

# **EXHIBIT 32**

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CLASSIFIER		
EXAMINER	502	4-28
TYPIST	821	5-15-7
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INDEX OF CLAIMS

Claim	Final	Original	Date													
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			AUG	MAR	SEP	MAY	JAN	NOV	MAR							
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Claim	Final	Original	13	Date												
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SYMBOLS  
 ✓ ..... Rejected  
 = ..... Allowed  
 - (Through numeral) ..... Canceled  
 + ..... Restricted  
 N ..... Non-elected  
 I ..... Interference  
 A ..... Appeal  
 O ..... Objected



THE UNITED STATES PATENT AND TRADEMARK OFFICE

88/103 BB  
Patent 2/15  
# 7/A  
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9-11-96  
d. will  
9/11/96

In re Application of )  
Steven W. Christensen ) Examiner: Dela Torre, C.  
Serial No. 08/316,237 ) Art Unit: 2415  
Filing Date: September 30, 1994 )  
For: METHOD AND APPARATUS FOR )  
DISPLAYING AND ACCESSING )  
CONTROL AND STATUS )  
INFORMATION IN A COMPUTER )  
SYSTEM )

AMENDMENT

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

Sir:

In response to the Office Action mailed March 20, 1996, Applicant respectfully requests the Examiner to enter the following amendments and consider the following remarks:

IN THE SPECIFICATION

- At page 2, line 11, please replace "it" with --It--.
- At page 4, line 10, please replace "individual" with --individual--.
- At page 21, line 23, please insert --not-- after "has".

Serial No. 08/316,237

1

04860.P1365



At page 28, lines 11-12, please delete "If the cursor location is determined to be within the control strip."

AT page 28, line 15, please insert --within the control strip-- after "occurs".

IN THE CLAIMS

Sub 1  
At

1. (Amended) 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 that provide status and 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 each of the plurality of display areas is associated with one of  
the plurality of individual programming modules;  
an indicia generation logic coupled to the data display screen to execute  
at least one of the plurality of programming modules to generate information  
[data] for display in [at least] one of the plurality of display areas in the first  
window region, wherein [a] 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

A

21 coordinate activities of the indicia generation logic to enable interactive  
22 display activity.

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1 5. (Amended) The display system defined in Claim 4 wherein the  
2 first window region[s] is sized such that none of the plurality of display areas  
3 is [are] visible.

A2

1 6. (Amended) The display system defined in Claim 4 wherein the  
2 first window region[s] is sized such that all of the plurality of display areas are  
3 visible.

1 7. (Amended) The display system defined in Claim 4 wherein the  
2 first window region[s] is sized such that a portion of the plurality of display  
3 areas is [are] visible.

1 8. (Amended) The display system defined in Claim 1 wherein at  
2 least one of the plurality of the display [data] areas only displays information.

1 9. (Amended) The display system defined in Claim 1 wherein at  
2 least one of the display [data] areas acts to provide access to control  
3 information when selected.

1 10. (Amended) The display system defined in Claim 9 wherein said  
2 at least one of the plurality of display [data] areas displays an additional  
3 display element.

Sub 21  
A2  
control

11. (Amended) 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;  
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 that provide status and 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 each of the plurality of display areas is associated with one of  
the plurality of individual programming modules [, wherein the first  
window region comprises at least one data display area];  
at least one indicia graphics generation logic coupled to the processor  
and the window generation logic, wherein said at least one indicia graphics  
generation logic generates user sensitive graphics for display in said at least  
one data display area by executing at least one of the plurality of programming  
modules;  
wherein the window generation and control logic determines when  
said at least one data display area has been selected by the user and signals said  
at least one indicia graphics generation logic in response to user selection, and  
further wherein said at least one indicia graphics generation logic initiates a  
response from said at least one of the plurality of programming modules.

<sup>15</sup>  
~~12~~ (Amended) The display system defined in Claim <sup>14</sup> 11 wherein the  
first window region is always visible to the user.



Sub 37

As

15. (Amended) A method for generating control information  
 comprising the steps of:  
create an operating environment for a plurality of individual  
 programming modules that provide status and control functions;  
 generating a first window sized to accommodate a plurality of [at least  
 one] display areas for indicia resulting from [, wherein the step of generating  
 the first window comprises] executing [a first] 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;  
 displaying an indicia in each of said at least one display area by  
 executing one of a plurality of programming modules corresponding to each  
 indicia;  
 selecting one of the indicia, wherein the step of selecting comprises the  
 first programming module determining which of said at least one display  
 area is selected and sending a message to the programming module of said  
 plurality of programming modules responsible for generating the display of  
 the selected indicia;  
 said programming module performing a function in response to the  
 selection.

Please add the following new claims:

A4

<sup>11</sup>  
~~19.~~ (New) The display system defined in Claim 1 wherein each of  
 the plurality of display areas is individually and variably sized.

rc

P

1 <sup>12</sup>/~~20~~ (New) The display system defined in Claim 1 wherein the first  
2 window region always appears in front of application windows.

1 <sup>13</sup>/~~21~~ (New) The display system defined in Claim 1 wherein the first  
2 window region is implemented in a private window layer that appears in  
3 front of windows for all applications layers.

