

(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 689 133 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention of the grant of the patent:
08.08.2001 Bulletin 2001/32

(51) Int Cl.7: **G06F 3/033, G06F 9/44**

(21) Application number: **95303789.2**

(22) Date of filing: **02.06.1995**

(54) **Method of displaying multiple sets of information in the same area of a computer screen**

Verfahren zur Anzeige einer Mehrzahl an Informationsgruppen im gleichen Rechnerbildschirmbereich

Procédé d'affichage d'une pluralité de groupes d'information dans la même région d'un écran d'ordinateur

(84) Designated Contracting States:
DE FR GB IT SE

(30) Priority: **23.06.1994 US 265653**

(43) Date of publication of application:
27.12.1995 Bulletin 1995/52

(73) Proprietor: **ADOBE SYSTEMS INC.**
Mountain View California 94039-7900 (US)

(72) Inventor: **Johnston, Kevin R.**
Mountain View, California 94043 (US)

(74) Representative: **Wombwell, Francis et al**
Potts, Kerr & Co.
15, Hamilton Square
Birkenhead Merseyside L41 6BR (GB)

(56) References cited:

- "IBM System Application Architecture - Common User Access Advanced Interface Design Reference (First Edition) (SC34-4290-00)" October 1991 , INTERNATIONAL BUSINESS MACHINE CORPORATION XP002013624 * page 1 ** page 163 - page 164 *
- IBM TECHNICAL DISCLOSURE BULLETIN, vol. 35, no. 5, October 1992, ARMONK, NY, US, pages 365-366, XP000313008 "TECHNIQUE FOR USING DETACHABLE NOTEBOOK PAGES"
- IBM TECHNICAL DISCLOSURE BULLETIN, vol. 37, no. 8, August 1994, ARMONK, NY, US, pages 181-182, XP000456381 "Dynamically Adding and Removing Pages and Sections from a Notebook Control"
- IBM TECHNICAL DISCLOSURE BULLETIN, vol. 35, no. 7, December 1992, ARMONK, NY, US, page 207 XP000332983 "NOTEBOOK TABS AS TARGET LOCATION FOR DRAG/DROP OPERATIONS"
- IBM TECHNICAL DISCLOSURE BULLETIN, vol. 35, no. 7, December 1992, ARMONK, NY, US, page 196 XP000332978 "NOTEBOOK TABS AS SOURCE LOCATION FOR DRAG/DROP OPERATIONS"

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 0 689 133 B1

Description

BACKGROUND OF THE INVENTION AND PRIOR ART

[0001] As software programs become more complex, one of the biggest issues that program designers face is making all of a software program's controls easily accessible to users within a user interface. Most software products act on a central depository called a document, whose content a user creates and edits. A document is typically displayed in a rectangular region of the display screen called a document window. A spreadsheet user arranges numbers and titles in a spreadsheet document which acts like a 2-dimensional table. A word-processing user edits a document which is designed to visually mimic a sheet of paper. An image software user works on a document which looks like a photograph.

[0002] To create and perform actions on these documents, programmers have used a variety of user interface elements such as menus, dialog boxes and floating palettes. Pull-down menus, such as the one shown in Fig. 1, are typically lists of commands which can be hidden and activated or pulled down with a pointing or cursor control device, such as a "mouse" or trackball, or a keyboard command. In the example of Fig. 1, a click on command word "View" 1 in the menu at the top of the screen will cause the pull-down menu 2 to appear. These single-word commands take up very little screen real estate because the pull-down menu, in its collapsed state, has a very compact form, such as a single command word.

[0003] Dialog boxes, such as the one shown in Fig. 2, are interface elements that are typically composed of rectangular regions that appear outside of the document window. While a dialog box is active, action within the document is usually halted while the user is requested to select one or more of a number of options identified within the dialog box. The dialog box is then dismissed and disappears, and the document is updated based upon the selection which the user made from the dialog box.

[0004] Floating palettes (or simply "palettes"), unlike dialog boxes, are typically rectangular regions that "float" above or near the document window or even inside it and contain commands or tools which are used in an interactive fashion. As opposed to dialog boxes, floating palettes are "non-modal". This means that, unlike dialog boxes, actions occurring within the document are not halted while the palettes are being accessed by the user. Accordingly, floating palettes are most useful for holding tools and commands that a user needs to access interactively in tandem with the document itself. In the example of Adobe Photoshop™, floating palettes are used to select colors, document layers or tools, among other things.

[0005] As software becomes more complex, the number of possible actions and commands within each

program rapidly multiplies. Menus become larger and longer; dialog boxes proliferate; and the number of required floating palettes grows. Thus, one of the most important tasks of the software creator is to manage the growing complexity of a program's user interface. The objective is to make all of a program's capabilities easily accessible and understandable, yet keep as much as possible of the document itself fully accessible and visible. This requires the minimization of the screen real estate used for the user interface elements discussed above, particularly those which remain on the screen for long periods.

[0006] In the screen example shown in Fig. 3 from the Microsoft Excel™ program, five of the nine possible floating palettes 3, 4, 5, 6 and 7, which Excel terms "tool-bars", have been made accessible. Each of the icons (pictorial representations of commands) situated in these named palettes "Utility", "Macro", "Drawing", "Formatting" and "Chart", executes an Excel command when accessed by the mouse. Note, however, that these five palettes obscure a great deal of the document window, making it more difficult for the user to view and manipulate data within the document. This illustrates the problem of making commands easily accessible while maintaining as much as possible of the document accessible at the same time.

