

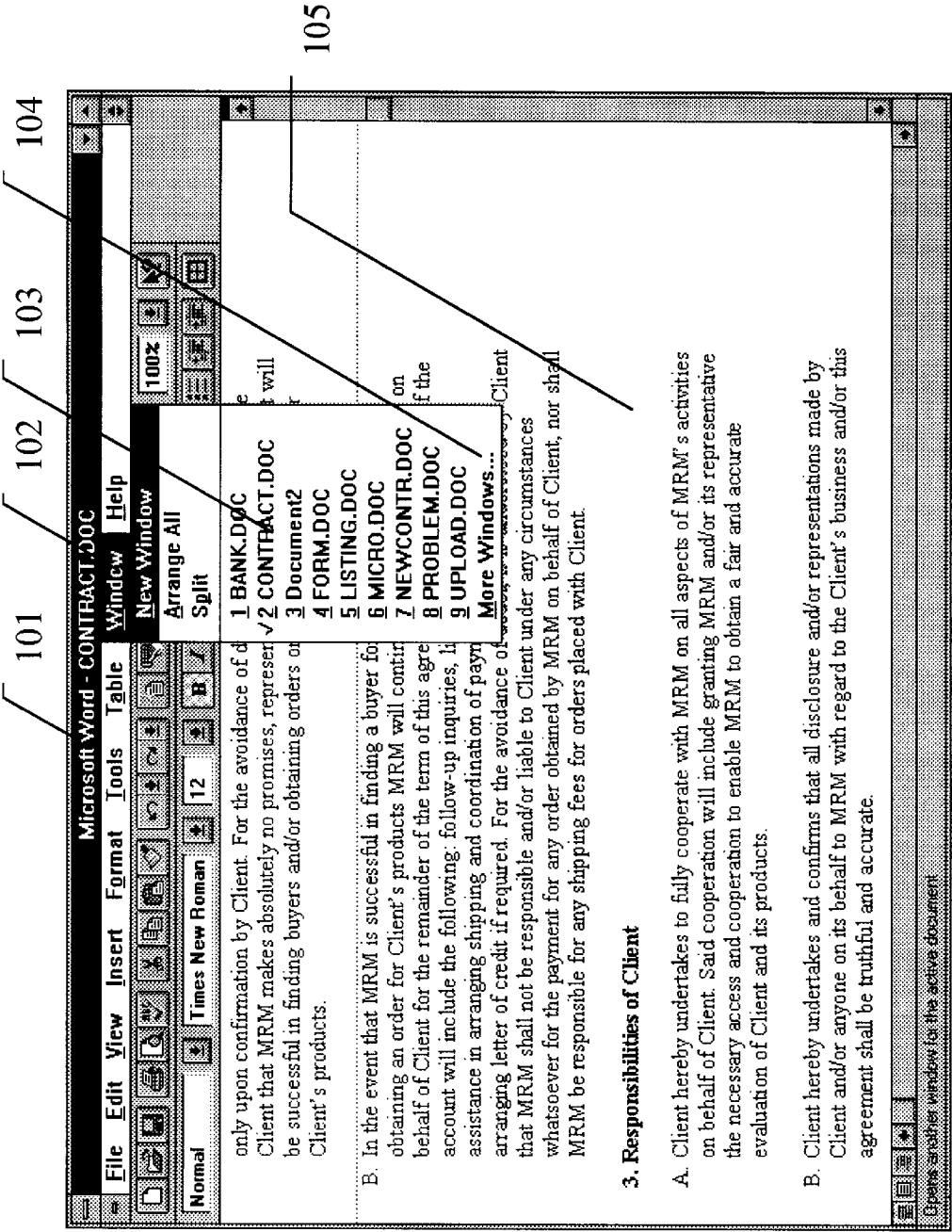


FIG. 1

