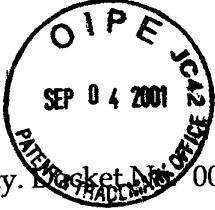


EXHIBIT R



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Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Steven W. Christensen)
)
Serial No. 08/821,004)
)
Filed: March 20, 1997)
)
For: METHOD AND APPARATUS)
FOR DISPLAYING AND)
ACCESSING CONTROL AND)
STATUS INFORMATION IN A)
COMPUTER SYSTEM)

Examiner: Dela Torre, C.

Art Unit: 2173

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Technology Center 2100

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

APPEAL BRIEF
IN SUPPORT OF APPELLANTS' APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Sir:

Appellants (hereafter "Appellants") hereby submit this Brief in triplicate in support of its appeal from a final decision by the Examiner, mailed January 28, 2000, in the above-captioned case. Appellants respectfully request consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the above-captioned patent application.

An oral hearing is desired.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

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Linda K. Brost August 31, 2001
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I. REAL PARTY IN INTEREST

The invention is assigned to Apple Computer, Inc. of 1 Infinite Loop, Cupertino, California, 95014.

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

III. STATUS OF THE CLAIMS

Claims 1-31 are currently pending in the above-referenced application. No claims have been canceled. Claims 1-31 were rejected in the Final Office Action mailed January 28, 2000, and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on January 28, 2000, rejecting claims 1-31, Appellants filed A Request for Reconsideration under 37 C.F.R. 1.116 with a Notice of Appeal on July 28, 2000, with a two-month extension of time.

An Advisory Action was received on July 12, 2000, stating that the Request for Reconsideration did not place the claims in condition for allowance.

A copy of all claims on appeal is attached hereto as Appendix A.

V. SUMMARY OF THE INVENTION

The present invention is defined by claims 1-31 and their equivalents. The present section of this Appeal Brief is set forth to comply with the requirements of 37 C.F.R. § 1.192(c)(5) and is not intended to limit claims 1-31 in any way. *See* M.P.E.P. § 1206.

The present invention is a method and apparatus to provide a window generator that generates and displays a window (e.g., a control strip) on a data display screen. In one embodiment, the window comprises a control and/or status window for display on the desktop of the computer system. The window displays graphics depicting at least one display area of indicia. The individual data areas may be controlled through controls and indicators in the window itself using cursor control keys. (Summary, pg. 4, paragraph 1.)

The control strip of the present invention is a window of graphics depicting one or more display areas for control and/or status indicia. In one embodiment, each of the display areas is individually and variably sized. The size of the control strip itself may also be variably sized. In one embodiment, the size may be adjusted such that none, all, or only a portion of the display areas within its boundaries is visible. The size of the control strip may also be varied such that only a portion of one display area is visible in the control strip. (Specification, pg. 14, lines 1-8.)

Each of the variably sized data areas may be sensitive to user input for control. That is, a user may interact with the individually display data areas. Different parts of the control strip either display information or act as buttons, or both. Note that buttons may display information on their surface. When the user clicks a button, it is highlighted. In one embodiment, buttons may also display additional elements such as pop-up menus (shown in Figure 2C) or help messages (e.g., balloons shown in Figure 2D). Thus, in one embodiment, control of the individual data areas is

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The present invention is a method and apparatus to provide a window generator that generates and displays a window (e.g., a control strip) on a data display screen. In one embodiment, the window comprises a control and/or status window for display on the desktop of the computer system. The window displays graphics depicting at least one display area of indicia. The individual data areas may be controlled through controls and indicators in the window itself using cursor control keys. (Summary, pg. 4, paragraph 1.)

The control strip of the present invention is a window of graphics depicting one or more display areas for control and/or status indicia. In one embodiment, each of the display areas is individually and variably sized. The size of the control strip itself may also be variably sized. In one embodiment, the size may be adjusted such that none, all, or only a portion of the display areas within its boundaries is visible. The size of the control strip may also be varied such that only a portion of one display area is visible in the control strip. (Specification, pg. 14, lines 1-8.)

Each of the variably sized data areas may be sensitive to user input for control. That is, a user may interact with the individually display data areas. Different parts of the control strip either display information or act as buttons, or both. Note that buttons may display information on their surface. When the user clicks a button, it is highlighted. In one embodiment, buttons may also display additional elements such as pop-up menus (shown in Figure 2C) or help messages (e.g., balloons shown in Figure 2D). Thus, in one embodiment, control of the individual data areas is

accomplished, in part, using small button controls and indicators in the form of various icons. (Specification, pg. 14, lines 12-21.)

In one embodiment, the control strip is implemented in a private window layer that appears in front of the windows of all the applications layers. That is, the control strip window appears on top of all application programming windows that may be generated as part of the execution of an application program. This prevents other windows from obscuring it. (Specification, page 15, lines 11-15.)