[0007] There are several ways that software engineers have tried to resolve these conflicting goals. The most basic way is to switch the floating palettes from visible to invisible when specific menu commands are chosen. For example, Adobe Photoshop has commands that enable a user to selectively hide or show the "Colors" palette.

[0008] Microsoft Excel, as shown in Fig. 3, implements two other popular schemes. In the case of the "Macro" palette 4, for example, movement of the tiny box 8 in the lower right hand corner allows the palette to be reoriented. As shown in Fig. 4, the "Macro" palette can be oriented either vertically or horizontally.

[0009] The second mechanism that Excel employs allows users to create custom palettes which contain the user's own private selection of command icons. Each of the icons on these palettes symbolizes and activates a selected Excel command. In this fashion, a user can customize the program so the commands that are used most often can be made the most accessible.

[0010] As will be apparent, all of these solutions solve part of the problem. However, as the number and variety of desirable floating palettes grow, additional real estate saving techniques must be invented.

[0011] Other examples of the prior art devices are discussed in IBM System Application Architecture "Common User Access Advanced Interface Design Reference", First edition, SC 34-4290-00, October 1991, pages 1, 163, 164 and in IBM Technical Disclosure Bulletin Volume 35, No. 5, October 1992, pages 365 and 366, which references discuss techniques for organising and labelling pages in a book or for making copies of pages

thereof.

BRIEF DESCRIPTION OF THE INVENTION

[0012] According to the present invention there is provided a method for combining an additional set of information into a group of multiple sets of information, as set forth in claim 1.

[0013] Also, there is provided a method for removing a set of information from a group of multiple sets of information, as set forth in claim 6.

[0014] Briefly, the method for displaying on a computer screen multiple sets of information needed on a recurring basis comprises the following steps: (1) establishing an area on the computer screen in which the multiple sets of information are to be displayed, the area having a size which is less than the entire area of the screen; (2) providing within that area a plurality of selection indicators, one for each of the multiple sets of information; and (3) selecting one of the multiple sets of information for display within the established area by pointing to one of the selection indicators within the established area, whereby the selected set of information will be substituted within the same area for the set of information which previously had been displayed within the established area. The user can combine an additional set of information into the multiple set from a different area of the display, and the additional set may then be selected in the same manner as the other sets. When the user no longer wants the sets of information to be combined, he or she may point to one of the selection indicators within the selected area and move or drag one of the selected sets of information away from the established area.

[0015] The method described herein can work in conjunction with the prior art techniques, described above, providing still more savings in screen real estate when floating palettes are employed. Using the method, the same screen can be used for these multiple sets of information, thereby freeing up more area of the document for user access. Alternatively, this space saving technique can be employed to make available more floating palettes than were previously possible with prior art techniques.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016]

Fig. 1 illustrates the use of pull-down menus in a computer program;

Fig. 2 illustrates a typical dialog box in a computer program;

Fig. 3 illustrates the use of floating palettes in a computer program;

Fig. 4 illustrates the use of re-orientable palettes in a computer program;

Fig. 5 shows an arrangement of floating palettes of

the invention with one palette overlapping another; Fig. 6 shows two separate combinable palettes of the type used in the invention before they are combined;

Figs. 7 and 8 show two examples of combined floating palettes in accordance with the invention; and Fig. 9 illustrates the control flow for the combinable palettes of a preferred embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0017] The invention works with floating palettes that may be used in accordance with prior art techniques. For example, the "Scratch", "Swatches" and "Picker" palettes, shown in Fig. 5 as palettes 10, 12 and 14, respectively, are three different sets of controls used for selecting colors in the Adobe Photoshop program. As with typical prior art floating palettes, they can be moved anywhere on the screen. They can be overlapped, as is shown in Fig. 5, where "Picker" palette 14 is partially overlapped onto "Swatch" palette 12. And they can be hidden by clicking on the "close boxes" 16, 18 and 20, respectively located in the upper left corner of each of the three palettes 10, 12 and 14 in Fig. 5. Once hidden, a palette is re-activated, as is well known in the art, by choosing an appropriate menu command which designates the hidden palette. As with normal Macintosh® software, clicking on any of boxes 16, 18 or 20 totally removes the palette containing that box from the screen. In accordance with this invention, any hidden palettes underneath the top one would also be removed.

[0018] The technique of the invention departs from prior art solutions to the screen real estate saving problem by allowing multiple palettes to be combined so that they occupy the same screen real estate and move as a combined unit. In accordance with the invention, by clicking on the title control tabs 22, 24 or 26 of one of palettes 10, 12 or 14, respectively, shown as folder tabs entitled "Scratch", "Swatches" and "Picker" just under the top left corner of each of these palettes 10, 12 and 14, a particular palette is selected. For example, in Fig. 6, if "Scratch" palette 10 is selected (by clicking on the "Scratch" tab) and dragged to the left so as to partially overlap the "Swatches" palette 12, as shown by the dotted box 11 in Fig. 6, instead of the palettes remaining partially overlapped, as shown by the dotted box 11 in Fig. 6, they will be physically combined in area 40, as shown in Fig. 7.