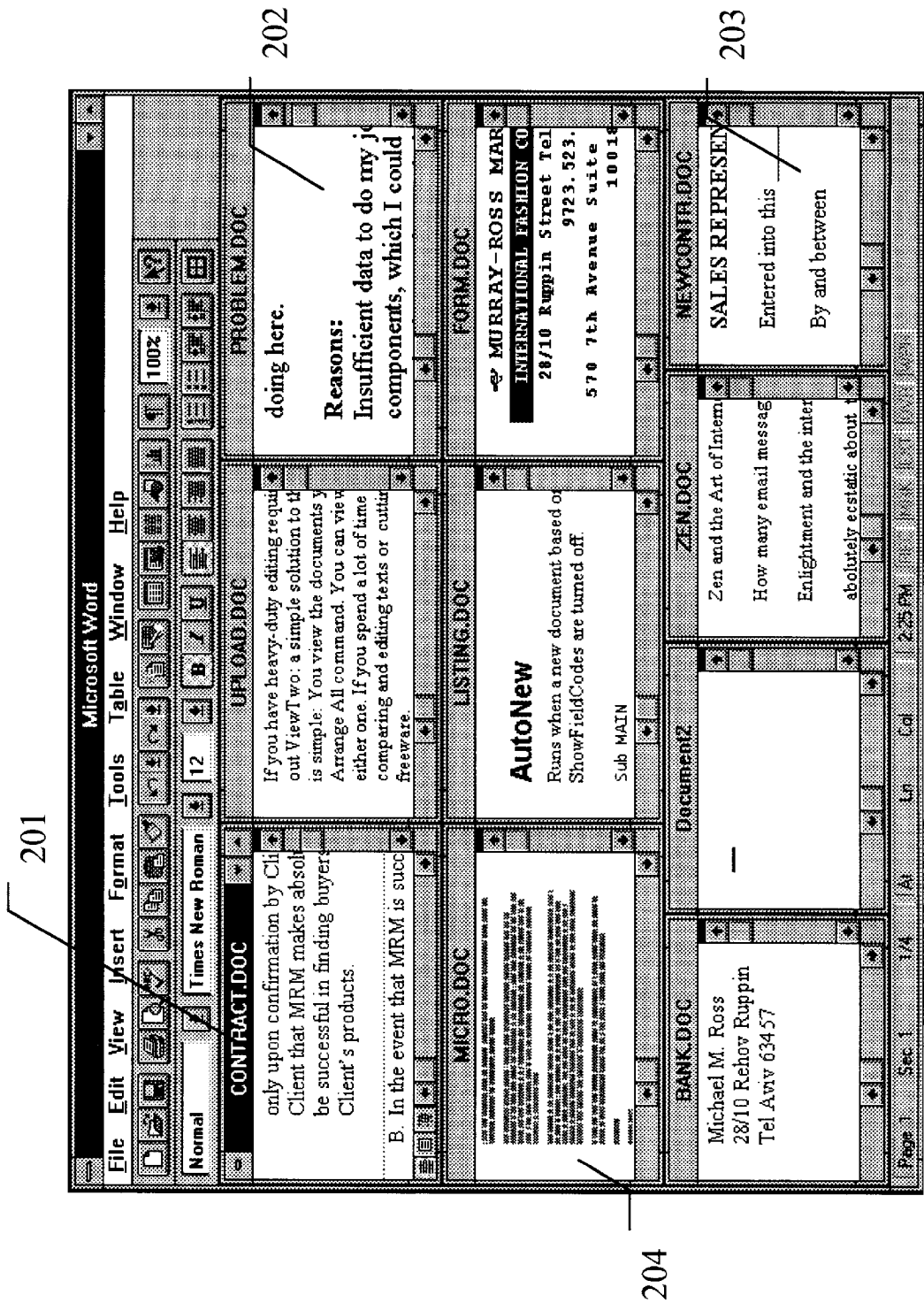
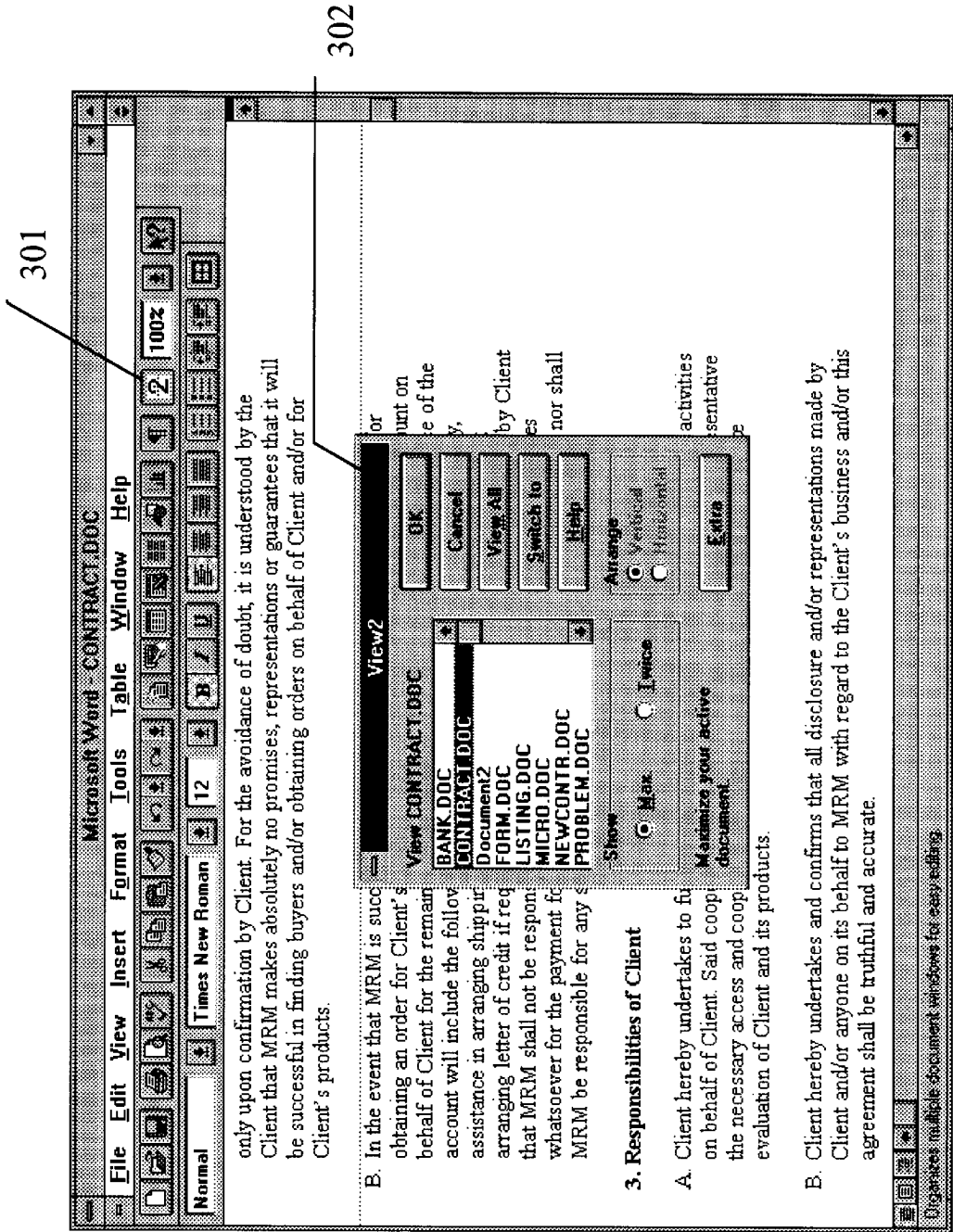