1 <sup>18</sup>/~~22~~ (New) The display system defined in Claim <sup>14</sup>/~~11~~ wherein each of  
2 the plurality of display areas is individually and variably sized.

1 <sup>19</sup>/~~23~~ (New) The display system defined in Claim <sup>14</sup>/~~11~~ wherein the first  
2 window region always appears in front of application windows.

1 <sup>20</sup>/~~24~~ (New) The display system defined in Claim <sup>14</sup>/~~11~~ wherein the first  
2 window region is implemented in a private window layer that appears in  
3 front of windows for all applications layers.

#### REMARKS

Applicant respectfully requests reconsideration of this application as amended. Claims 1-18 remain in the application. Claim 1, 5-12, and have been amended. Claims 19-24 have been added. No claims have been canceled.

The Examiner has listed a number of informalities and errors in the application. The Applicant has corrected these informalities and errors, as well as others, to put the application in correct form for allowance.

The Examiner has rejected Claims 1-18 under 35 U.S.C. § 102(b) as being unpatentable over Mills et al. Mills teaches the use of a slider control bar for



controlling the rate of display of sequential information. Specifically, Mills teaches the use of such a control window to control the playback rate of video. This control window is defined as having certain components such as standard playback direction/velocity indicators, reverse, stop and fast forward. Mills uses control icon to select one of these rates of display.

Claim 1 of the present invention as amended states, in part:

...  
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 that provide status and 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 each of the plurality of display areas is associated with one of the plurality of individual programming modules;  
...

Thus, the present invention provides logic that creates an operating environment like a shell for other programming modules to provide status and control functions. Mills does not provide such an environment. In Mills, the control window is used for controlling video generated by an application.

Claim 1 of the present invention also includes that "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" Contrary to the Examiner's assertion, Mills does not teach the use of message based communication for information exchange, particularly between control logic that creates an environment for the plurality of programming modules

which control the indicia generation logic. In one described embodiment, the message based communication comprises the control strip of the present invention passing messages to a module to either tell it what to do or to obtain information about the module and its capabilities (e.g., See Specification, pg. 32, lines 5-7). There is no indication in Mills that such message based communication is used. In view of the above discussion, Applicant respectfully submits that Mills does not anticipate the present invention as claimed in Claim 1, nor any of its dependent claims.

Independent Claims 11 and 15 also include a similar limitation regarding the creation of the operating environment. Therefore, based on the same rationale given above, Applicant respectfully submits Claims 11 and 15 and their dependent claims are not anticipated by Mills.

Applicant has added Claims 19-24. Claims 19-21 are dependent on Claim 1, and Claims 22-24 are dependent on Claim 11. Claims 19 and 22 provide that each of the plurality of display areas is individually and variably sized. Mills does not disclose such sizing. Claims 20 and 23 provide that the first window region always appears in front of application windows. Similarly, Claims 21 and 24 provide that the first window region is implemented in a private window layer that appears in front of windows for all applications layers. Mills clearly does not show this. In fact, as soon as another application is used in Mills, the control window will be overlapped and at least partially non-visible. Therefore, based on this, Applicant respectfully submits that Claims 19-24 are allowable over the art of record.

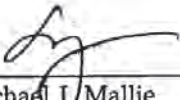
Accordingly, Applicant respectfully submits that the rejection under 35 U.S.C. § 102(b) has been overcome by the amendments and the remarks and withdrawal of these rejections is respectfully requested. Applicant submits

that Claims 1-18 as amended and Claims 19-24 as added are now in condition for allowance and such action is earnestly solicited.

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

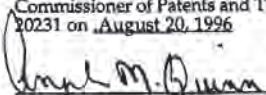
Respectfully submitted,  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: 8/20 1996

  
\_\_\_\_\_  
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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 Commissioner of Patents and Trademarks, Washington, D.C. 20231 on August 20, 1996

  
\_\_\_\_\_  
Angell Quinn      August 20, 1996  
Date





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#10/B (N)  
1-29-97  
B. Hilliard

Patent

Response under 37 CFR 1.116 — Expedited Procedure  
Examining Group 237

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of )  
Steven W. Christensen )  
Serial No. 08/316,237 )  
Filing Date: September 30, 1994 )  
For: METHOD AND APPARATUS FOR )  
DISPLAYING AND ACCESSING )  
CONTROL AND STATUS )  
INFORMATION IN A COMPUTER )  
SYSTEM )

Examiner: Dela Torre, C.  
Art Unit: 2415

Upon Appeal,  
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Amendment B  
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GROUP 240

AMENDMENT TO FINAL OFFICE ACTION

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Final Office Action mailed November 20, 1996,  
Applicant respectfully requests the Examiner to enter the following  
amendments and consider the following remarks:

FIRST CLASS CERTIFICATE OF MAILING

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

on January 17, 1997 Date of Deposit

Christine M. Gregovich  
Name of Person Mailing Correspondence

Christine M. Gregovich January 17, 1997  
Signature Date

Serial No. 08/316,237

04860.P1365

IN THE CLAIMS

1           1.     (Twice Amended) An interactive computer-controlled display  
2 system comprising:  
3           a processor;  
4           a data display screen coupled to the processor;  
5           a cursor control device coupled to said processor for positioning a  
6 cursor on said data display screen;  
7           a window generation and control logic coupled to the processor and  
8 data display screen to create an operating environment for a plurality of  
9 individual programming modules that provide status and control functions,  
10 wherein the window generation and control logic generates and displays a  
11 first window region having a plurality of display areas on said data display  
12 screen, wherein each of the plurality of display areas is associated with one of  
13 the plurality of individual programming modules;  
14           an indicia generation logic coupled to the data display screen to execute  
15 at least one of the plurality of individual programming modules to generate  
16 information for display in one of the plurality of display areas in the first  
17 window region, wherein at least one of the plurality of display areas and its  
18 associated programming module is sensitive to user input, and further  
19 wherein the window generation and control logic and the indicia generation  
20 logic use message-based communication to exchange information to  
21 coordinate activities of the indicia generation logic to enable interactive  
22 display activity.

1           3.     (Once Amended) The display system defined in Claim 1  
2 wherein said at least one of the plurality of display areas [area] is variably  
3 sized.

1           8.     (Twice Amended) The display system defined in Claim 1  
2 wherein said at least one of the plurality of [the] display areas only displays  
3 information.

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

1           11.    (Twice Amended) An interactive computer-controlled display  
2 system comprising:  
3           a processor;  
4           a data display screen coupled to the processor;  
5           a cursor control device coupled to said processor for positioning a  
6 cursor on said data display screen;  
7           window generation and control logic coupled to the processor and data  
8 display screen to create an operating environment for a plurality of  
9 individual programming modules that provide status and control functions,  
10 wherein the window generation and control logic generates and displays a  
11 first window region having a plurality of display areas on said data display  
12 screen, wherein each of the plurality of display areas is associated with one of  
13 the plurality of individual programming modules;  
14           at least one indicia graphics generation logic coupled to the processor  
15 and the window generation and control logic, wherein said at least one  
16 indicia graphics generation logic generates user sensitive graphics for display  
17 in [said] at least one data display area by executing at least one of the plurality  
18 of individual programming modules;



19 wherein the window generation and control logic determines when  
20 said at least one data display area has been selected by the user and signals said  
21 at least one indicia graphics generation logic in response to user selection, and  
22 further wherein said at least one indicia graphics generation logic initiates a  
23 response from said at least one of the plurality of programming modules.

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

1 15. (Twice Amended) A method for generating control information  
2 comprising the steps of:

3 creating [create] an operating environment for a plurality of individual  
4 programming modules that provide status and control functions;

5 generating a first window sized to accommodate a plurality of display  
6 areas for indicia resulting from executing at least one of the plurality of  
7 individual programming modules, wherein each of the plurality of display  
8 areas is associated with one of the plurality of individual programming  
9 modules;

10 displaying the [an] indicia in each of said plurality of [at least one]  
11 display [area] areas by executing one of a plurality of individual programming  
12 modules corresponding to each indicia;

13 selecting one of the indicia, wherein the step of selecting comprises a  
14 [the] first programming module determining which of said plurality of [at  
15 least one] display [area] areas is selected and sending a message to a [the]  
16 programming module of said plurality of individual programming modules  
17 responsible for generating a [the] display of a [the] selected indicia;

18           said programming module performing a function in response to a [the]  
19 selection.

1           16. (Amended) The method defined in Claim 15 wherein one of  
2 said [plurality of] indicia comprises status information.

1           17. (Amended) The method defined in Claim 15 wherein one of  
2 said [plurality of] indicia comprises control information.

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

#### REMARKS

Applicant respectfully requests reconsideration of this application as amended. Claims 1-24 remain in the application. No claims have been canceled.

Claims 1-3, 8-24 were rejected under 35 U.S.C. §102(a) as being anticipated by EPO Patent No. 0 584 392 A1 to Cohausz ("Cohausz"). Cohausz teaches a status indicator which indicates the location at which one is in a

program, text or information range. The status indicator includes a number of individual fields represent portions of the individual program, text or information. Clicking on the field leads to the respective program area. The individual fields are arranged successively in accordance with the logical and/or timed running of the program. The sizes of the fields correspond to the size of the area represented.

Claim 1 of the present invention claims:

*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 that provide status and 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 each of the plurality of display areas is associated with one of the plurality of individual programming modules;*

*an indicia generation logic coupled to the data display screen to execute at least one of the plurality of 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. (Emphasis added.)*

The present invention provides display areas which are associated with individual programming modules. Cohausz does not provide such display areas. Cohausz teaches a status indicator which is associated with a single program. The status indicator of Cohausz indicates the location within the one single program, text or information range. The Examiner refers to page 3, paragraph 2 as teaching plurality of individual programming modules. However, page 3, paragraph 2 of Cohausz specifically states that "the individual fields represent portions of the individual program, text of information, i.e. sections, paragraphs, chapters or segments of information."



Thus, Cohausz does not teach individual programming modules associated with each field. Therefore, claim 1 is not anticipated by Cohausz.