[0019] In their combined state, shown as screen area 40 in both Figs. 7 and 8, the "Scratch" and "Swatches" palettes 10 and 12 move as one and occupy the exact same physical screen space 40 as a single palette. Screen area 40 in Fig. 7 shows the "Scratch" palette 10 selected and visible, the "Swatches" palette 12 being hidden behind it with only its control tab 34 visible. The same screen area 40 in Fig. 8 shows the "Scratch" palette 10 hidden with only its control tab 36 visible and the

"Swatches" palette 12 is selected and fully visible. It is important to note that the tab controls of both palettes always remain accessible, as shown. When combined, the palette control tabs of the two unified palettes assume one of two states: active, as shown by "Scratch" tab 30 in Fig. 7 and "Swatches" tab 32 in Fig. 8, or inactive, as shown by "Swatches" tab 34 in Fig. 7 and "Scratch" tab 36 in Fig. 8. Only the active palette is displayed, not the inactive one. Clicking on an inactive palette control tab, which always remains displayed, makes that palette the active one, and makes the formerly active palette inactive. By clicking on tab 34 in screen area 40 in Fig. 7, for example, the inactive "Swatches" palette 12 will replace the active and visible "Scratch" palette 10 as the palette in view, as shown in screen area 40 in Fig. 8.

[0020] Virtually any number of palettes can be combined, one behind the other, by this same technique, not just two. The only requisite is that the tabs of the hidden palettes always be visible so an inactive palette can be identified and retrieved. Combined palettes may easily be separated by the same technique as used for combining them, as illustrated in Fig. 6. Clicking on the title control tab 34 in Fig. 7 of the inactive "Swatches" palette and dragging it outside of the combined screen area 40 will liberate the hidden "Swatches" palette 12 and place "Swatches" palette 12 in an area of the screen where it can be viewed.

[0021] The method of the invention is described in more detail using the flow chart of Fig. 9. The method starts at box 50 where the user clicks the pointer on the floating palette control tab. At step 52 a determination is made whether the mouse button has been released. If the answer is yes, a second determination is made at step 54 as to whether the selected palette control tab was behind other tabs. The tab will be "behind" other tabs when it belongs to an inactive palette which is combined with an active palette. If the answer to that question is yes, the selected tab is made active, the other tabs with which it is combined are made inactive and its palette contents are made visible. If desired, the palette indicated by the selected tab also may be resized, as is well known in the art, for example, in Microsoft "Windows". The palette options are brought to the foreground at the same time. On the other hand, if the selected tab was determined at step 54 not to be combined with other tabs, or is already active, then nothing further need be done.

[0022] If it was determined at step 52 that the mouse button had not been released, a determination is made at step 56 whether the selected tab was dragged past the edge of the screen area of the palette controlled by the selected tab (such as screen area 40 in Figs. 7 and 8). If not, nothing further is done. If so, however, at step 58 a determination is made whether the selected palette is currently combined with any others. If so, the selected palette is highlighted. Moreover, the palette associated with the selected tab is separated from the inactive pal-

ettes in the selected palette group.

[0023] If the selected palette was determined in step 58 not to be combined with any others, then a determination is made at step 60 whether the tab is now on top of another palette. If so, the palette which the selected tab is on top of is highlighted. In addition, the palette associated with the selected tab is combined with the palette that it is on top of. If the determination in step 60 finds that the tab is not now on top of another palette, the selected palette is merely moved the distance that the tab was dragged, as was determined at step 56.

[0024] The technique of the invention provides a way of combining palette controls to allow multiple sets of controls to occupy the same screen space. The invention allows any number of palettes to be combined or separated at the user's discretion.

[0025] A general description of the device and method of the present invention as well as a preferred embodiment of the present invention has been set forth above. For example, the palettes could be somewhat different from each other in area, and a smaller one may be placed on top of a larger one (or vice-versa), where either the smaller one would expand to fill the space of the larger, or the larger one shrink to conform to the smaller, taking into account any size limitations imposed upon one or more palettes by the underlying program.

Claims

1. A method for combining on a computer display an additional set of information displayed in a first area of the display and having associated with it a selection indicator into a group of multiple sets of information needed on a recurring basis displayed in a second area of the screen, comprising the steps of:

establishing the second area (10) on the computer display in which the group of multiple sets of information is displayed, the second area having a size which is less than the entire area of the computer display, the second area (10) displaying a first of the multiple sets of information;

providing within the second area (10) a plurality of selection indicators (30,34), each one associated with a corresponding one of the multiple sets of information;

selecting a second of the multiple sets of information for display within the second area by activating a selection indicator (34) associated with a second of the multiple sets of information, whereby the second of the multiple sets of information is substituted for the first of the multiple sets of information within the area of the display; and

combining the additional set of information, displayed in the first area of the display into the

group of multiple sets of information so that the additional set of information may be selected using its selection indicator (34) in the same manner as the other sets of information in the group.

2. The method of claim 1 wherein the established area is movable to various locations around the display.
3. The method of claim 1 wherein the additional set of information is combined by pointing to a selection indicator for the additional set of information and dragging that selection indicator into the second area.
4. The method of claim 1 wherein one of the multiple sets of information in the established area is moved away from the second area.
5. The method of claim 4 wherein the move is accomplished by activating a selection indicator for the set of information to be moved and dragging that selection indicator away from the second area.
6. A method for removing a set of information from a group of multiple sets of information on a computer display, comprising the steps of:
 - establishing an area (10) on the computer display in which the group of multiple sets of information is to be displayed, the area having a size which is less than the entire area of the computer display;
 - displaying within the area a first of the multiple sets of information from the group of multiple sets of information;
 - providing within the area a plurality of selection indicators (30,34), each being associated with one of the multiple sets of information;
 - selecting a second of the multiple sets of information from the group of multiple sets of information for displaying within the area by activating a selection indicator (34) associated with the second of the multiple sets of information, whereby the second of the multiple sets of information is substituted on the display for the first of the multiple sets of information; and
 - removing and liberating a set of information from the group of multiple sets of information so that the removed set of information is no longer associated with group and displaying the removed set of information in a different area of the display from the established area.
7. The method of claim 6 wherein the set of information is removed by pointing to the selection indicator associated with that set of information and dragging the set of information out of the established area.