FIG. 2



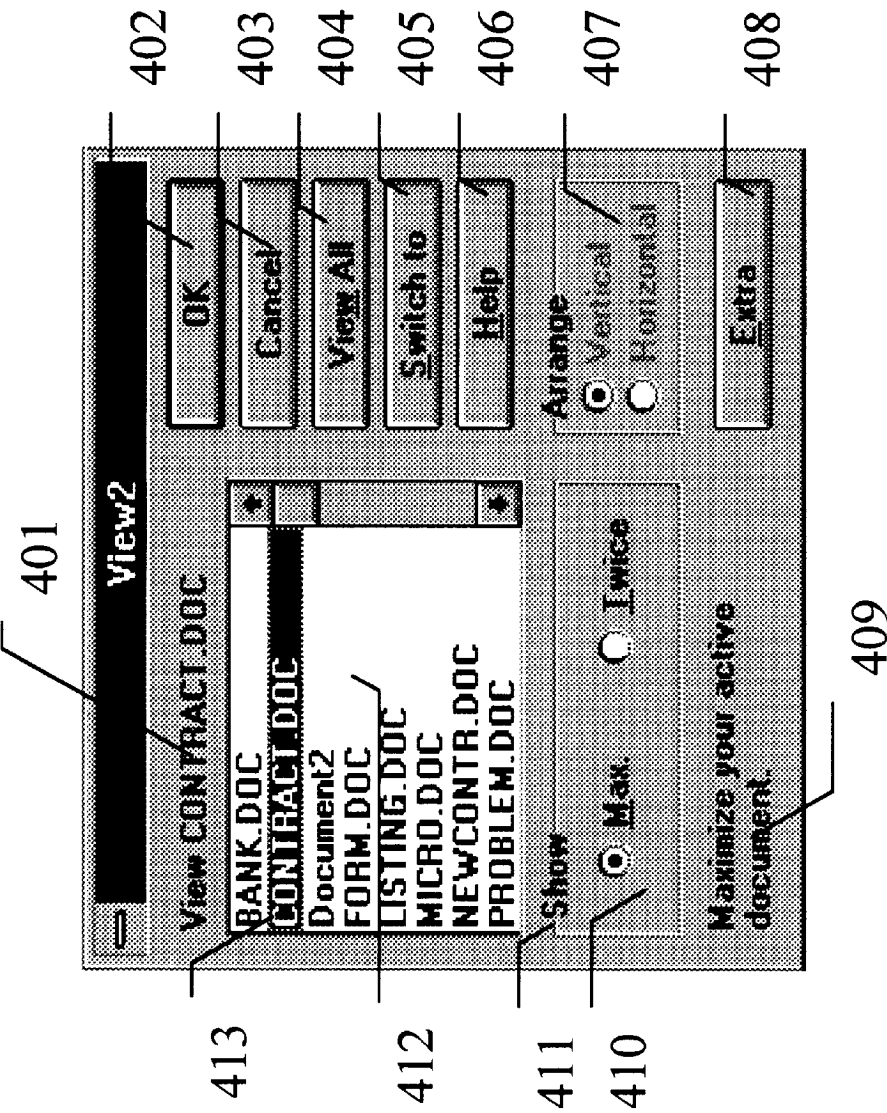


FIG. 4

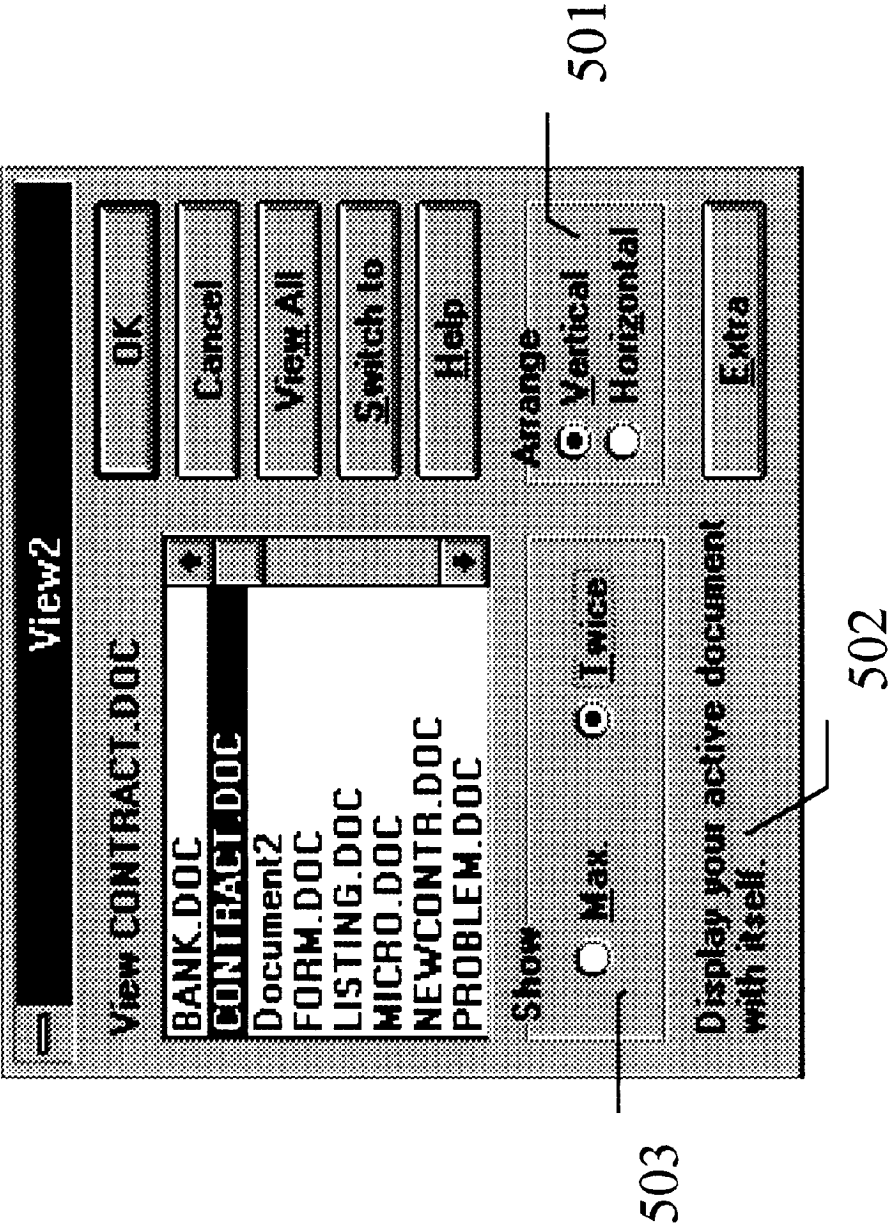


FIG. 5