Claim 1 of the present invention also claims an indicia generation logic that uses message-based communication to exchange information to coordinate activities of the indicia generation logic." Cohausz does not teach the use of message based communication for information exchange. Contrary to the Examiner's assertion, Cohausz's teaching of individual fields which lead to respective program areas does not teach the use of message-based communication. The present invention sets forth message based communication, which means that the control strip passes messages to a module to, for example, either tell the module what to do or to obtain information about the module and its capabilities. (Specifications, pg. 32, lines 5-7). There is no indication in Cohausz that such message based communication is used. Therefore, Cohausz does not anticipate the present invention as claimed in Claim 1, or any of its dependent claims.

Independent Claims 11 and 15 also include similar limitations regarding the operating environment. Therefore, based on the same rationale given above, Applicant respectfully submits that Claims 11 and 15 and their dependent claims are not anticipated by Cohausz.

Claims 4-7 were also rejected under 35 U.S.C. §103 as being unpatentable over Cohausz and U.S. Patent 5,202,961 to Mills et. al. ("Mills"). Mills teaches the use of a slider control bar for controlling the rate of display of sequential information. Specifically, Mills teaches the use of such a control strip to control the playback rate of video. This control strip is defined as having certain components such as standard playback direction/velocity indicators, reverse, stop and fast forward. Mills uses a control icon to select one of these rates of display. Claims 4-7 depend on independent Claim 1,

discussed above. The Examiner has acknowledged that Mills does not teach the indicia generator, or a plurality of programs corresponding to the plurality of fields as claimed in the present invention. Because Cohausz does not teach, or make obvious the use of a plurality of fields or message based communication, the present invention is not obvious in view of Cohausz further in view of Mills.

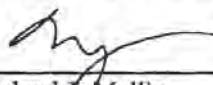
Accordingly, Applicant respectfully submits that the rejection under 35 U.S.C. §102(a) and §103 have been overcome by the amendments and the remarks and withdrawal of these rejections is respectfully requested.

Applicant submits that Claims 1-24 are now in condition for allowance and such action is earnestly solicited.

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

Respectfully submitted,  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 1/17, 1997

  
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IN THE CLAIMS

Sub  
9a1

1. (Twice Amended) 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 programs that provide status and 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 each of the plurality of display areas is associated with one of the plurality of individual programming modules;
- 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.

D<sup>1</sup>

D<sup>2</sup> Sub  
9a2

11. (Twice Amended) 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;  
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 programs that provide status and 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 each of the plurality of display areas is associated with one of the plurality of individual programming modules;  
at least one indicia graphics generation logic coupled to the processor and the window generation and control logic, wherein said at least one indicia graphics generation logic generates user sensitive graphics for display in at least one data display area by executing at least one of the plurality of individual programming modules;  
wherein the window generation and control logic determines when said at least one data display area has been selected by the user and signals said at least one indicia graphics generation logic in response to user selection, and further wherein said at least one indicia graphics generation logic initiates a response from said at least one of the plurality of programming modules.

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15. (Twice Amended) A method for generating control information comprising the steps of:

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

3  
displaying the indicia in each of said plurality of display areas by executing one of a plurality of individual programming modules corresponding to each indicia;

selecting one of the indicia, wherein the step of selecting comprises a first programming module determining which of said plurality of display areas is selected and sending a message to a programming module of said plurality of individual programming modules responsible for generating a display of a selected indicia;

said programming module performing a function in response to a selection.

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### REMARKS

Applicant respectfully requests reconsideration of this application as amended. Claims 1-24 remain in the application. No claims have been canceled. Applicant respectfully submits that the above amendments place the case in a better position to be allowed. Furthermore, good and sufficient reasons exist why the below arguments were not presented earlier. Applicant requests entry of the amendments and their consideration.

Claim 1, as amended, claims:

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 programs that provide status and 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 each of the plurality of display areas is associated with one of the plurality of individual programming modules.

(emphasis added).

Thus, Applicant claims individual programming modules associated with different programs, which are defined in the specification as a collection of individual modules that provide status and control functions.

(Specification pg. 18, lines 3-5). "The control strip functions in one embodiment includes a network switch that shows whether a network connection for the computer system . . . is on or off and lets the user turn the network connection on or off. . . . The control strip may also include a battery monitor that displays the status of the battery or batteries. Another control strip module displays the state of File Sharing that may be currently employed on the computer system. The control strip of the present invention may also provide a module to allow the internal hard disk power to be turned off. The control strip may also provide power settings that allow the users to select

between maximum battery conservation or maximum computer performance. 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." (Specification, pg. 18-19).

Cohausz, according to the Examiner, teaches individual programming modules at bridging paragraph of pp. 2-3, where it states: "The problem under consideration is solved according to the invention in that the oblong field comprises a plurality of individual fields which are adjacent to one another, each of which constitutes an operating field or a control button which, upon being activated, branches into the associated program area or executes the associated program function, with the indicator field or the cursor always being located on the individual field in whose associated program area/program function the user is currently located." (emphasis added). Cohausz refers to fields corresponding to program areas/functions, within a single program. Generally Cohausz refers to individual fields together forming a status indicator, "the individual fields representing portions of the individual program, text or information, i.e., sections, paragraphs, chapters, or segments of information." (Cohausz, pg. 3, lines 8-12).