The control strip of the present invention provides a standard screen location for a collection of individual modules that provide status and control functions. In one embodiment, the control strip functions include a network switch that shows whether a network connection for the computer system, such as an AppleTalk™ network connection, is on or off and lets the user turn the network connection on or off without having to locate and execute other network connection software on the computer system. (Specification, page 18, lines 3-9.) The control strip may also include a battery monitor that displays the status of the battery or batteries. (Specification, page 18, lines 11-12.) Another control strip module displays the state of File Sharing (e.g., on, off, or users connected) that may be currently employed on the computer system. (Specification, page 18, lines 19-21.)

Other modules, for example, may provide time and/or date information, may list currently running programming applications, may indicate the amount of available memory, may control a CD drive, may provide access to audio controls and status information. Therefore, the control strip acts as a status and control function bar, or windowing area, that provides running modules to be displayed in an arrangement that is to be displayed, such an arrangement being modifiable such that the size of the window or bar may be changed. (Specification, page 19, lines 11-19.)

The control strip includes a plurality of individual modules. Each module includes its own initialization process. Thus, as the control strip is initiated, the modules are each called, and if a module is able, it is added to the control strip in the appropriate locations. After initialization, during an idle period, the module tasks are run.

Examples of module tasks may include updating help messages (e.g., due to a help feature being enabled on the computer system) and saving updated state information (e.g., display area on screen moved to new location, display area resized, module made invisible; module indicates state is changed and that it must be saved). (Specification, page 22, lines 13-17.)

VI. ISSUES PRESENTED

Whether Claims 1-25 are obvious under 35 U.S.C. §103(a) in view of Cohausz, in view of Takagi, et al., and further in view of Hansen, et al.

Whether Claims 26-31 are obvious under 35 U.S.C. §103(a) in view of Takagi further in view of Hansen.

VII. GROUPING OF CLAIMS

For the purposes of this appeal:

The claims do not stand or fall together.

Claims 1, 3-9, 11-12, 14-20, 22, 23, and 25-30, stand and fall together as Group I.

Claims 2, 13, and 31 stand and fall together as Group II.

Claim 10 stands and falls alone as Group III.

Claims 21 and 24 stand and fall together as Group IV.

Reasons for separate patentability of the above indicated Claim Groups are presented in the arguments section pursuant to 37 C.F.R. § 1.192(c)(7).

VIII. ARGUMENT

A. REJECTION OF CLAIMS 1-31 WAS IMPROPER UNDER 35 U.S.C. §103 IN VIEW OF COHAUSZ, TAKAGI, AND FURTHER IN VIEW OF HANSEN BECAUSE THESE REFERENCES CANNOT BE LOGICALLY COMBINED.

Cohausz discusses a status bar for a computer program that permits tracking of location. Takagi teaches a document filing apparatus that allows a user to print, scan, and file documents within the program. Hansen discusses a dashboard including a plurality of buttons, to permit management of various items.

There is no suggestion in any of these references for the combination made by the Examiner. In fact, Cohausz and Takagi discuss different application programs that have various features available through function buttons and status bars. However, the functionalities of Takagi would not logically be applicable to Cohausz, and vice versa. Additionally, there is no suggestion in Cohausz to incorporate the "individual programming modules" asserted by the Examiner in Takagi into Cohausz.

Furthermore, Hansen discusses a dashboard not associated with a particular application program. Cohausz' application and Takagi's application cannot be logically combined with the dashboard of Hansen. Again, no suggestion is found by the Examiner to combine these functionalities.

Additionally, since Takagi and Cohausz address function and status indicators that are associated with specific application programs, it would not be logical to combine these functionalities with the "always on top feature" Examiner alleges can be found in Hansen. Rather, as is generally the case with application programs, it would only be logical to display the status indicators of Cohausz and Takagi while the application program in question is active. When another application is active, it would not be logical to display the unavailable functionalities of Cohausz and/or

Takagi on top of the window of the currently active application. Therefore, it is not logical to combine Cohausz, Takagi, and Hansen.

Therefore, Appellants respectfully submit that claims 1-31 are not obvious over Cohausz, Takagi, and Hansen.

B. THE REJECTION OF CLAIMS IN VIEW OF COHAUSZ, TAKAGI, AND HANSEN WAS IMPROPER BECAUSE EVEN IN COMBINATION, THESE REFERENCES DO NOT MAKE CLAIMS 1-31 OBVIOUS.

In assessing obviousness under 35 U.S.C. § 103, certain inquiries should be made. These include (1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art, and (4) the effect of "secondary considerations." See Graham v. John Deere, 383 U.S. 1, 17-18 (1966).

1. The scope and content of the cited prior art.

The Examiner has rejected claims 1-25 as obvious under 35 U.S.C. §103(a) in view of Cohausz, in view of Takagi, et al., and further in view of Hansen, et al. Claims 26-31 were rejected as obvious under 35 U.S.C. §103(a) in view of Takagi further in view of Hansen.

