

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(2) is not binding precedent of the Board.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. 42

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte LISA C. ANDERSON,  
KATHLEEN L. HOLMAN  
and  
MAURICE G.B.F. VAN SWAAIJ

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Appeal No. 96-2372  
Application 08/278,676<sup>1</sup>

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ON BRIEF

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<sup>1</sup> Application for patent filed July 20, 1994. According to appellants, the application is a continuation of Application 08/021,640, filed February 16, 1993, abandoned; which is a continuation of Application 07/694,535, filed May 1, 1991, abandoned.

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Before STONER, Chief Administrative Patent Judge, and ABRAMS and FRANKFORT, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 3 and 5 through 26. Claim 4 has been canceled.

Appellants' invention relates to an apparatus for the interactive handling of objects, such as electronic documents and tools in a computer workstation environment.<sup>2</sup> More particularly, as noted in the paragraph bridging pages 2 and 3 of the specification, an objective of the invention is to provide an apparatus

whereby the menu of options is displayed and  
whereby movements on or by the pointer device

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<sup>2</sup> As indicated on page 1 of the specification, within the frame of the present application, tools (such as those necessary to copy, transmit, store, etc. documents and sets of data), documents, and the necessary supplemental executable programs and data are indicated with the general term "objects." Other kinds of objects are, for example, programs emulating a calculator, agenda, calendar and telephone directory or communication equipment, as a telephone or fax.

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are adapted to hand movements that a human operator can make and remember easily. An apparatus in accordance with the invention is

therefore characterized in that the apparatus comprises means for displaying the options on the viewscreen in a curved band and in that the corresponding areas are positioned in a corresponding band which is curved similar to the curved band on the viewscreen. While working with a pointer device such as a mouse or a stylus it is easier to target areas along a curved line around a central area located somewhere beneath the hand of the operator on a desk than to follow substantially straight lines. Also travel of the pointer device from the centerpoint is reduced and it is easier to remember the position of each option by utilizing motor and spatial memory.

Claim 1, one of two independent claims on appeal, is representative of the subject matter on appeal and reads as follows:

1. Apparatus for interactive handling of objects, which apparatus comprises

a viewscreen for displaying a menu of options and

a pointer device for pointing at one of a plurality of corresponding areas each associated with one of the options displayed on the viewscreen, and thereby selecting one of said options,



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Reference is made to the examiner's answer (Paper No. 35, mailed January 23, 1996) for the examiner's reasoning in support of the above-noted rejections. Appellants' arguments thereagainst are found in the brief (Paper No. 34, filed October 23, 1995).

#### OPINION

In reaching our conclusion on the obviousness issues raised in this appeal, we have carefully considered appellants' specification and claims, the applied prior art, and the respective viewpoints advanced by appellants and the examiner. As a consequence of our review, we have made the determination that the examiner's rejections of the appealed claims under 35 U.S.C. § 103 cannot be sustained. However, we have also decided to remand the application to the examiner for further consideration. Our reasons follow.

The examiner's statements notwithstanding, when the disclosure of Callahan is fully considered, we fail to find

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therein any teaching or suggestion of a "means for displaying the options on the viewscreen in a non-closed, curved band" as set forth in independent claim 1 on appeal and as set forth, in somewhat different language, in independent claim 22 on appeal. In each instance in Callahan (e.g., Figures 2, 4, 5 and 7), the menu items (options) seen in the menu displayed on the viewscreen are distributed so as to occupy the entire 360° of the pie menu and to establish wedge-shaped or sector-shaped activation regions like that shown, for example, in Figure 5. There is simply no disclosure or teaching in Callahan of the particular type of non-closed, curved band menu display formats disclosed and claimed by appellants in the present application. As for the arbitrarily shaped windows seen in Figure 16 of the Callahan article, we note the total lack of any description of such menu displays and again note our failure to find anything therein which teaches or suggests "means for displaying" non-closed, curved band menu formats like those required in appellants' claims on appeal.