8. The method of claim 6 wherein the established area is movable to another location on the display.

5 Patentansprüche

1. Ein Verfahren zum Vereinigen, auf einem Computerdisplay, eines zusätzlichen Satzes von Informationen, die in einem ersten Bereich des Displays angezeigt werden und denen ein Auswahlindikator zugeordnet ist, mit einer Gruppe mehrerer Sätze wiederholt benötigter Informationen, die in einem zweiten Bereich des Bildschirm angezeigt werden, umfassend die Schritte:

Bilden des zweiten Bereichs (10) auf dem Computerdisplay, in dem die Gruppe mehrerer Sätze von Informationen angezeigt wird, wobei der zweite Bereich ein Größe aufweist, die geringer ist als die vollständige Fläche des Computerdisplays, wobei der zweite Bereich (10) einen ersten der mehreren Sätze von Informationen anzeigt;

Bereitstellen einer Mehrzahl von Auswahlindikatoren (30, 34), von denen jeder einem zugehörigen der mehreren Sätze von Informationen zugeordnet ist, in dem zweiten Bereich (10);
Auswählen eines zweiten der mehreren Sätze von Informationen zur Anzeige in dem zweiten Bereich durch Aktivieren eines Auswahlindikators (34), der einem zweiten der mehreren Sätze von Informationen zugeordnet ist, wodurch der erste der mehreren Sätze von Informationen in dem Bereich des Displays durch den zweiten der mehreren Sätze von Informationen ausgetauscht wird; und

Vereinigen des zusätzlichen Satzes von Informationen, der in dem ersten Bereich des Displays angezeigt wird, mit der Gruppe mehrerer Sätze von Informationen derart, daß der zusätzliche Satz von Informationen unter Verwendung seines Auswahlindikators (34) auf die gleiche Weise wie die anderen Sätze von Informationen in der Gruppe ausgewählt werden kann.

2. Das Verfahren nach Anspruch 1, wobei der gebildete Bereich zu verschiedenen Orten auf dem Display bewegbar ist.
3. Das Verfahren nach Anspruch 1, wobei der zusätzliche Satz von Informationen vereinigt wird, indem auf einen Auswahlindikator für den zusätzlichen Satz von Informationen gezeigt und dieser Auswahlindikator in den zweiten Bereich gezogen wird.
4. Das Verfahren nach Anspruch 1, wobei einer der mehreren Sätze von Informationen in dem gebilde-

ten Bereich aus dem zweiten Bereich herausbewegt wird.

5. Das Verfahren nach Anspruch 4, wobei das Bewegen ausgeführt wird, indem ein Auswahlindikator für den zu bewegendem Satz von Informationen aktiviert wird und der Auswahlindikator aus dem zweiten Bereich herausgezogen wird. 5
6. Ein Verfahren zum Entfernen eines Satzes von Informationen aus einer Gruppe mehrerer Sätze von Informationen auf einem Computerdisplay, umfassend die Schritte: 10
- Bilden eines Bereichs (10) auf dem Computerdisplay, in welchem die Gruppe mehrerer Sätze von Informationen angezeigt werden soll, wobei der Bereich eine Größe aufweist, die geringer als die vollständige Fläche des Computerdisplays ist; 15
- Anzeigen eines ersten der mehreren Sätze von Informationen aus der Gruppe mehrerer Sätze von Informationen in dem Bereich; 20
- Bereitstellen einer Mehrzahl von Auswahlindikatoren (30, 34) in dem Bereich, von denen jeder einem der mehreren Sätze von Informationen zugeordnet ist; 25
- Auswählen eines zweiten der mehreren Sätze von Informationen aus der Gruppe mehrerer Sätze von Informationen zur Anzeige in dem Bereich durch Aktivieren eines Auswahlindikators (34), der dem zweiten der mehreren Sätze von Informationen zugeordnet ist, wodurch der erste der mehreren Sätze von Informationen auf der Anzeige durch den zweiten der mehreren Sätze von Informationen ausgetauscht wird; und 30
- Entfernen und Freisetzen eines Satzes von Informationen aus der Gruppe mehrerer Sätze von Informationen derart, daß der entfernte Satz von Informationen nicht mehr der Gruppe zugeordnet ist, und der entfernte Satz von Informationen in einem von dem gebildeten Bereich abweichenden Bereich des Displays angezeigt wird. 40
7. Das Verfahren nach Anspruch 6, wobei der Satz von Informationen entfernt wird, indem auf den diesem Satz von Informationen zugeordneten Auswahlindikator gezeigt und der Satz von Informationen aus dem gebildeten Bereich herausgezogen wird. 50
8. Das Verfahren nach Anspruch 6, wobei der gebildete Bereich an einen anderen Ort auf dem Display bewegbar ist. 55