Cohausz discusses a status bar for a computer program (Cohausz, Abstract) that provides the status of the program. Each area in the status bar corresponds to an area of the program. Cohausz's status bar is a menu. However, the term menu in Cohausz refers to a table of contents, rather than to communication with a module. This is clarified on pg. 5 of Cohausz, where it states that "the oblong status indicator can represent a menu in which the individual fields represent menu points or menu subjects." No indication is found that this relates to communication with a programming module. The sentence above this one clarifies that "the individual fiends are control panels or control buttons, which, when activated (clicked on) lead

to the respective program area, text, or information segment." This is the sole functionality of the indicator.

The indicator of Cohausz does not obtain information about the module. Cohausz refers to displaying where the user is located, i.e., actual location within a document. Along the oblong field, a square or other indicator is located at the same location as the cursor can be found in the text. This is similar to the scroll bar of most word processors. The difference is that the scroll bar of Cohausz is divided into subsections indicating a defined program area or program function. There is no indication of that the oblong field obtains information about a module. In fact, Cohausz does not indicate any communication between the indicator and any application or program outside the indicator. Furthermore, Cohausz' indicators are not interactive. Rather, they are passive indicators of location only.

Takagi teaches a document filing apparatus including:

[A] document window 201 for displaying document images including characters is substantially centered in the display screen. Icons (also called "selection marks" or "commands") are arrayed in the right portion of the document window 201, and give an operator various necessary indications, such as image-enlarging and reducing, and rotation and scroll of the displayed image. . . . The display further contains a function area 202 provided in connection with function keys F1 to F10. The function area contains icons F1 to F10 indicating various devices for inputting and outputting documents such as a scanner, printer, display, and file.

(Takagi, column 3, lines 7-26.) Thus, Takagi teaches a document filing apparatus, which is a single application that permits manipulation of documents. Takagi does not teach or suggest a window region independently displayed and independently active of any application program, the window region having interactive display areas. Rather, Takagi teaches displayed function keys that permit access to printing, scanning, saving, and other functions of a single "document filing apparatus" taught by Takagi. Furthermore, the display areas of Takagi are not

interactive. Rather, the display areas display static information, such as "scanner," "printer," "display," etc. The function keys of Takagi are not interactive. Rather, they provide access to an input or output mechanism, such as a printer or scanner. If a user selects one of the functions, a window may be opened. However, the buttons are not interactive in that they do not change in response to user interaction.

Hansen discusses a dashboard including a plurality of buttons, to permit management of various items. Hansen provides a plurality of functions, such as rolodex, calendar, etc. Hansen's system further provides a selection option, which when pressed, brings the user interface shell before another window (Hansen, column 2, lines 23-28). However, Hansen does not teach or suggest a plurality of independent application programs associated with a plurality of independent areas in a display system. Furthermore, Hansen's display areas are not interactive. They do not change in response to user interaction. When the user wishes to alter the display on the dashboard of Hansen, a window is opened, and the configuration of the various icons is changed.

2. The level of ordinary skill in the art.

The test for obviousness under 35 U.S.C. § 103(a) requires reference to obviousness at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Appellants respectfully believe that the level of ordinary skill in the art is that of a computer programmer who works in the field of user interface design.

3. The differences between the claimed invention and the prior art.

A. The Examiner's Rejections

The Examiner has rejected claims 1-25 as obvious under 35 U.S.C. §103(a) in view of Cohausz, in view of Takagi, et al., and further in view of Hansen, et al.

Claims 26-31 were rejected as obvious under 35 U.S.C. §103(a) in view of Takagi further in view of Hansen.

Appellants respectfully submit that Cohausz, Takagi, and Hansen alone or in combination fail to render the claimed invention obvious. Furthermore, Appellants respectfully submit that Takagi and Hansen in combination do not make claims 26-31 obvious.

- B. Claim Group I: None of Cohausz, Takagi, and Hansen, alone or in combination, teach or suggest a plurality of display areas associated with plurality of individual programming modules associated with different application programs.**

Claim 1 reads:

1. An interactive computer-controlled display system comprising:
 - a processor;
 - a data display screen coupled to the processor;
 - a cursor control device coupled to said processor for positioning a cursor on said data display screen;
 - a window generation and control logic coupled to the processor and data display screen to create an operating environment for a plurality of individual programming modules associated with different application programs that provide status and/or control functions, wherein the window generation and control logic generates and displays a first window region having a plurality of display areas on said data display screen, wherein the first window region is independently displayed and independently active of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules, the first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated;
 - an indicia generation logic coupled to the data display screen to execute at least one of the plurality of individual programming modules to generate information for display in one of the plurality of display areas in the first window region, wherein at least one of the plurality of display areas and its associated

programming module is sensitive to user input, and further wherein the window generation and control logic and the indicia generation logic use message-based communication to exchange information to coordinate activities of the indicia generation logic to enable interactive display activity.