Thus, it is clear from Cohausz that there are no individual programming modules associated with different programs, as claimed in the present invention, but rather a single program, which can be accessed at different locations through the use of this indicator. Therefore, Cohausz does not teach the individual programming modules associated with different programs as claimed in Claim 1 of the present invention. Therefore, Claim 1 of the present invention is not anticipated by or obvious over Cohausz.

Independent Claims 11 and 15 similarly claim individual programming modules associated with different programs, and are therefore not anticipated by or obvious over Cohausz.

Applicant respectfully requests allowance of claims 1-24. If any obstacles remain to such allowance, Applicant respectfully requests that the Examiner contact the undersigned by telephone.

Please charge any shortages or credit any overages to Deposit Account No. 02-2666.

Respectfully submitted,  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 11/14, 1997

  
Judith A. Szepesi  
Registration No. 39,393

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Los Angeles, CA 90025-1026  
(408) 720-8598





Atty. Dela Torre, N. 004860.P1365C2

Patent

22/E  
7-10-98  
Clm

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: 2415

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98 JUL -7 PM 2:24  
GROUP 2700

AMENDMENT AND RESPONSE TO OFFICE ACTION

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

Sir:

In response to the Office Action mailed March 25, 1998, please amend the above-referenced application as follows:

FIRST CLASS CERTIFICATE OF MAILING

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

on June 25, 1998  
Date of Deposit

Edith Fuentes  
Name of Person Mailing Correspondence

[Signature]  
Signature

6-25-98  
Date

07/02/1998 TNGUYEN 0000053 08821004

01 FC:103 154.00 OP  
02 FC:102 164.00 OP

IN THE CLAIMS

Please amend the claims as follows:

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E

1. (Three Times Amended) 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 independent of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules;

SE

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.

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N. (Three Times Amended) 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;

32 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 independent of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules;

at least one indicia graphics generation logic coupled to the processor and the window generation and control logic, wherein said at least one indicia graphics generation logic generates user sensitive graphics for display in at least one data display area by executing at least one of the plurality of individual programming modules;

wherein the window generation and control logic determines when said at least one data display area has been selected by the user and signals said at least one indicia graphics generation logic in response to user selection, and further wherein said at least one indicia graphics generation logic initiates a response from said at least one of the plurality of programming modules.



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15. (Three Times Amended) A method for generating control information comprising the steps of:

- 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 independent of any application program;
- displaying the indicia in each of said plurality of display areas by executing one of a plurality of individual programming modules corresponding to each indicia;
- selecting one of the indicia, wherein the step of selecting comprises a first programming module determining which of said plurality of display areas is selected and sending a message to a programming module of said plurality of individual programming modules responsible for generating a display of a selected indicia;
- said programming module performing a function in response to a selection.

Please add the following claims:

EB  
Cont

25. (New) A system comprising:  
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 independent of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules;

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.

24  
Cont.

~~26. (New) A system comprising:~~

~~a window region independent 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;~~

~~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.~~

27. (New) The system of claim 26 wherein the window region is displayed at a bottom of a display screen.

~~28. (New) The system of claim 26, wherein one of the display areas displays status information.~~

~~29. (New) The system of Claim 26, wherein one of the display areas control information.~~

~~30. (New) The system of claim 26, wherein the window region is always displayed on top of other windows.~~

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~~31. (New) The system of claim 26, wherein the window region is a resizable control strip, such that the window region is displayed but none of the display areas are shown when the window region is closed, some of the display areas are displayed when the window region is partially open, and all of the display areas are displayed when the window region is completely open.~~

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### REMARKS

The foregoing amendments and the following remarks are responsive to the Office Action mailed March 25, 1998. Applicant respectfully requests reconsideration of the present application. Claims 1-24 remain in the application. Claims 1, 11, and 15 have been amended. New claims 25-31 have been added.

The Examiner rejected claims 1-3 and 8-24 under 35 U.S.C. 103(a) as being unpatentable over Cohausz EPO Patent No. 0 584 392 A1, based upon the English translation, in view of Foster et al., U.S. Patent No. 5,588,105.

The Examiner further rejected Claims 4-7 under 35 U.S.C. 103(a) as being unpatentable over Cohausz EPO Patent No. 0 584 392 A1, based upon the English translation, and Foster et al, U.S. Patent No. 5,588,105 and further in view of Mills et al., U.S. Patent No. 5,202,961.

Cohausz, according to the Examiner, teaches individual programming modules at bridging paragraph of pp. 2-3, where Cohausz states:

"The problem under consideration is solved according to the invention in that the oblong field comprises a plurality of individual fields which are adjacent to one another, each of which constitutes an operating field or a control button which, upon being activated, branches into the associated program area or executes the associated program function, with the indicator field or the cursor always being located on the individual field in whose associated program area/program function the user is currently located."

It is clear from Cohausz that there are no individual programming modules associated with different application programs, but rather a single program, which can be accessed at different locations through the use of this indicator. Therefore, Cohausz does not teach the individual programming modules associated with different programs as claimed in Claim 1 of the present invention. Foster does not remedy this failing of Cohausz. Foster teaches a status bar for application windows. Specifically, Foster teaches:

A "status bar" which is attached to open application windows. Since the status bar is attached directly to the application window, there is no ambiguity as to which window that status bar controls.'