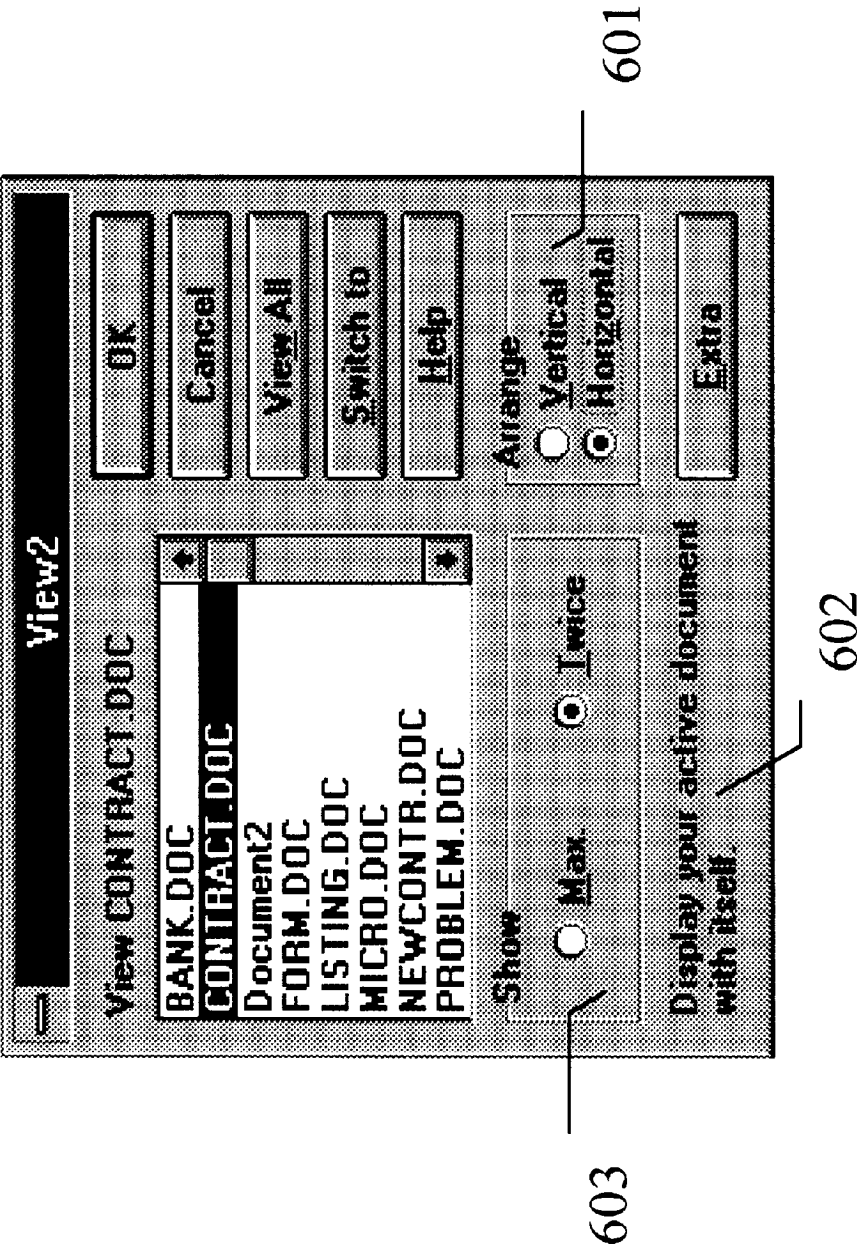


FIG. 6

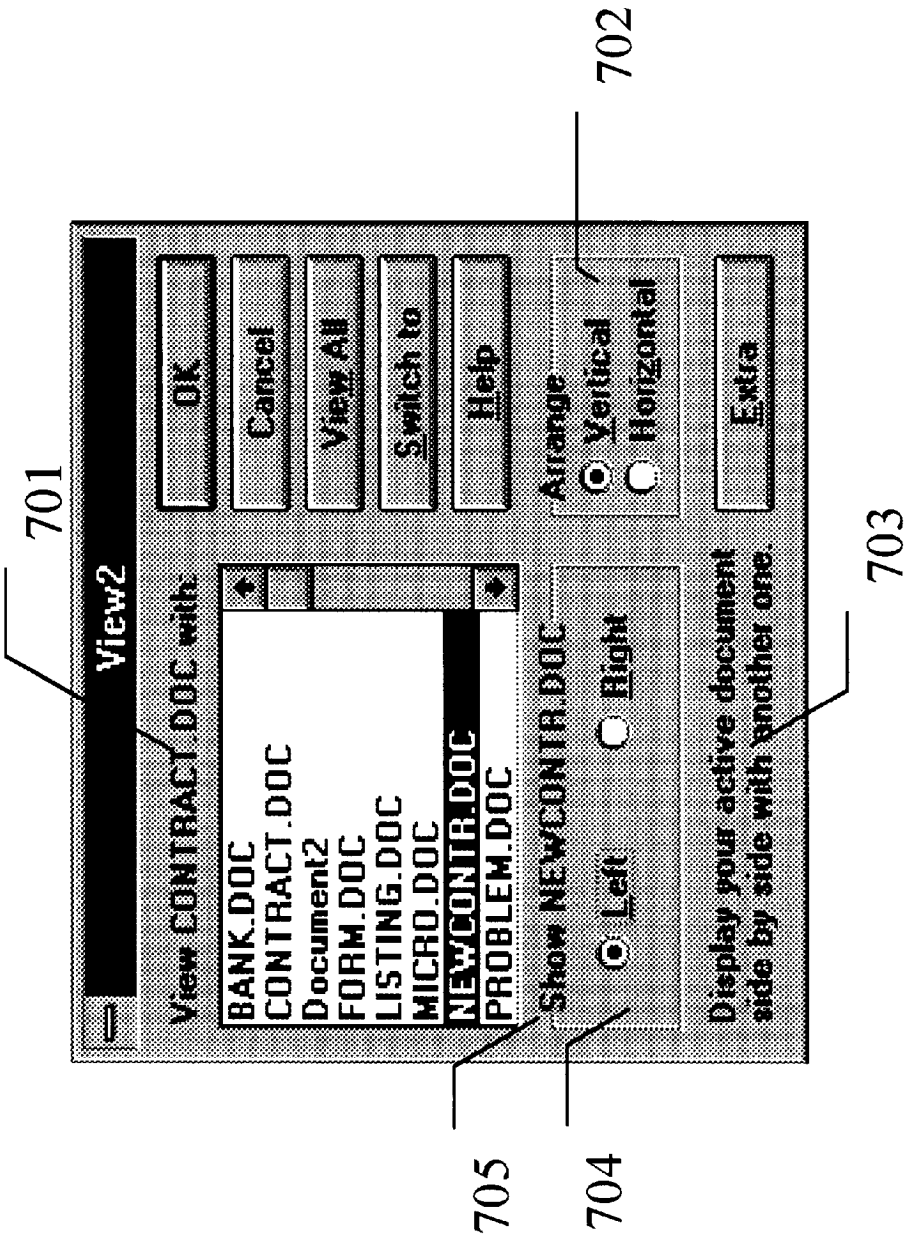


FIG. 7