(Claim 1.) Thus, claim 1 recites a display system to display status information through a window in which the individual programming modules are associated with different programs to provide status and/or control functions. Each of the program modules is associated with the different individual display areas in the window. Furthermore, these display areas permit interactive display activity.

The Examiner stated in her rejection that:

[Cohausz] does not teach a status bar with a plurality of individual programming modules associated with different programs, nor does Cohausz teach that the first window region is displayed separately from any application program. ...

Takagi teaches a first window region, with function area 202, which is displayed separately from application programs in window 201, and also teaches that the plurality of individual programming modules, F1-F4, in function area 202 are associated with different programs. ...

(Final Office Action, page 4, paragraphs 1 and 2.) The Examiner noted that Cohausz does not discuss a plurality of individual programming modules associated with different programs. However, The Examiner asserts that Takagi teaches this element. Appellants respectfully disagree with Examiner's interpretation of Takagi. Takagi teaches a document filing apparatus, which is a single application that permits manipulation of documents. Takagi states that:

FIG. 2 shows an initial display on the screen of display 9 in the document filing apparatus according to the present invention. As shown, document window 201 for displaying document images including characters is substantially centered in the display screen. Icons (also called "selection marks" or "commands") are arrayed in the right portion of the document window 201, and give an operator various necessary indications, such as image-enlarging and reducing, and rotation and scroll of the displayed image.

These indications by the icons are designated by a mouse or related keys on the keyboard. For example, if the "Enlarge" icon is designated, the document displayed within the document window is enlarged.

The display further contains a function area 202 provided in connection with function keys F1 to F10. The function area contains icons F1 to F10 indicating various devices for inputting and outputting documents such as a scanner, printer, display, and file.

(Takagi, column 3, lines 7-25.) As can be seen in Figure 2, and as described in Takagi, there is a single display area, which includes icons on the right-hand side, and function areas. Note that Takagi specifically discusses, and illustrates a "document filing apparatus," a single system, which includes a plurality of controls and potential outputs and functions. Furthermore, Takagi specifically notes that "property sheets for changing or checking the properties of these devices [scanner, printer, display and file] can be displayed by display 9." (Takagi, column 4, lines 44-45.) Thus, Takagi clearly does not teach or suggest a display that displays properties. Furthermore, Takagi's system is a unitary system having a single display area, which includes a plurality of functions.

Takagi does not teach or suggest a "a window region independently displayed and independently active of any application program," as claimed in Claim 1. Rather, Takagi teaches displayed function keys that permit access to printing, scanning, saving, and other functions of a single "document filing apparatus" taught by Takagi. There is nothing in Takagi that indicates that there are individual programming modules and the Appellants submit that the document filing apparatus is a single application. The fact that Takagi displays function keys and a function area does not change this fact. Takagi is not directed to the use of individual programming modules. In Takagi, status and control functions are part of a single program.

Furthermore, since Takagi discusses a standard application window for a document filing apparatus, Takagi does not teach or suggest an area that appears on top of application windows. The Examiner suggests that Hansen makes up for this shortcoming of Takagi. However, as discussed above, Hansen discusses a dashboard. However, Hansen only allows the user an unobstructed view of the system if a button is selected (Hansen, col. 4, lines 45-51). For example, see Figure 18 of Hansen, wherein the dashboard is obscured by a window. Thus, Hansen does not teach or suggest “window layer appears on top of application programming windows that may be generated.”

Furthermore, Hansen does not teach “a plurality of individual programming modules associated with different application programs.” As discussed above, neither Cohausz nor Takagi teaches or suggests individual programming modules associated with different application programs.

The Examiner asserts that Cohausz discusses an “interactive programming activity.” Appellants respectfully disagree. The status indicator of Cohausz simply “indicates very precisely at which location in the program or information one is located.” (Cohausz, page 3, paragraph 2.) Furthermore, this is done by an overlay of an “indicator field” or “cursor.” Cohausz does not teach or suggest the availability of “interactive display activity.” Interactive display activity is described in detail in the Specification, for example at page 19, where examples of various modules are provided. For example, the interactivity of the display permits a user to “turn the network connection on or off without having to locate and execute other network connection software” (Specification, page 18, lines 7-9). Thus, the user may interact with the modules, and thereby control computer functions. Cohausz provides no such interactivity. Rather, the indicator of Cohausz is simply a location indicator.

Furthermore, Takagi does not teach or suggest an interactive display, either. Takagi's system permits the user to print, scan, or perform other actions. However, Takagi's system does not teach or suggest "interactive programming ability." Hansen does not make up for this shortcoming of Cohausz', either.