(Foster, Summary, Column 1, lines 54-57).

Foster further notes that in order to generate his status bar, the process initially starts a new application program and then couples the status bar to the application program window. (Column 6, lines 32-40). Foster further teaches that the icons on the status bar relate to actions within the application window. Thus, for example, Foster teaches a notepad which has a status bar including items such as view button, font button, nib button, close button, etc. In addition to these specific buttons that are associated with the application, a global clock button is also taught by Foster to display the current time.

Foster teaches "buttons 60 and 62 are examples of active areas which provide indirect control over the notepad function." Thus, the buttons on the status bar of Foster provide indirect control over functions of a single application program.

Claim 1, on the other hand, claims:

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 independent of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules;

(Claim 1, as amended). Neither Cohausz nor Foster teach or suggest the plurality of display areas associated with individual programming modules. Rather, Cohausz' display areas are associated with different locations of the application program, and Foster's display areas are associated with functions of the application program. Therefore, Claim 1 is not obvious over Cohausz in view of Foster.



Furthermore, Claim 1, as amended, claims indicia generation logic that uses message-based communication. This is defined in the specification as: passing information to the module to either tell it what to do or to obtain information about the module and its capabilities. (Specification, pg. 32, lines 5-7).

According to the Examiner Cohausz teaches message based communication at p. 3, second paragraph, where it states: "The status indicator thus has the double function of operation like a menu and of displaying exactly where in the program or in the body of information the operator or user is located." The Examiner interprets operating like a menu as telling the module what to do. The Examiner also interprets the phrase "where . . . user is located" as obtaining information about the module -- i.e. location of the user in the program.

Applicant respectfully suggests that the Examiner misunderstands the meaning of the term "menu" as used in Cohausz. Specifically, 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 functionality of the indicator of Cohausz.

It is the Applicants understanding that the interpretation that the indicator obtains information about the module is not supported by the reference. 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 teach or suggest any communication between the indicator and anything else. Thus, Cohausz does not teach message based communication, as claimed in Claim 1. Foster does not remedy this failing of Cohausz. Foster controls functions of an application program and may display a clock, and does not teach or suggest message based communication. Therefore, Claim 1 is not obvious over Cohausz in view of Foster.

Furthermore, Claim 1 claims the first window region independent of any application program. Examiner noted that Cohausz does not teach a status bar with a plurality of individual programming module associated with different programs. Examiner references Foster characterizing the status bar of Foster as being associated with different programs.

Foster teaches a status bar for application windows. Specifically, Foster teaches:

A "status bar" which is attached to open application windows. Since the status bar is attached directly to the application window, there is no ambiguity as to which window that status bar controls.

(Foster, Summary, Column 1, lines 54-57).

Foster further notes that in order to generate his status bar, the process initially starts a new application program and then couples the status bar to the application program window. (Column 6, lines 32-40). Foster further teaches that the icons on the status bar relate to actions within the application window. Thus, for example, Foster teaches a notepad which has a status bar including items such as view button, font button, nib button, close button, etc. In addition to these specific

buttons that are associated with the application, a global clock button is also taught by Foster to display the current time.

However, Claim 1, as amended, claims:

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 independent of any application program, and wherein each of the plurality of display areas is associated with one of the plurality of individual programming modules;

(Claim 1, as amended) (emphasis added). Neither Foster nor Cohausz teach or suggest a plurality of display areas independent of any application program and associated with a plurality of individual programming modules. Cohausz teaches a status bar for controlling a display within an application program. Similarly, Foster teaches a status bar associated with an application program, and used to control actions within the application program. Claim 1, on the other hand, claims an independent window region, not associated with any application programs. Therefore, Claim 1 is not obvious over Cohausz in view of Foster.

Similarly, independent claims 11, 15, 25, and 26 claim a plurality of display areas independent of any application program and associated with a plurality of individual programming modules. Therefore, for the same reasons advanced above with respect to Claim 1, claims 11, 15, 25, and 26 are not obvious over Cohausz in view of Foster.

In view of the foregoing amendments and remarks, applicant respectfully submits that all pending claims are in condition for allowance. Such allowance is respectfully requested.

If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to contact Judith A. Szepesi at (408) 720-8598.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 6/25, 1998

  
Judith A. Szepesi  
Registration No. 39,393

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Seventh Floor  
Los Angeles, CA 90025-1026  
(408) 720-8598





# 25/F (NE)

Atty. Docket No. 004860.P1365C2

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 )

DEC 1 / 1998

Group 2700

Examiner: Dela Torre, C.

Art Unit: 2773

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GROUP 2700

AMENDMENT AND RESPONSE TO OFFICE ACTION

Upon  
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Amendment  
1/19/99  
C-2

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

Sir:

In response to the Office Action mailed September 18, 1998, please amend the above-referenced application as follows:

FIRST CLASS CERTIFICATE OF MAILING

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 on

December 10, 1998  
 Date of Deposit  
Edith Fuentes  
 Name of Person Mailing Correspondence  
[Signature]  
 Signature  
12-10-98  
 Date

IN THE CLAIMS

Please amend the claims as follows:

1. (Four Times Amended) 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;
  - 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.