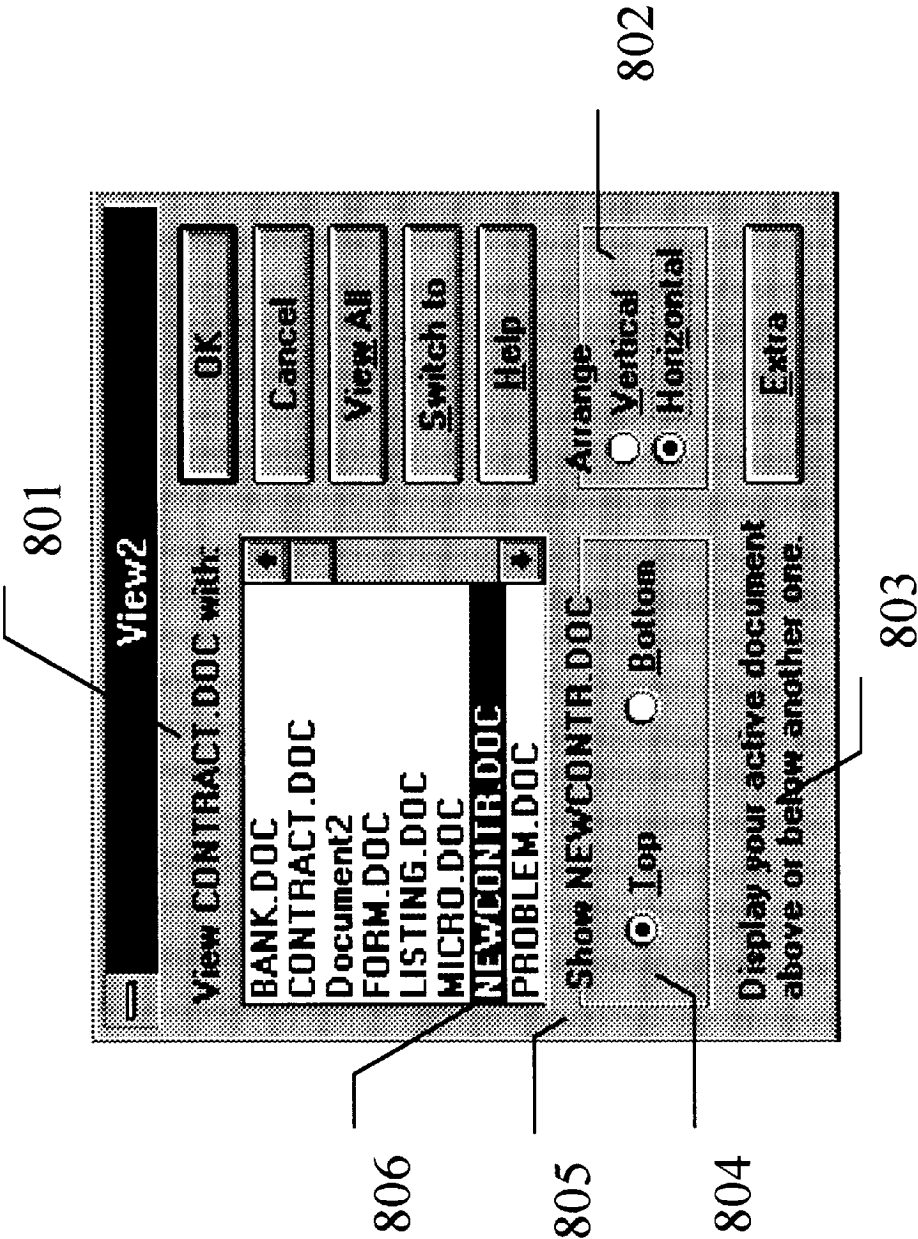


FIG. 8

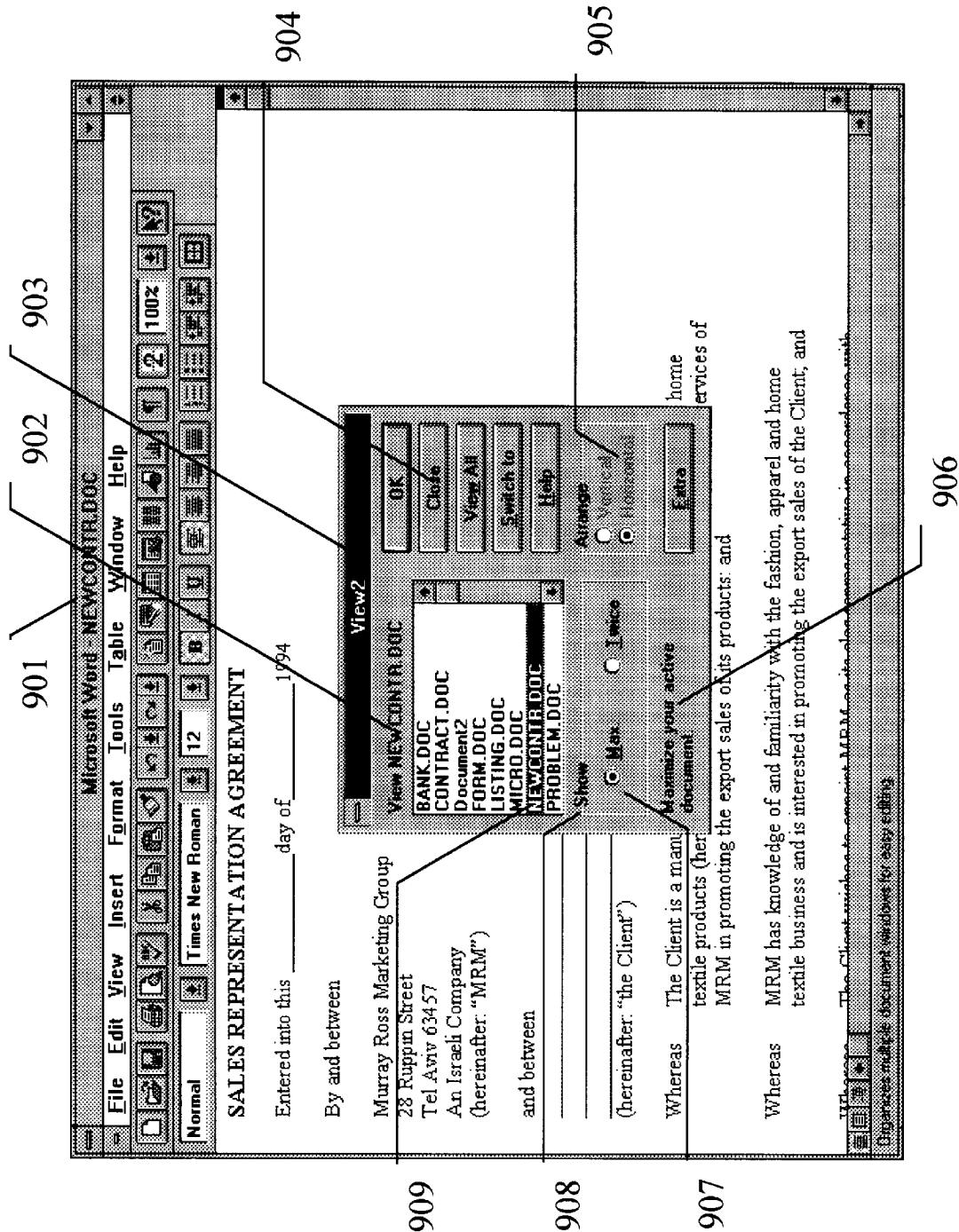


FIG. 9

1001 / 1002