Further, like appellants, we observe that Callahan fails to teach or suggest "corresponding areas," as set forth

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in claim 1 on appeal, associated with a pointer device and positioned in a corresponding band which is curved similarly to the curved band on the viewscreen "whereby the corresponding area [sic, areas] can be traced easily without lifting the wrist and the curved band [on the viewscreen] suggests to the user such a motion."

In our view, it is only by using appellants' own teachings and relying upon impermissible hindsight that one versed in the art would have been able to achieve appellants' claimed apparatus for interactive handling of objects on the basis of the teachings and disclosure of Callahan. The Day patent additionally relied upon by the examiner in the § 103 rejection of claims 5 through 8 and 12 through 14 adds nothing which accounts for or supplies the deficiencies in Callahan as noted above.

Since we perceive no factual basis in the prior art relied upon which supports the examiner's rejections and have thus determined that the examiner's stated conclusion of

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obviousness is based on hindsight reconstruction of the claimed invention from isolated disparate teachings in the prior art, we are compelled to reverse the examiner's rejections of claims 1 through 3 and 5 through 26 under 35 U.S.C. § 103.

However, in evaluating the application before us on appeal it has become apparent that there are several issues which require us to remand the application to the examiner for further consideration.

The first of those issues relates to a question of the adequacy of the disclosure of this application under 35 U.S.C. § 112, first paragraph, and of the definiteness of the claims on appeal under 35 U.S.C. § 112, second paragraph. In particular, we are concerned that there appears to be no description in the specification concerning exactly what constitutes the various "means" set forth in claims 1, 8, 11 and 22 on appeal. As an example, while one skilled in this art may well perceive the "means for displaying" of claims 1 and 22, the "means for requesting" of claim 8, and the "further display means" of

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claim 11, lines 2-6 as being some form of software, we are at a complete loss to understand what might constitute the "means for providing further corresponding areas . . ." set forth in lines 7-9 of claim 11. In that same vein, we are at a loss to clearly understand the recitation in some of the appealed claims (e.g., claims 3, 12, 13 and 14) that the apparatus "is arranged for . . ." performing some function. As an example, exactly how is the apparatus "arranged for establishing corresponding areas associated with options in the menu before displaying the options on the viewscreen," as set forth in claim 13 on appeal? In considering these kinds of issues the examiner's attention is directed to Sections 2106-2106.02 and 2185 of the Manual of Patent Examining Procedure (Rev. 2, July 1996).

Further points to be considered by the examiner regarding issues under 35 U.S.C. § 112, second paragraph, relate to exactly what constitutes "a substantially circular band" as required in claim 3 on appeal and what constitutes a curved band shape that is "substantially smaller than 360E" as set forth in claims 19 and 22 on appeal.

As a final point, we note that we are aware that Windows™ software available from Microsoft, installed on a computer having a viewscreen for displaying a menu of items and a pointer device in the form of a mouse for pointing at one of a plurality of corresponding areas each associated with one of the options displayed on the viewscreen, has for many years had the capability, on its Program Manager display screen, of allowing the icons therein to be arranged in any manner the user chooses, e.g., in a non-closed, curved band wherein the icons are arranged in an arc about an imaginary center point and the band is defined by inner and outer imaginary concave curved lines encompassing and containing the icon boxes and two spaced later imaginary lines extending generally along a radius toward the imaginary center point. Moreover, when the user saves this particular orientation of the icons on the Program Manager display screen by activating the "Save Settings on Exit" command, the next time the user logs onto Windows™, the software will display the icon options in the non-closed, curved format previously saved by the user. Thus, we commend to the examiner a consideration of whether a conventional PC having a mouse input

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device and having installed thereon the well-known Windows™ software at the time of appellants' invention would have been responsive to the apparatus as defined in appellants' claims on appeal.

REVERSED AND REMANDED

BRUCE H. STONER, JR.	)	
Chief Administrative Patent Judge	)	
	)	
	)	
NEAL E. ABRAMS	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	

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