Revendications

1. Procédé de combinaison sur un affichage d'ordinateur d'un ensemble additionnel d'information affiché dans une première zone de l'affichage et possédant en association un indicateur de sélection dans un groupe de plusieurs ensembles d'information requis sur une base récurrente affiché dans une seconde zone de l'écran, comprenant les étapes suivantes :
- ♦ l'établissement de la seconde zone (10) sur l'affichage d'ordinateur dans laquelle le groupe de plusieurs ensembles d'information est affiché, la seconde zone ayant une dimension qui est inférieure à la zone total de l'affichage d'ordinateur, la seconde zone (10) affichant un premier parmi plusieurs ensembles d'information ;
 - ♦ la prévision dans la seconde zone (10) d'une pluralité d'indicateurs de sélection (30, 34), chacun d'eux étant associé à un ensemble correspondant de la pluralité d'ensembles d'information ;
 - ♦ la sélection d'un second ensemble de la pluralité d'ensembles d'information pour un affichage dans la seconde zone par activation d'un indicateur de sélection (34) associé à un second ensemble de la pluralité d'ensembles d'information, le second ensemble de la pluralité d'ensembles d'information étant ainsi substitué au premier de la pluralité d'ensembles d'information dans la zone de l'affichage ; et
 - ♦ la combinaison d'un ensemble additionnel d'information, affiché dans la première zone de l'affichage dans le groupe des multiples ensembles d'information de telle façon que l'ensemble additionnel d'information puisse être sélectionné à l'aide de son indicateur de sélection (34) de la même façon que les autres ensembles du groupe.
2. Procédé selon la revendication 1, selon lequel la zone établie est mobile en divers points autour de l'affichage. 45
3. Procédé selon la revendication 1, selon lequel l'ensemble additionnel d'information est combiné par pointage sur un indicateur de sélection pour l'ensemble additionnel d'information et par tirage de cet indicateur de sélection dans la seconde zone. 50
4. Procédé selon la revendication 1, selon lequel un parmi la pluralité d'ensembles d'information de la zone établie est écarté de la seconde zone. 55

5. Procédé selon la revendication 4, selon lequel le déplacement est effectué par activation d'un indicateur de sélection pour l'ensemble d'information devant être déplacé et par tirage de cet indicateur de sélection à l'écart de la seconde zone. 5
6. Procédé pour enlever un ensemble d'information d'un groupe de plusieurs ensembles d'information sur un écran d'ordinateur, comprenant les étapes suivantes : 10
- ◆ l'établissement d'une zone (10) sur l'affichage d'ordinateur dans laquelle le groupe de plusieurs ensembles d'information doit être affiché, la zone ayant une dimension qui est inférieure à la zone total de l'affichage d'ordinateur ; 15
 - ◆ l'affichage dans la zone d'un premier des multiples ensembles d'information à partir du groupe de plusieurs ensembles d'information ; 20
 - ◆ la prévision dans la zone d'une pluralité d'indicateurs de sélection (30, 34), chacun d'eux étant associé à un ensemble correspondant de la pluralité d'ensembles d'information ; 25
 - ◆ la sélection d'un second ensemble de la pluralité d'ensembles d'information à partir du groupe de plusieurs ensembles d'information pour un affichage dans la zone par activation d'un indicateur de sélection (34) associé à un second ensemble de la pluralité d'ensembles d'information, le second ensemble de la pluralité d'ensembles d'information étant ainsi substitué sur l'affichage au premier de la pluralité d'ensembles d'information ; et 30
 - ◆ l'enlèvement et la libération d'un ensemble d'information à partir du groupe de plusieurs ensembles d'information de telle façon que l'ensemble d'information enlevé ne soit plus associé au groupe et l'affichage de l'ensemble d'information enlevé dans un zone de l'affichage différente de la zone établie. 40 45
7. Procédé selon la revendication 6, selon lequel l'ensemble d'information est enlevé par pointage sur l'indicateur de sélection associé à cet ensemble d'information et par tirage de l'ensemble d'information en dehors de la zone établie. 50
8. Procédé selon la revendication 6, selon lequel la zone établie est mobile vers une autre position sur l'affichage. 55