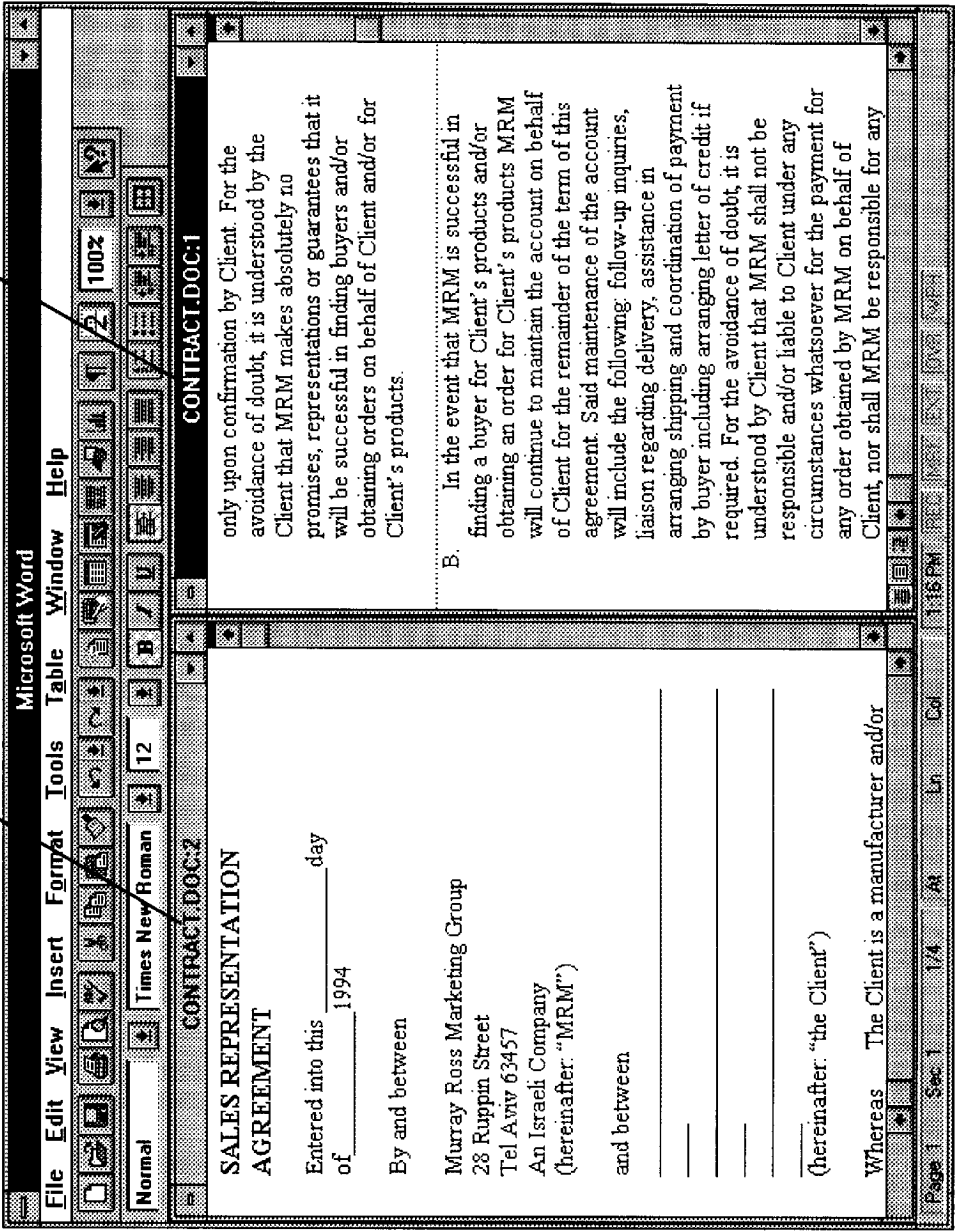


FIG. 10

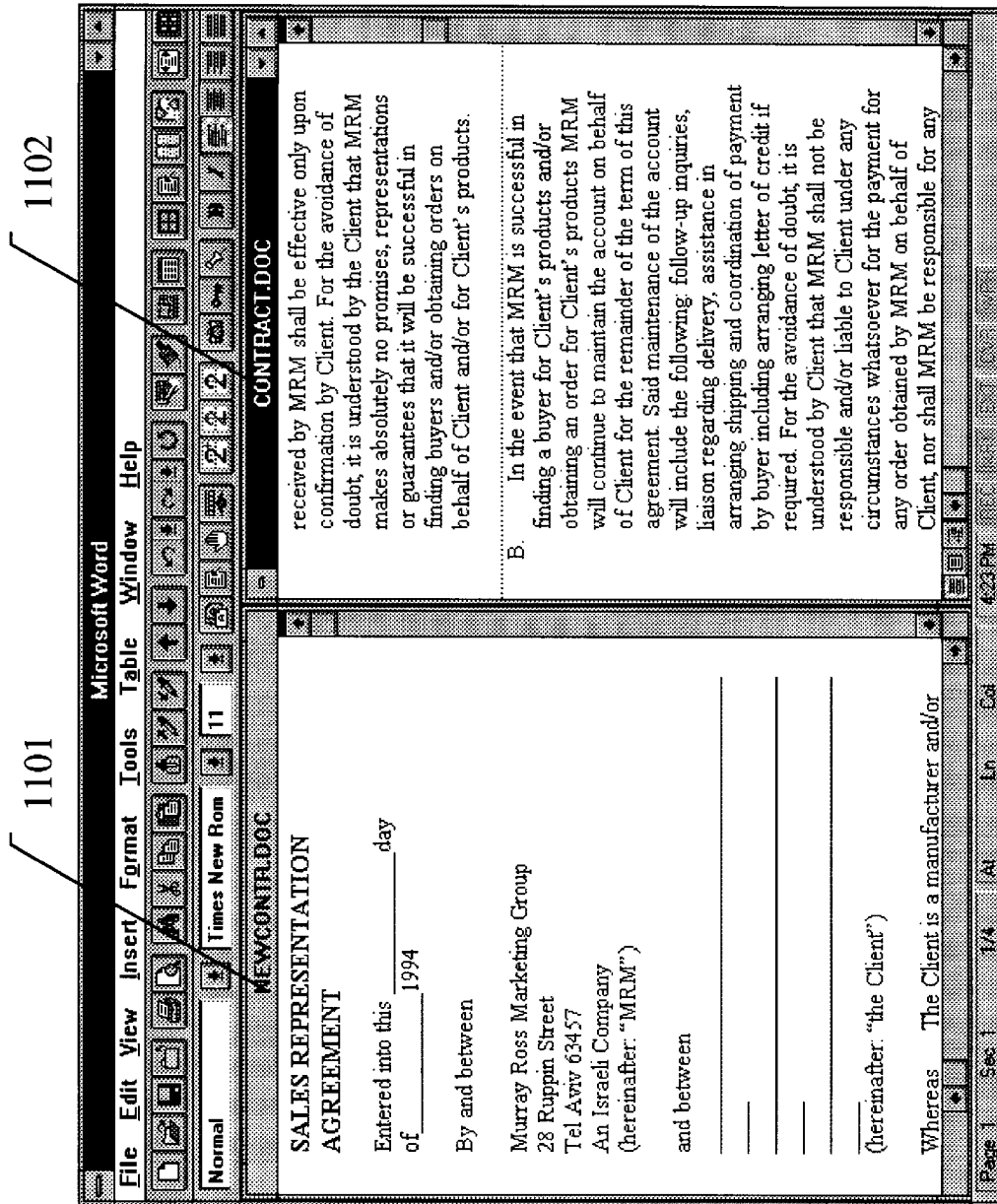


FIG. 11

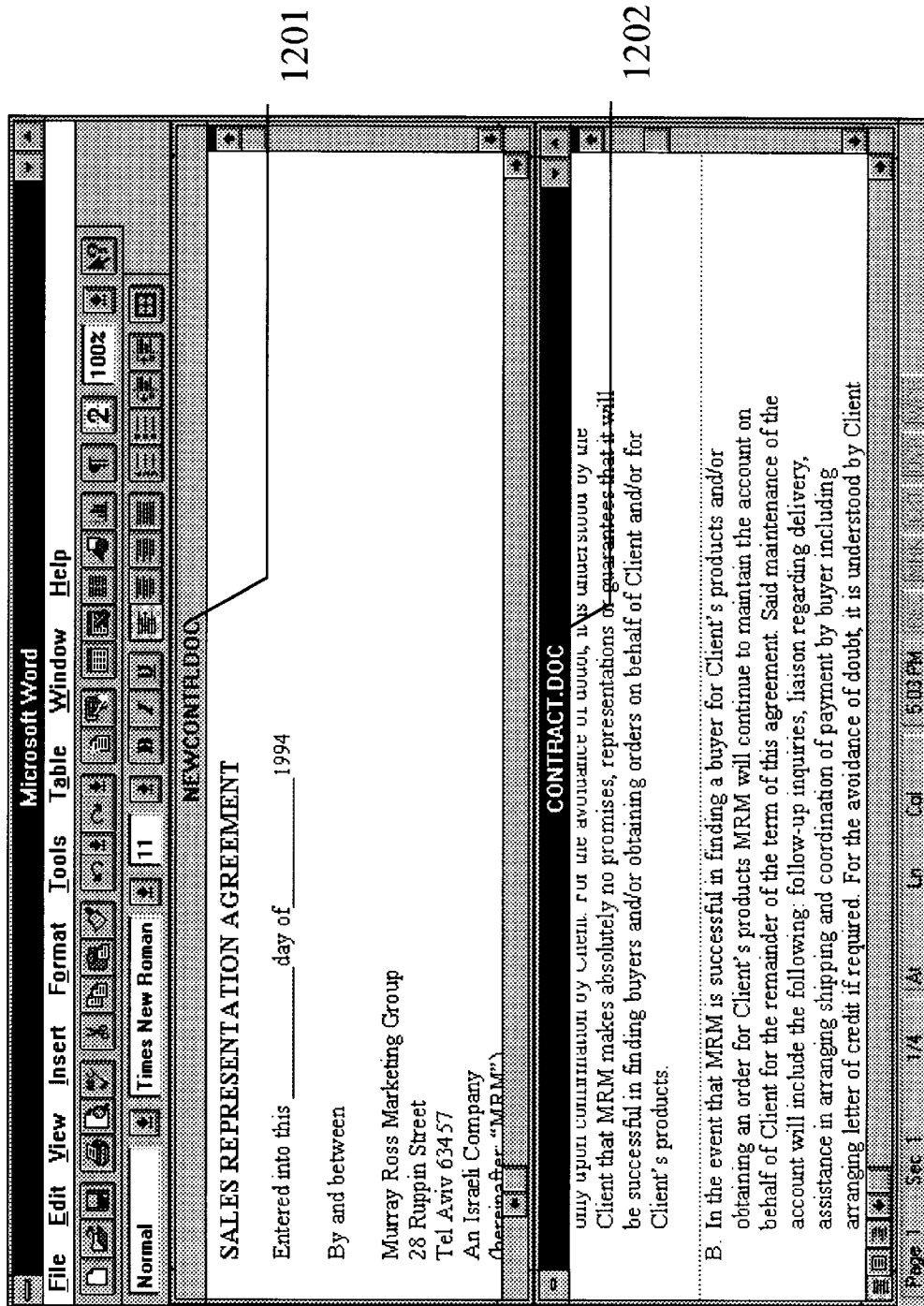