11. (Four Times Amended) 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;
- 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;
- at least one indicia graphics generation logic coupled to the processor and the window generation and control logic, wherein said at least one indicia graphics generation logic generates user sensitive graphics for display in at least one data display area by executing at least one of the plurality of individual programming modules;
- wherein the window generation and control logic determines when said at least one data display area has been selected by the user and signals said at least one indicia graphics generation logic in response to user selection, and further wherein said at least one indicia graphics generation logic initiates a response from said at least one of the plurality of programming modules.

15. (Four Times Amended) A method for generating control information comprising the steps of:



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;

displaying the indicia in each of said plurality of display areas by executing one of a plurality of individual programming modules corresponding to each indicia;

selecting one of the indicia, wherein the step of selecting comprises a first programming module determining which of said plurality of display areas is selected and sending a message to a programming module of said plurality of individual programming modules responsible for generating a display of a selected indicia;

said programming module performing a function in response to a selection.

25. (Once Amended) A system comprising:

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;

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.

.

26. (Once Amended) 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;

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.

#### REMARKS

The foregoing amendments and the following remarks are responsive to the Office Action mailed September 18, 1998. Applicant respectfully requests reconsideration of the present application. Claims 1-31 remain in the application. Claims 1, 11, 15, 25, and 26 have been amended.

The Examiner rejected claims 1-31 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 11, 15, 26, and 26 have been amended to more particularly point out and distinctly claim what Applicant considers the invention.

The Examiner further rejected Claims 26-30 under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (U.S. Patent 4,885,704) ("Takagi I"). Takagi I teaches a document filing apparatus. Specifically, Takagi I teaches a document filing apparatus including"

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 I, column , lines ). Thus, Takagi teaches a document filing apparatus, which is a single application that permits manipulation of documents. Takagi does not teach or suggest a "a window region independently displayed and independently active of any application program, the window region having interactive display areas," as claimed in Claim 26. 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.

Therefore, Takagi does not anticipate, or make obvious claim 26, as amended.



The Examiner further rejected claims 1-3, 8-25 under 25 U.S.C. §103(a) as being unpatentable over Cohausz in view of Takagi I. The Examiner states 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. The Examiner states that Takagi makes up the missing elements in Cohausz.

However, as discussed above, Takagi does not teach or suggest an independently displayed and independently active window region, as claimed. Rather, as can be seen in Figure 2, Takagi teaches a document filing apparatus that includes functionalities, including icons and a function area indicating various devices for inputting and outputting documents that are within the document filing apparatus. Therefore, Takagi does not teach or suggest a window region that is independently displayed and independently active of any application program. Therefore, Claims 1-3, and 8-25 are not anticipated by or obvious over Cohausz in view of Takagi.

The Examiner further rejected claims 4-7. Mills teaches a resizeable window. Mills does not make up the elements missing in Cohausz and Takagi. Mills does not teach or suggest a display area that is independently displayed and independently active of any application program. Therefore, claims 4-7 are not obvious over Cohausz, in view of Takagi, further in view of Mills.

Claim 31 was rejected over Takagi in view of Mills. Claim 31 depends on Claim 26, and incorporates all of the limitations of claim 26. As discussed above, Takagi and Mills, alone or in combination, do not teach or suggest an independently active and independently displayed window, as claimed. Therefore, Claim 31 is not obvious over Takagi in view of Mills.

In view of the foregoing amendments and remarks, applicant respectfully submits that all pending claims are in condition for allowance. Such allowance is respectfully requested.


If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to contact Judith A. Szepesi at (408) 720-8598.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 12/10, 1998

  
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Reopen  
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Atty. Docket No. 004860.P1365C2

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: 2773

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AMENDMENT AND RESPONSE TO OFFICE ACTION

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

Sir:

In response to the Office Action mailed May 6, 1999, please amend the above-referenced application as follows:

IN THE CLAIMS

Please amend the claims as follows:

Sub  
H  
H

1. (Amended) An interactive computer-controlled display system
- 2 comprising:
- 3 a processor;
- 4 a data display screen coupled to the processor;
- 5 a cursor control device coupled to said processor for positioning a cursor on said
- 6 data display screen;

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

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

~~11. (Amended) 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;~~

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

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18 at least one indicia graphics generation logic coupled to the processor and the  
19 window generation and control logic, wherein said at least one indicia graphics  
20 generation logic generates user sensitive graphics for display in at least one data display  
21 area by executing at least one of the plurality of individual programming modules;

22 wherein the window generation and control logic determines when said at least  
23 one data display area has been selected by the user and signals said at least one indicia  
24 graphics generation logic in response to user selection, and further wherein said at least  
25 one indicia graphics generation logic initiates a response from said at least one of the  
26 plurality of programming modules.

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1 15. (Amended) A method for generating control information comprising the  
2 steps of:  
3 creating an operating environment for a plurality of individual programming  
4 modules associated with different application programs that provide status and/or  
5 control functions;

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

14 displaying the indicia in each of said plurality of display areas by executing one  
15 of a plurality of individual programming modules corresponding to each indicia;  
16 selecting one of the indicia, wherein the step of selecting comprises a first  
17 programming module determining which of said plurality of display areas is selected  
18 and sending a message to a programming module of said plurality of individual  
19 programming modules responsible for generating a display of a selected indicia;  
20 said programming module performing a function in response to a selection.