Therefore, claim 1 is not obvious over Cohausz, in view of Takagi and Hansen. Claims 2-10 and 19-21 depend directly or indirectly on claim 1, and are not obvious over Cohausz in view of Takagi and Hansen for at least the same reasons recited above with respect to claim 1.

Similarly, claim 11 recites in part:

window generation and control logic coupled to the processor and data display screen to create an operating environment for a plurality of individual programming modules associated with different application programs that provide status and/or control functions, wherein the window generation and control logic generates and displays a first window region having a plurality of display areas on said data display screen, wherein the first window region is independently displayed and independently active of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules, the first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated; . . .

(Claim 11.) As discussed above with respect to claim 1, none of the references, alone or in combination, teach or suggest a system in which individual programming modules are associated with different application programs that provide status and/or control information. Furthermore, none of the references teach or suggest an independent first window region implemented in a window layer that appears on top of application programming windows. Therefore, claim 11 is not obvious over Cohausz, in view of Takagi and Hansen. Claims 12-14 and 22-24 depend on claim 11,

and are not obvious over Cohausz in view of Takagi and Hansen for at least the same reasons recited above with respect to claim 11.

Similarly, claim 15 recites in part:

creating an operating environment for a plurality of individual programming modules associated with different application programs that provide status and/or control functions;

generating a first window sized to accommodate a plurality of display areas for indicia resulting from executing at least one of the plurality of individual programming modules, wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules, and wherein the first window is independently displayed and independently active of any application program, the first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated;

(Claim 15.) As discussed above with respect to claim 1, none of the references, alone or in combination, teach or suggest creating an operating environment for a plurality of individual programming modules associated with different application programs that provide status and/or control functions. Furthermore, none of the references teach or suggest an independent first window region implemented in a window layer that appears on top of application programming windows. Therefore, claim 15 is not obvious over Cohausz, in view of Takagi and Hansen. Claims 16-18 depend on claim 15, and are not obvious over Cohausz in view of Takagi and Hansen for at least the same reasons recited above with respect to claim 15.

Similarly, claim 25 recites in part:

a window generation and control logic to create an operating environment for a plurality of individual programming modules associated with different application programs that provide status and/or control functions, wherein the window generation and control logic generates and displays a first window region having a plurality of display areas,

wherein the first window region is independently displayed and independently active of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules, the first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated;

an indicia generation logic coupled to the data display screen to execute at least one of the plurality of individual programming modules to generate information for display in one of the plurality of display areas in the first window region, wherein at least one of the plurality of display areas and its associated programming module is sensitive to user input, and further wherein the window generation and control logic and the indicia generation logic use message-based communication to exchange information to coordinate activities of the indicia generation logic to enable interactive display activity.

(Claim 25.) As discussed above with respect to claim 1, none of the references, alone or in combination, teach or suggest a system in which individual programming modules are associated with different application programs that provide status and/or control information. Furthermore, none of the references teach or suggest a first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows. Additionally, claim 25 recites an indicia generation logic enabling interactive display activity. As discussed above with respect to claim 1, none of Cohausz, Takagi, or Hansen teach or suggest interactive display activity, as claimed in claim 25. Therefore, claim 25 is not obvious over Cohausz, in view of Takagi and Hansen.

Similarly, claim 26 recites:

26. A system comprising:
a window region independently displayed and independently active of any application program, the window region having interactive display areas;
each of a plurality of the display areas associated with one of a plurality of individual programming modules, the first window region and the plurality of independent display areas implemented in a

window layer that appears on top of application programming windows that may be generated;

wherein at least one of the individual programming modules is executable to generate information for display in the plurality of display areas, and wherein at least one of the display areas sensitive to user input.

(Claim 26.) As discussed above with respect to claim 1, none of the references, alone or in combination, teach or suggest a system in which each of a plurality of the display areas is associated with one of a plurality of individual programming modules. Furthermore, none of the references teach or suggest a first window region and the plurality of independent display areas implemented in a window layer that appears on top of application programming windows that may be generated. Additionally, claim 26 recites interactive display areas. As discussed above with respect to claim 1, none of Cohausz, Takagi, or Hansen teach or suggest interactive display areas, as claimed in claim 26. Therefore, claim 26 is not obvious over Cohausz, in view of Takagi and Hansen. Claims 27-31 depend on claim 26, and are not obvious over Cohausz in view of Takagi and Hansen for at least the same reasons recited above with respect to claim 26.

C. Claim Group II: Appellants Respectfully Submit that None of Cohausz, Takagi, and Hansen Teach or Suggest a Control Strip.

The claims of Group II depend on claims in Group I, and incorporate their respective limitations. Therefore, the claims of Group II are not obvious over the cited references for at least the same reasons advanced above with respect to the claims of Group I.

Furthermore, claim 2, which depends on claim 1, recites:

The display system defined in Claim 1 wherein the first window region comprises a control strip.