FIG. 12

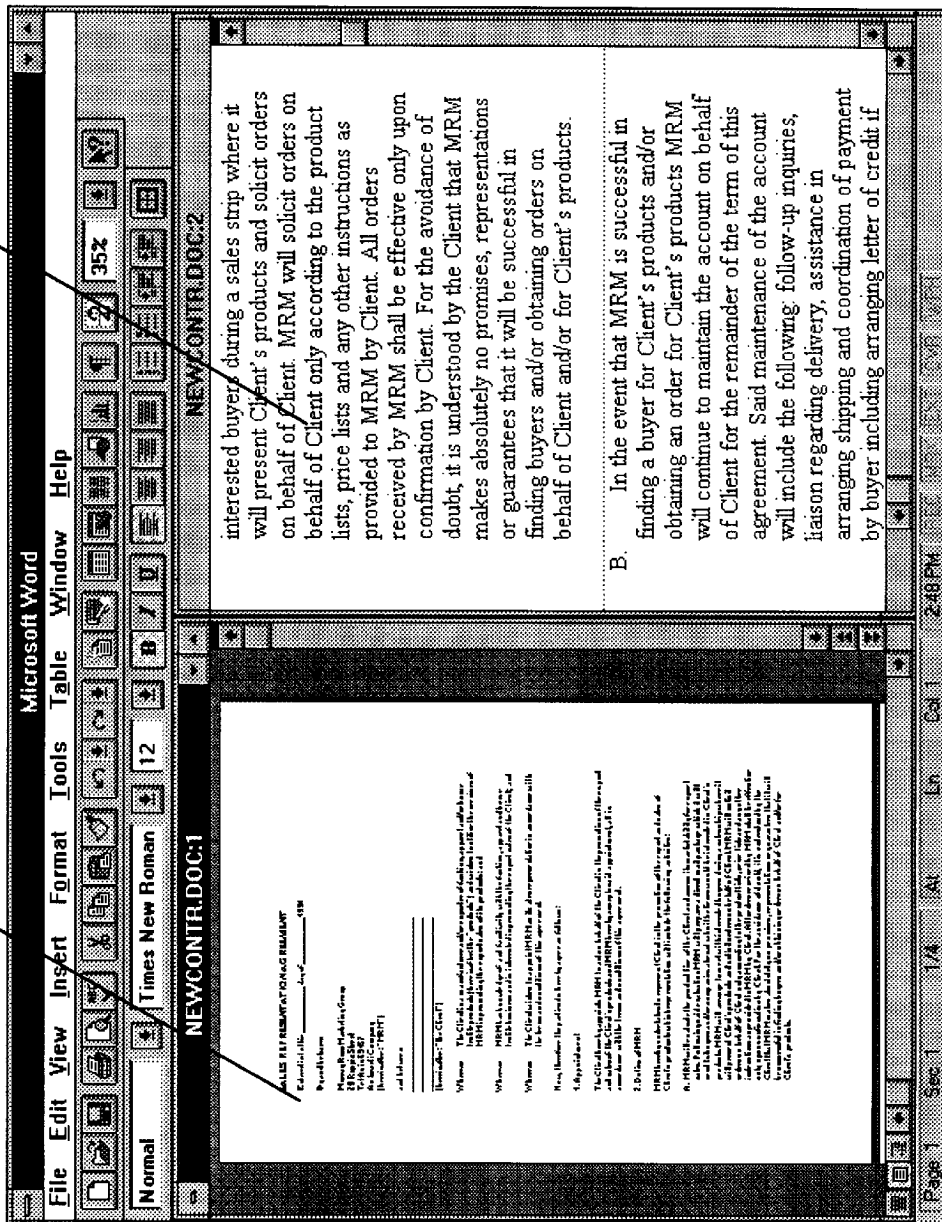


FIG. 13

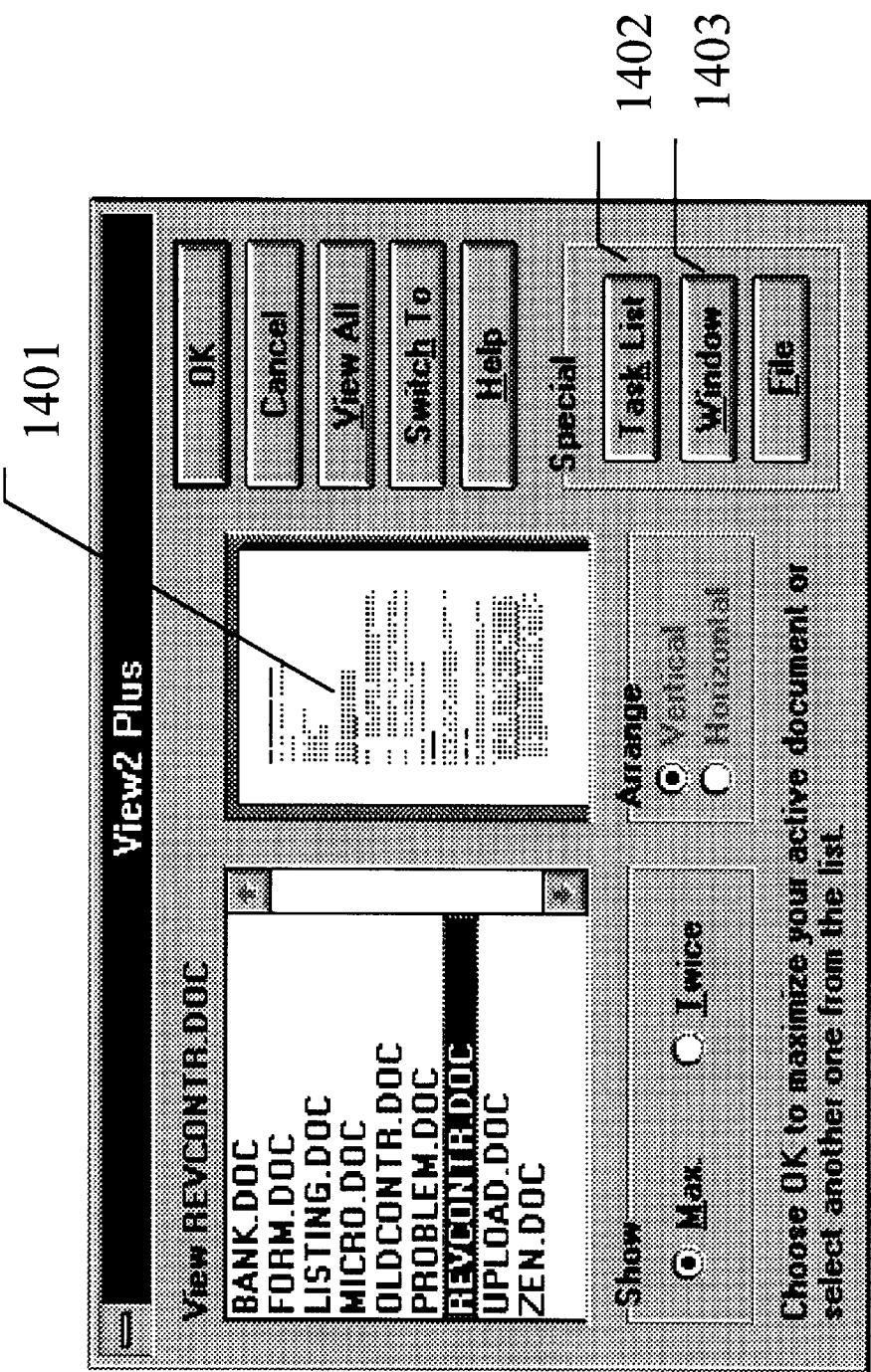