1 25. (Amended) A system comprising:

2 a window generation and control logic to create an operating environment for a  
3 plurality of individual programming modules associated with different application  
4 programs that provide status and/or control functions, wherein the window generation  
5 and control logic generates and displays a first window region having a plurality of  
6 display areas, wherein the first window region is independently displayed and  
7 independently active of any application program, and wherein each of the plurality of  
8 display areas is associated with one of the plurality of individual programming  
9 modules, the first window region and the plurality of independent display areas



10 implemented in a window layer that appears on top of application programming  
11 windows that may be generated;  
12 an indicia generation logic coupled to the data display screen to execute at least  
13 one of the plurality of individual programming modules to generate information for  
14 display in one of the plurality of display areas in the first window region, wherein at  
15 least one of the plurality of display areas and its associated programming module is  
16 sensitive to user input, and further wherein the window generation and control logic  
17 and the indicia generation logic use message-based communication to exchange  
18 information to coordinate activities of the indicia generation logic to enable interactive  
19 display activity.

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1 26. (Amended) 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 individual  
5 programming modules, the first window region and the plurality of independent  
6 display areas implemented in a window layer that appears on top of application  
7 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 least  
10 one of the display areas sensitive to user input.

REMARKS

The foregoing amendments and the following remarks are responsive to the Office Action mailed May 6, 1999. Applicant respectfully requests reconsideration of

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the present application. Claims 1-31 remain in the application. Claims 1, 11, 15, 25, and 26 have been amended.

The Examiner rejected claims 1-31 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 11, 15, 26, and 26 have been amended to more particularly point out and distinctly claim what Applicant considers the invention.

The Examiner further rejected Claims 26-30 under 35 U.S.C. 102(b) as being anticipated by Takagi et al. (U.S. Patent 4,885,704) ("Takagi I"). Takagi I teaches a document filing apparatus. Specifically, Takagi I teaches a document filing apparatus including"

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 I, column , lines ). Thus, Takagi teaches a document filing apparatus, which is a single application that permits manipulation of documents. Takagi does not teach or suggest a "a window region independently displayed and independently active of any application program, as claimed in Claim 26. 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 present invention as claimed sets further that the "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." Takagi does not disclose

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the first window region and independent display areas being in a window layer that appears on top of application programming windows that may be generated.

Therefore, the present invention as claimed does not teach, mention, nor disclose the present invention as claimed.

Moreover, the display areas of Takagi are not interactive. Rather, the display areas display static information, such as "scanner," "printer," "display," etc. Therefore, Takagi does not anticipate, or make obvious claim 26, as amended.

The Examiner further rejected claims 1-3, 8-25 under 25 U.S.C. §103(a) as being unpatentable over Cohausz in view of Takagi I. The Examiner states 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. The Examiner states that Takagi makes up the missing elements in Cohausz.

However, as discussed above, Takagi does not teach or suggest an independently displayed and independently active window region, as claimed. Rather, as can be seen in Figure 2, Takagi teaches a document filing apparatus that includes functionalities, including icons and a function area indicating various devices for inputting and outputting documents that are within the document filing apparatus. Therefore, Takagi does not teach or suggest a window region that is independently displayed and independently active of any application program. Therefore, Claims 1-3, and 8-25 are not anticipated by or obvious over Cohausz in view of Takagi.

The Examiner further rejected claims 4-7. Mills teaches a resizable window. Mills does not make up the elements missing in Cohausz and Takagi. Mills does not teach or suggest a display area that is independently displayed and independently active of any application program. Therefore, claims 4-7 are not obvious over Cohausz, in view of Takagi, further in view of Mills.



Claim 31 was rejected over Takagi in view of Mills. Claim 31 depends on Claim 26, and incorporates all of the limitations of claim 26. As discussed above, Takagi and Mills, alone or in combination, do not teach or suggest an independently active and independently displayed window, as claimed. Therefore, Claim 31 is not obvious over Takagi in view of Mills.

In view of the foregoing amendments and remarks, applicant respectfully submits that all pending claims are in condition for allowance. Such allowance is respectfully requested.


If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to contact Judith A. Szepesi at (408) 720-8598.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 11/8, 1999

  
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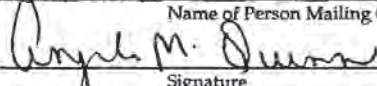
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Patent Attorney. Docket No. 004860.P1365C2

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: 2773

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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.

"Express Mail" mailing label number: EL617183692US  
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 I hereby certify that I am causing this paper or fee to be deposited with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated above and that this paper or fee has been addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231  
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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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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 application 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).



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## 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

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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 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. 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



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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



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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 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 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.

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 associate 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



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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, with 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, 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 located 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.



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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 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 associated with different application programs that provide status and/or control information. Furthermore, none of the references teach or suggest an 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.



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(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 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 is 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 additional, 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 a The First Window Region Implemented in a Private Window Layer that Appears in Front of Windows for All Application 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 application 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



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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 out Deposit Account No. 02-2666.

Respectfully submitted,  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 6/1, 2001

  
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