(Claim 2.) Thus, in accordance with Claim 2, the window region is a control strip. The Examiner stated that "Cohausz teaches a 'control strip' with oblong field 1, at Figs. 1-3." (Final Office Action, page 5, third full paragraph.) Appellants respectfully disagree with Examiner's analysis. Cohausz does not teach or suggest a control strip. A control strip, by definition, is "a window of graphics depicting one or more display areas for control and/or status indicia." (Specification, page 14, 1-2.) Cohausz's "oblong field" is not a control strip, since it does not include control or status indicia. Rather, Cohausz's oblong field only indicates the current location of the user. Although Cohausz does use the term "status," she is using it as a referent for location. On the other hand, the present invention clearly defines "status" as "information regarding application programs, as well as information produced by system programs, that are run on the computer system." (Specification, page 2, lines 1-2.) Cohausz does not teach or suggest such a control strip. Takagi does not teach or suggest such a control strip either, nor does Hansen. Therefore, claim 2 is not obvious over Cohausz, in view of Takagi and Hansen.

Claim 13 adds the limitation that "the first window region comprises a control strip," to independent claim 11. As discussed above with respect to claim 2, none of the references alone or in combination disclose a control strip, as recited in claim 13. Therefore, claim 13 is not obvious over Cohausz, Takagi, and Hansen.

E. Claim Group III: Appellants Respectfully Submit that None of Cohausz, Takagi, and Hansen Teach or Suggest a Data Area Displaying An Additional Display Element.

The claim of Group IV depends on claims in Group I, and incorporates their limitations. Therefore, the claim of Group IV is not obvious over the cited references for at least the same reasons advanced above with respect to the claims of Group I.

Furthermore, claim 10, which indirectly depends on claim 1, recites:

The display system defined in Claim 9 wherein said at least one of the data areas display an additional display element.

(Claim 10.) Thus, in accordance with Claim 10, at least one of the display areas displays an additional display element. The Examiner stated that "Cohausz displays an additional display element" at p. 6, paragraph 3. (Final Office Action, page 6, third full paragraph.) Appellants respectfully disagree with Examiner's analysis. Cohausz does not teach or suggest a display area that displays an additional display element. Rather, Cohausz discusses a display area that "may not only display writing but additionally, and as an alternative, also symbols or pictures as represented in the right region of the Figures." (Cohausz, page 6, 3rd paragraph.) The Specification provides an example of such an additional display element, where it states:

Note that buttons may display information on their surface. When the user clicks a button, it is highlighted. In one embodiment, buttons may also display additional elements such as pop-up menus (shown in Figure 2C) or help messages (e.g., balloons shown in Figure 2D).

(Specification, page 14, lines 15-18.) Cohausz, on the other hand, simply discusses using "images" instead of text to label an area. Cohausz does not teach or suggest additional elements, such as pop-up menus, help messages, etc. Neither Takagi nor Hansen make up for this shortcoming of Cohausz. Therefore, claim 10 is not obvious over Cohausz, in view of Takagi and Hansen.

F. Claim Group IV: Appellants Respectfully Submit that None of Cohausz, Takagi, and Hansen Teach or Suggest The First Window Region Implemented in a Private Window Layer that Appears in Front of Windows for All Applications Layers.

The claims of Group V depend on claims in Group I, and incorporate their respective limitations. Therefore, the claims of Group V are not obvious over the

cited references for at least the same reasons advanced above with respect to the claims of Group I.

Furthermore, claim 21, which depends on claim 1, recites:

The display system defined in Claim 1 wherein the first window region is implemented in a private window layer that appears in front of windows for all applications layers.

(Claim 21.) Thus, in accordance with Claim 21, the first window region is implemented in a private window layer. The Examiner stated that Cohausz discusses "the first window region in a 'private window layer'" at p. 4, paragraph 5. (Final Office Action, page 12, first paragraph.) Appellants respectfully disagree with Examiner's analysis. Cohausz does not teach or suggest a private window layer that is always in front of all applications layers. At the cited location, Cohausz merely discusses that the regions on the oblong field are adjacent. Cohausz does not teach or suggest a "private window layer." Takagi discusses only function keys attached to an application. Hansen discusses a dashboard that may or may not appear in front of other windows. However, Hansen does not teach or suggest the use of a private window layer. Therefore, claim 21 is not obvious over Cohausz, in view of Takagi and Hansen.

Similarly, claim 24 recites in part a system "wherein the first window region is implemented in a private window layer that appears in front of windows for all applications layers." As discussed above with respect to claim 21, none of the references teach or suggest a private window layer that appears in front of windows for all applications layers. Therefore, claim 24 is not obvious over Cohausz, in view of Takagi and Hansen.