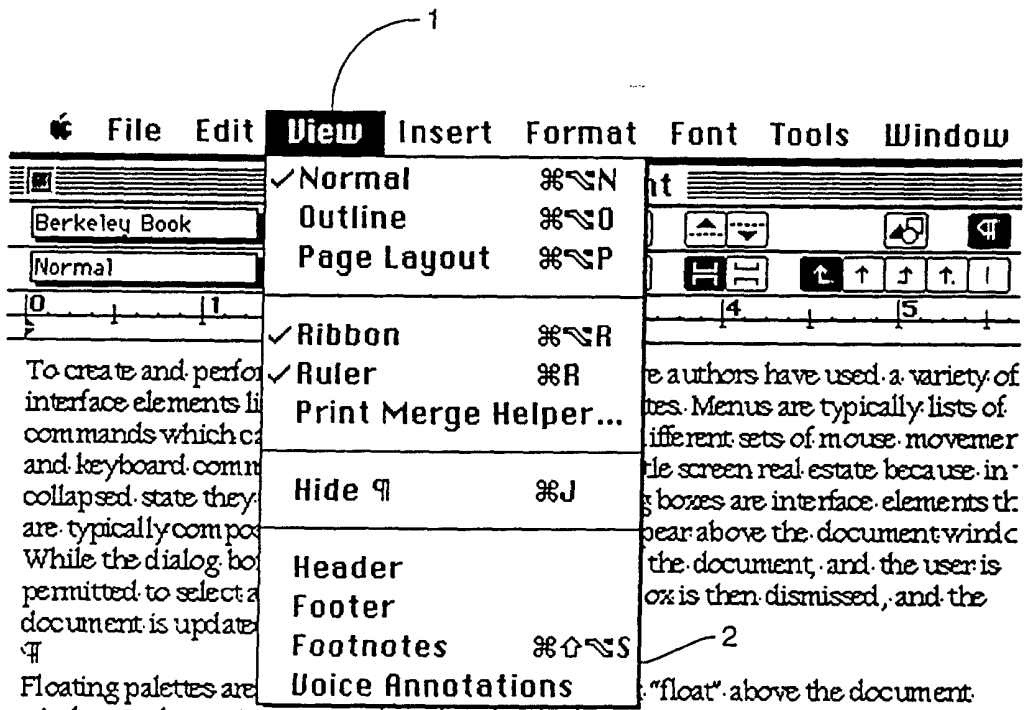


FIGURE 1

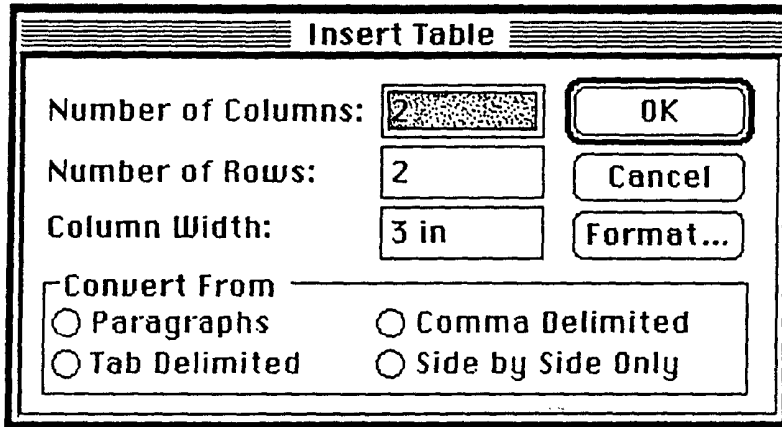


FIGURE 2

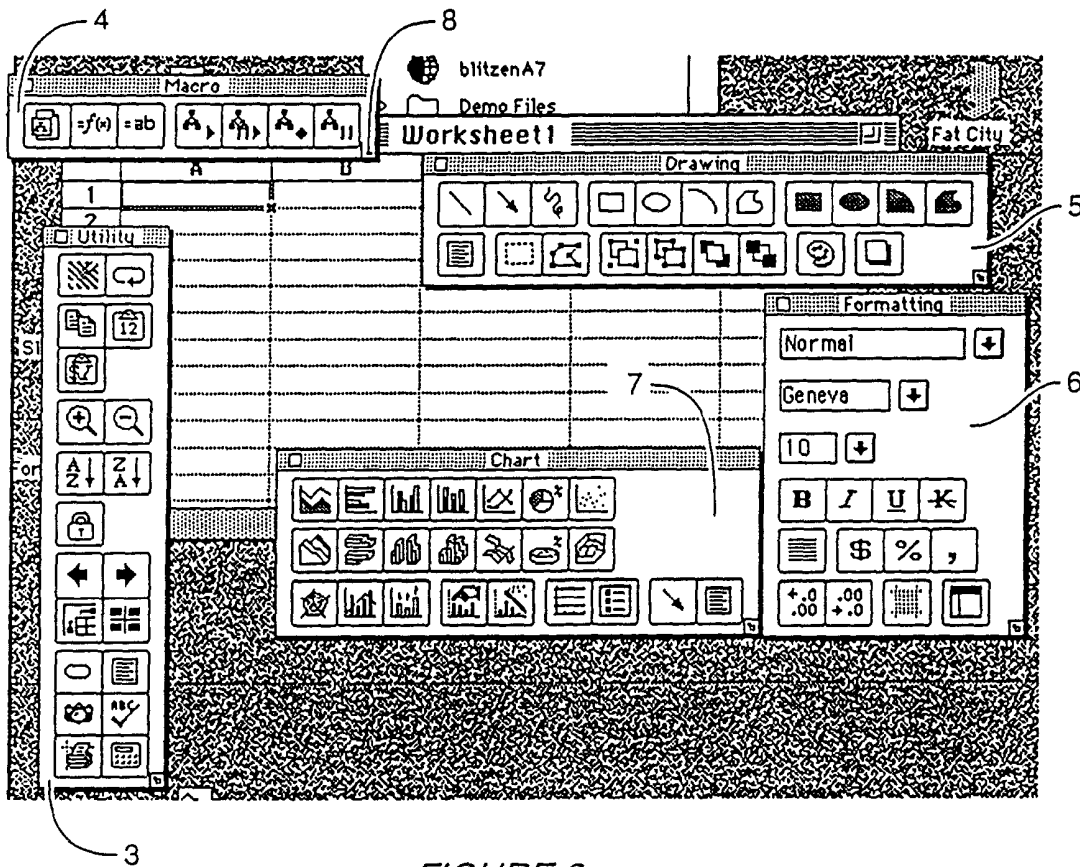


FIGURE 3

