Application 07/889,660, Appeal No. 94-3636, Kita does not search file contents for a search string. Many of our comments regarding Kita are applicable to limitations in the claims before us. A "string" is a finite sequence of alphanumeric characters and a "string search" is a search for that sequence of characters.³ A string search is inconsistent with the image information stored by Kita. Kita stores and retrieves images using hierarchical category and sub-category menus. While the menu items in the broad sort name menu 81a are strings of characters, Kita does not search contents for that string. The menu items lead to sub-category menu items as in menu 81b and then to a list of files as in data area 81c. The files are categorized by titles and keywords input by the operator (column 6, lines 47-51). The files are retrieved by addresses attached to these titles and keywords in the secondary information storage region (e.g., column 7, lines 23-27), not by a string search on the contents of

³ For the examiner's benefit we cite the following common examples of a string search: (1) the "Find" command from the Microsoft MS-DOS User's Guide (Ver. 4.0)(1988); (2) the "Search" and "Word Search" commands from the WordPerfect manual (Ver. 4.1) (1985); and (3) the "Find" command in the Macintosh Operating System (as used with HyperCard) from The Complete HyperCard Handbook by Danny Goodman (2d ed. 1988), pages 47-56. Copies of the references are attached to this decision. We make no comments regarding the patentability of the claims over the references.

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the image information which is, of course, impossible. The operator searches each menu to input the sort name and the CPU reads out detailed names in the next lower menu until at last the picture information serving as primary information is read out (column 3, line 49 to column 4, line 23). The CPU does not perform a string search, but merely reads out the selected next menu or image file. For example, Kita does not search the object picture information for occurrences of the strings "Electronic File" or "Research Data." These strings are titles or keywords associated with an object picture by the operator during registration (initial storage).

The examiner finds the search string selection to be shown in figure 4, steps S2-S4. However, these steps refer to selection of sort names from a menu, not a search string. Kita does not search for a string, but only retrieves information based on retrieval information input by the operator as information is being stored. The examiner finds the steps of executing global and local searches to be taught by Kita in "figure 8: 81a, 81b and 82a and . . . column 4, lines 52-60; where 81a corresponds to applicant's [sic] local search, i.e. broad sort names, and where 81b and 82a correspond to applicant's [sic] global search, i.e detailed sort names" (Examiner's Answer, page 10). We disagree for the reasons stated by appellants at

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page 11 of the Brief. Reference numbers 81a and 81b represent different levels of the retrieval hierarchy which an operator must search by choosing keywords to get at the image information 82a. Kita does not suggest string search, much less a global and local search for a search string.

Crandall is cited as disclosing "a computer system which is operator interactive having multiple operating screens that uses a stylus pen inputting device (column 5, lines 18-28)" (Examiner's Answer, page 10). Column 5 describes that the button icons in figure 1 may be selected by a user with a mouse or with a touch screen display. Crandall is not cited as showing any search method or apparatus and we find that it does not disclose anything relevant to performing a string search on file contents.

The combination of Kita and Crandall does not teach or suggest performing the step of "a search is made through the contents of each record" for a string as recited in claim 1, "searching through the contents of each record" for a string as recited in claim 20, "conducting the desired search of the contents of each record" for a string as recited in claim 29, or apparatus having "means for searching for a string in each of the plurality of records" as recited in claim 33. Since neither Kita nor Crandall perform a string search on the content of a file, the combination is lacking a critical limitation of all the

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claims. Accordingly, the examiner has failed to establish a prima facie case of obviousness. The rejection of claims 1-4 and 6-36 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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