4. The effect of secondary considerations.

In determining whether a patent claim is obvious, the secondary considerations, or factors, are considered because they sometimes provide

circumstantial evidence of non-obviousness. The most common factors are (1) commercial success of the claimed invention, (2) solution by the claimed invention of long-standing problems in the art, (3) widespread recognition and copying of the invention in the industry, and (4) disbelief by experts that the invention would work. Appellants respectfully submit that, in view of the strength of the arguments presented herein, evidence of non-obviousness in the form of secondary considerations has not been presented heretofore in the prosecution of this application.

IX. CONCLUSION

Appellants submit that Cohausz, in view of Takagi and Hansen, do not teach or suggest the invention claimed. Appellants submit that Cohausz and Takagi cannot be logically combined. Furthermore, Appellants submit that none of the references, alone or in combination, teach or suggest a plurality of display areas associated with plurality of individual programming modules associated with different application programs. Appellants further submit that the art cited by the Examiner provides absolutely no motivation for combining the references cited. Appellants further submit that Examiner provides no motivation for performing the Examiner's modification and that any further modification of the cited references is neither taught nor suggested by either reference.

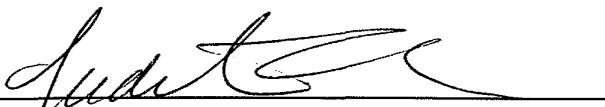
Appellants respectfully submit that all the appealed claims in this application are patentable and requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

This brief is submitted in triplicate, along with a check for \$310.00 to cover the appeal fee for one other than a small entity as specified in 37 C.F.R. § 1.17(f).

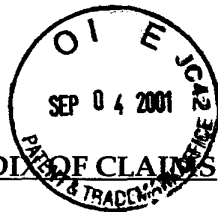
Please charge any shortages and credit any overcharges to our Deposit Account No. 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 8/31, 2001


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X. APPENDIX OF CLAIMS

1 1. An interactive computer-controlled display system comprising:
2 a processor;
3 a data display screen coupled to the processor;
4 a cursor control device coupled to said processor for positioning a cursor on
5 said data display screen;
6 a window generation and control logic coupled to the processor and data
7 display screen to create an operating environment for a plurality of individual
8 programming modules associated with different application programs that provide
9 status and/or control functions, wherein the window generation and control logic
10 generates and displays a first window region having a plurality of display areas on
11 said data display screen, wherein the first window region is independently displayed
12 and independently active of any application program, and wherein each of the
13 plurality of display areas is associated with one of the plurality of individual
14 programming modules, the first window region and the plurality of independent
15 display areas implemented in a window layer that appears on top of application
16 programming windows that may be generated;
17 an indicia generation logic coupled to the data display screen to execute at
18 least one of the plurality of individual programming modules to generate
19 information for display in one of the plurality of display areas in the first window
20 region, wherein at least one of the plurality of display areas and its associated
21 programming module is sensitive to user input, and further wherein the window
22 generation and control logic and the indicia generation logic use message-based
23 communication to exchange information to coordinate activities of the indicia
24 generation logic to enable interactive display activity.

1 2. The display system defined in Claim 1 wherein the first window region
2 comprises a control strip.

1 3. The display system defined in Claim 1 wherein said at least one of the
2 plurality of display areas is variably sized.

1 4. The display system defined in Claim 1 wherein size of the first window
2 region is variable.

1 5. The display system defined in Claim 4 wherein the first window region
2 is sized such that none of the plurality of display areas is visible.

1 6. The display system defined in Claim 4 wherein the first window
2 regions is sized such that all of the plurality of display areas are visible.

1 7. The display system defined in Claim 4 wherein the first window
2 regions is sized such that a portion of the plurality of display areas is visible.

1 8. The display system defined in Claim 1 wherein said at least one of the
2 plurality of display areas only displays information.

1 9. The display system defined in Claim 1 wherein said at least one of the
2 plurality of display areas acts to provide access to control information when selected.

1 10. The display system defined in Claim 9 wherein said at least one of the
2 data areas display an additional display element.

1 11. An interactive computer-controlled display system comprising:
2 a processor;
3 a data display screen coupled to the processor;
4 a cursor control device coupled to said processor for positioning a cursor on
5 said data display screen;
6 window generation and control logic coupled to the processor and data
7 display screen to create an operating environment for a plurality of individual
8 programming modules associated with different application programs that provide
9 status and/or control functions, wherein the window generation and control logic
10 generates and displays a first window region having a plurality of display areas on
11 said data display screen, wherein the first window region is independently displayed
12 and independently active of any application program, and wherein each of the
13 plurality of display areas is associated with one of the plurality of individual
14 programming modules, the first window region and the plurality of independent
15 display areas implemented in a window layer that appears on top of application
16 programming windows that may be generated;
17 at least one indicia graphics generation logic coupled to the processor and the
18 window generation and control logic, wherein said at least one indicia graphics
19 generation logic generates user sensitive graphics for display in at least one data
20 display area by executing at least one of the plurality of individual programming
21 modules;
22 wherein the window generation and control logic determines when said at
23 least one data display area has been selected by the user and signals said at least one
24 indicia graphics generation logic in response to user selection, and further wherein
25 said at least one indicia graphics generation logic initiates a response from said at
26 least one of the plurality of programming modules.