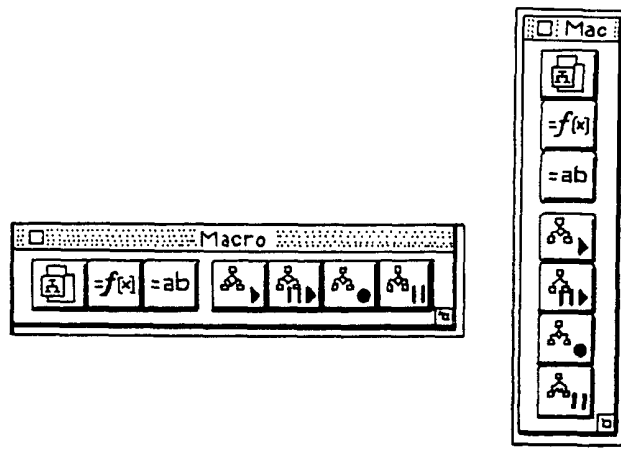


FIGURE 4

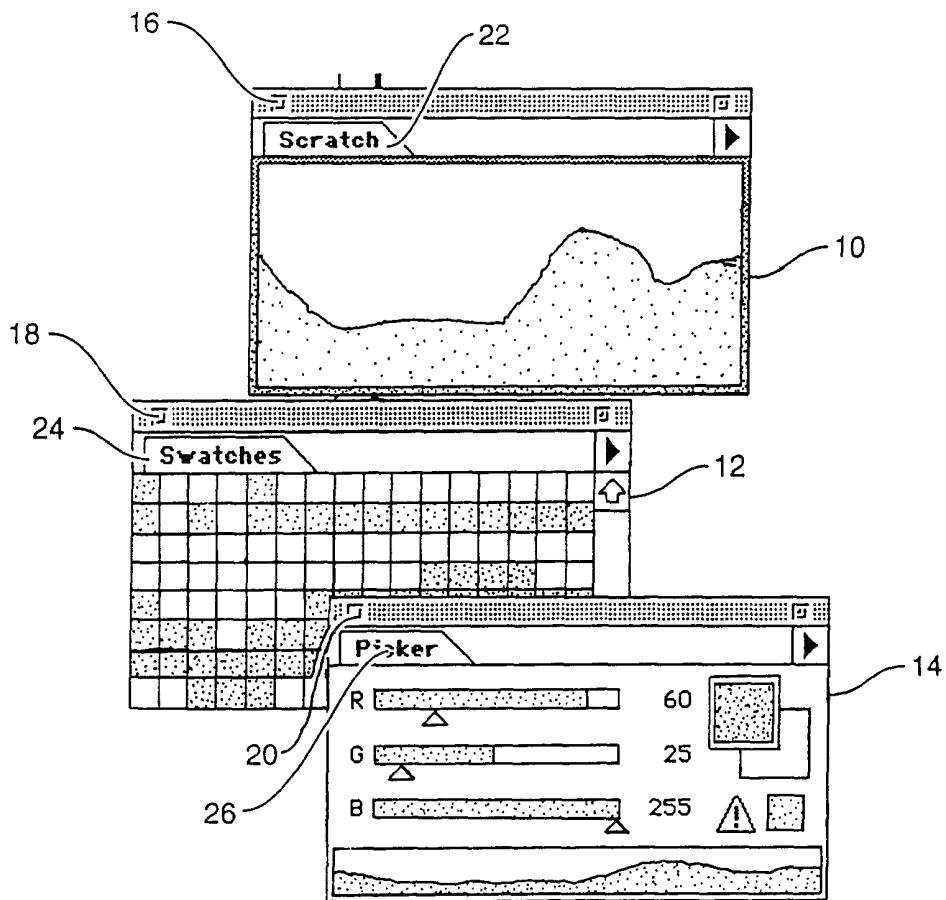


FIGURE 5

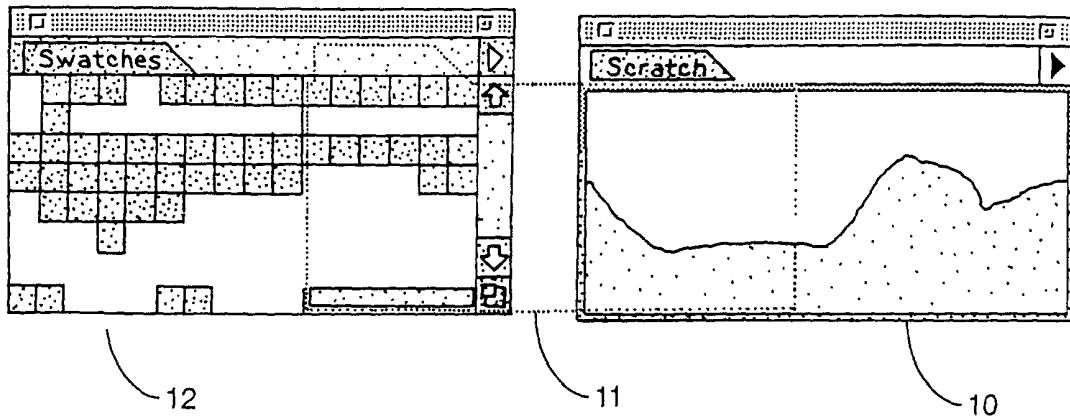


FIGURE 6