1 12. The display system defined in Claim 11 wherein the first window
2 region is always visible to the user.

1 13. The display system defined in Claim 11 wherein the first window
2 region comprises a control strip.

1 14. The display system defined in Claim 11 wherein said at least one data
2 display area is variably sized.

1 15. A method for generating control information comprising the steps of:
2 creating an operating environment for a plurality of individual programming
3 modules associated with different application programs that provide status and/or
4 control functions;
5 generating a first window sized to accommodate a plurality of display areas
6 for indicia resulting from executing at least one of the plurality of individual
7 programming modules, wherein each of the plurality of display areas is associated
8 with one of the plurality of individual programming modules, and wherein the first
9 window is independently displayed and independently active of any application
10 program, the first window region and the plurality of independent display areas
11 implemented in a window layer that appears on top of application programming
12 windows that may be generated;
13 displaying the indicia in each of said plurality of display areas by executing
14 one of a plurality of individual programming modules corresponding to each indicia;
15 selecting one of the indicia, wherein the step of selecting comprises a first
16 programming module determining which of said plurality of display areas is
17 selected and sending a message to a programming module of said plurality of

18 individual programming modules responsible for generating a display of a selected
19 indicia;
20 said programming module performing a function in response to a selection.

1 16. The method defined in Claim 15 wherein one of said indicia comprises
2 status information.

1 17. The method defined in Claim 15 wherein one of said indicia comprises
2 control information.

1 18. The method defined in Claim 15 further comprising the steps of:
2 the first programming module requesting a set of features supported by said
3 programming module, wherein said step of requesting comprises sending a first
4 message to said programming module; and
5 said programming module returning a second message indicative of features
6 supported by said programming module, such that said first programming module
7 interacts with said programming module in response to user interaction with the first
8 programming module based on indicated features as set forth by said programming
9 module.

1 19. The display system defined in Claim 1 wherein each of the plurality of
2 display areas is individually and variably sized.

1 20. The display system defined in Claim 1 wherein the first window region
2 always appears in front of application windows.

1 21. The display system defined in Claim 1 wherein the first window region
2 is implemented in a private window layer that appears in front of windows for all
3 applications layers.

1 22. The display system defined in Claim 11 wherein each of the plurality of
2 display areas is individually and variably sized.

1 23. The display system defined in Claim 11 wherein the first window
2 region always appears in front of application windows.

1 24. The display system defined in Claim 11 wherein the first window
2 region is implemented in a private window layer that appears in front of windows
3 for all applications layers.

1 25. A system comprising:
2 a window generation and control logic to create an operating environment for
3 a plurality of individual programming modules associated with different application
4 programs that provide status and/or control functions, wherein the window
5 generation and control logic generates and displays a first window region having a
6 plurality of display areas, wherein the first window region is independently
7 displayed and independently active of any application program, and wherein each of
8 the plurality of display areas is associated with one of the plurality of individual
9 programming modules, the first window region and the plurality of independent
10 display areas implemented in a window layer that appears on top of application
11 programming windows that may be generated;

12 an indicia generation logic coupled to the data display screen to execute at
13 least one of the plurality of individual programming modules to generate
14 information for display in one of the plurality of display areas in the first window
15 region, wherein at least one of the plurality of display areas and its associated
16 programming module is sensitive to user input, and further wherein the window
17 generation and control logic and the indicia generation logic use message-based
18 communication to exchange information to coordinate activities of the indicia
19 generation logic to enable interactive display activity.

1 26. A system comprising:
2 a window region independently displayed and independently active of any
3 application program, the window region having interactive display areas;
4 each of a plurality of the display areas associated with one of a plurality of
5 individual programming modules, the first window region and the plurality of
6 independent display areas implemented in a window layer that appears on top of
7 application programming windows that may be generated;
8 wherein at least one of the individual programming modules is executable to
9 generate information for display in the plurality of display areas, and wherein at
10 least one of the display areas sensitive to user input.

1 27. The system of claim 26 wherein the window region is displayed at a
2 bottom of a display screen.

1 28. The system of claim 26, wherein one of the display areas displays status
2 information.

1 29. The system of Claim 26, wherein one of the display areas control
2 information.

1 30. The system of claim 26, wherein the window region is always
2 displayed on top of other windows.

1 31. The system of claim 26, wherein the window region is a resizeable
2 control strip, such that the window region is displayed but none of the display areas
3 are shown when the window region is closed, some of the display areas are
4 displayed when the window region is partially open, and all of the display areas are
5 displayed when the window region is completely open.