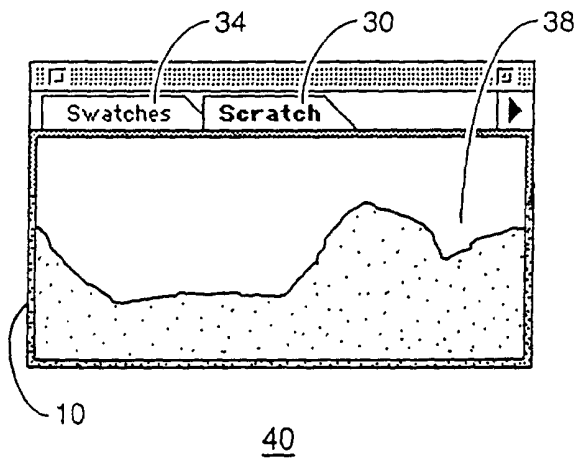


FIGURE 7

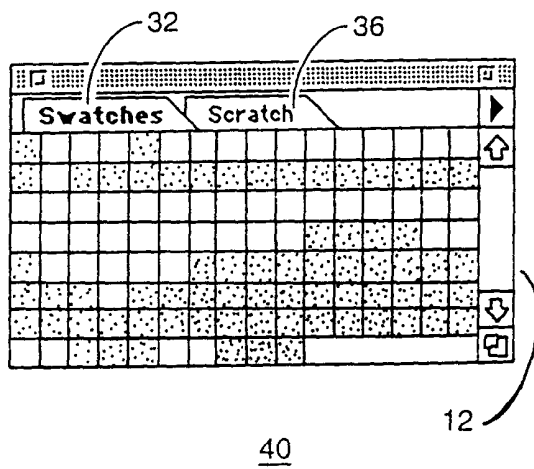


FIGURE 8

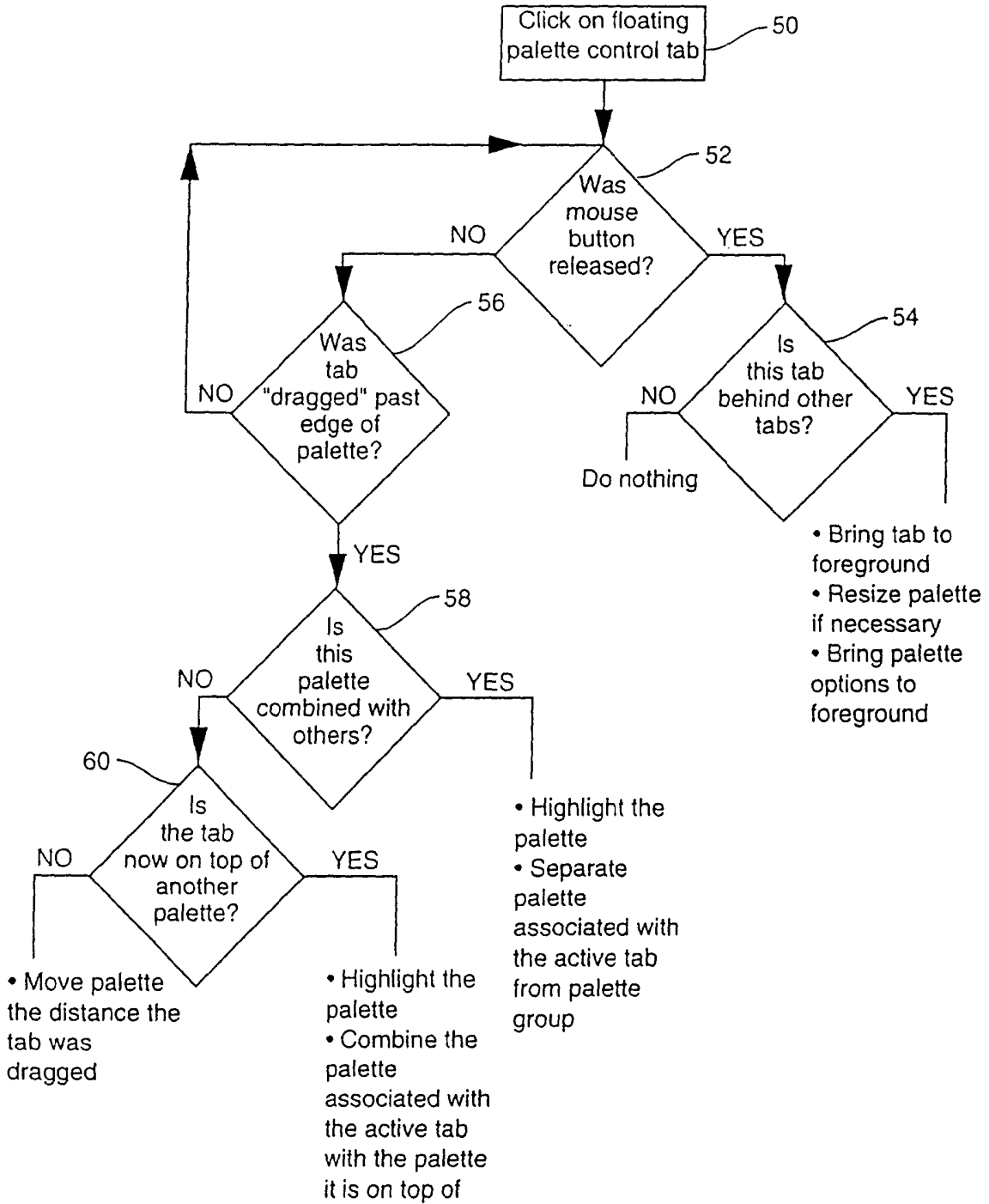


FIGURE 9