FIG. 14

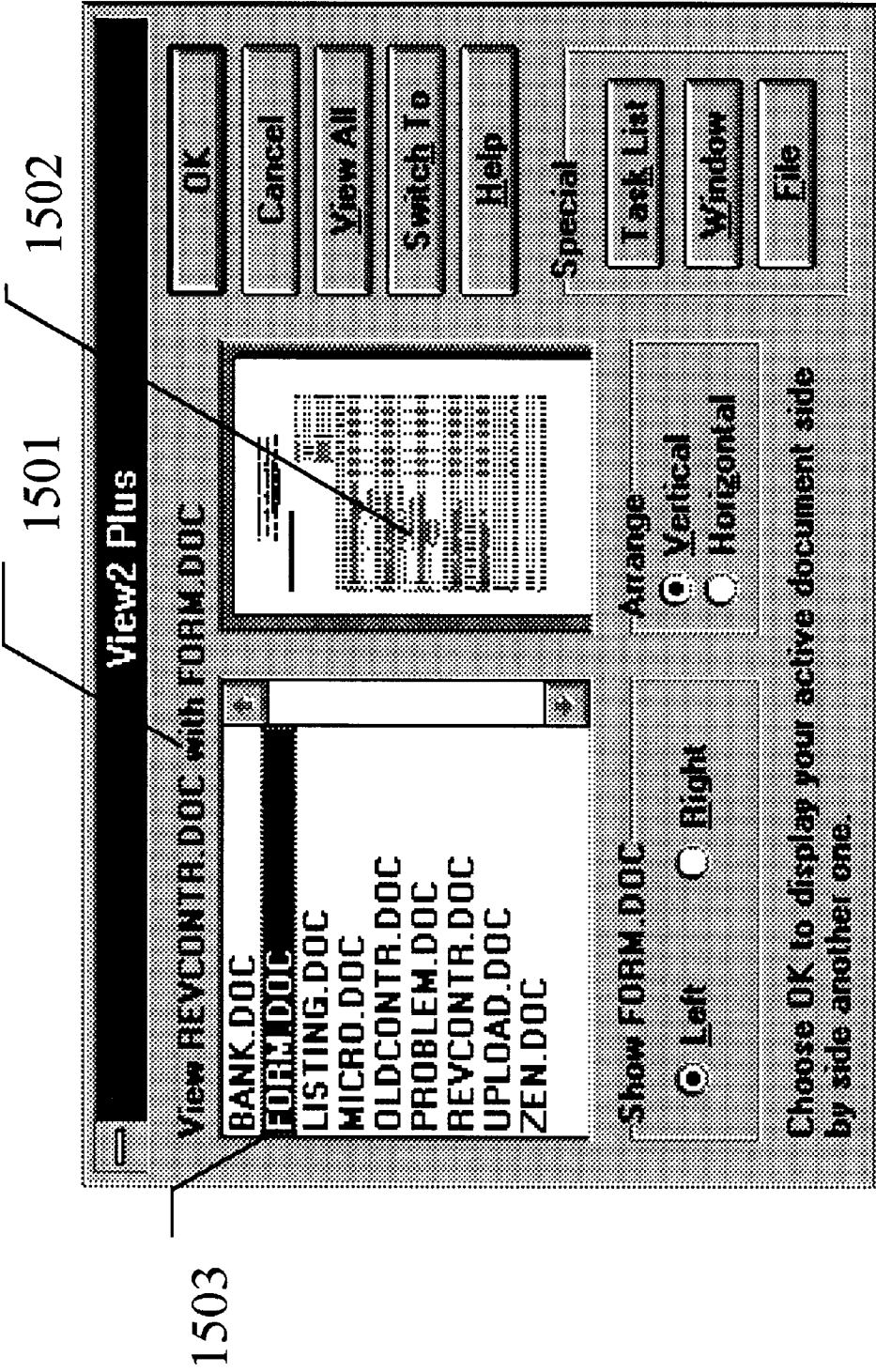


FIG. 15

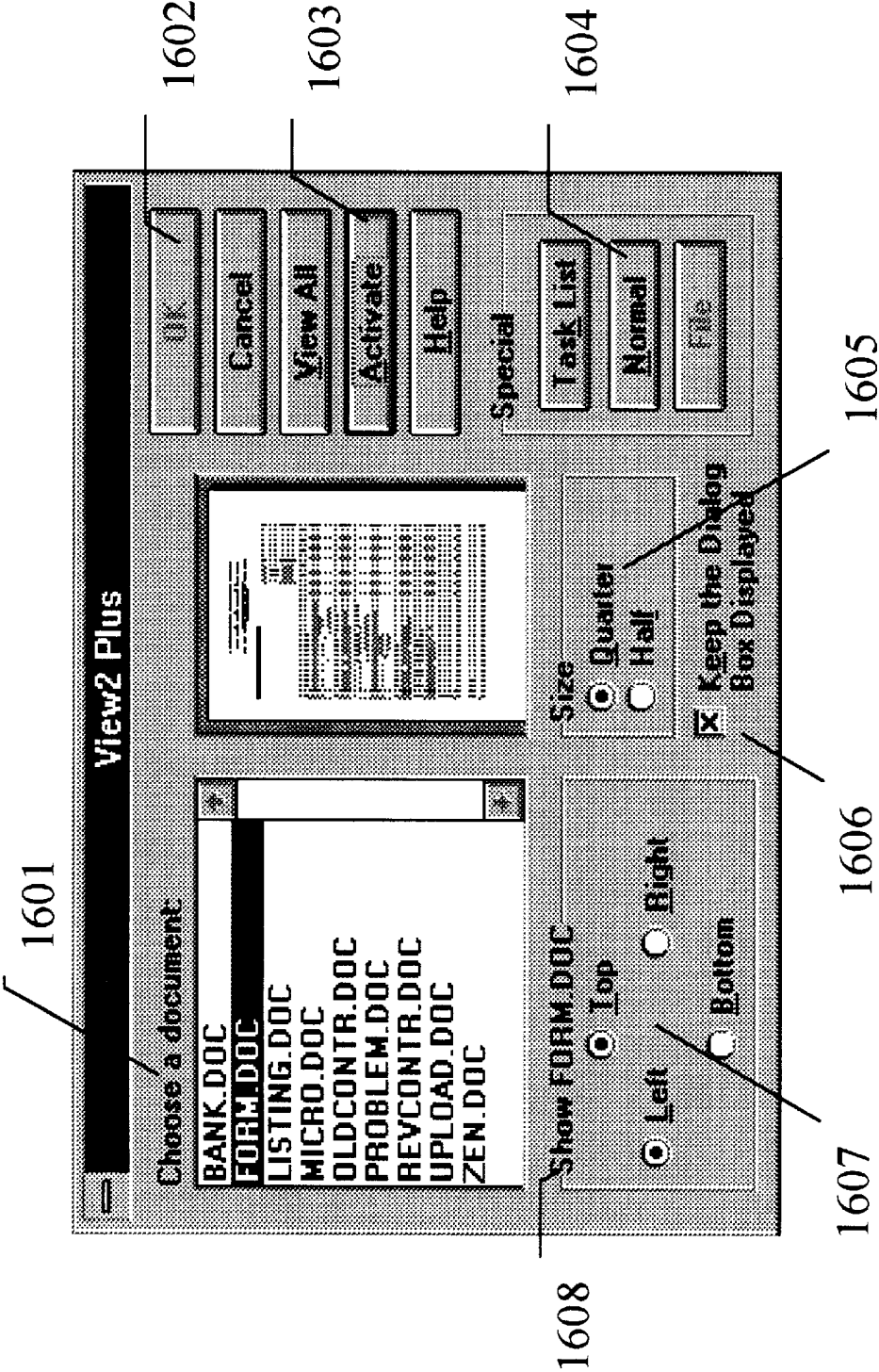


FIG. 16

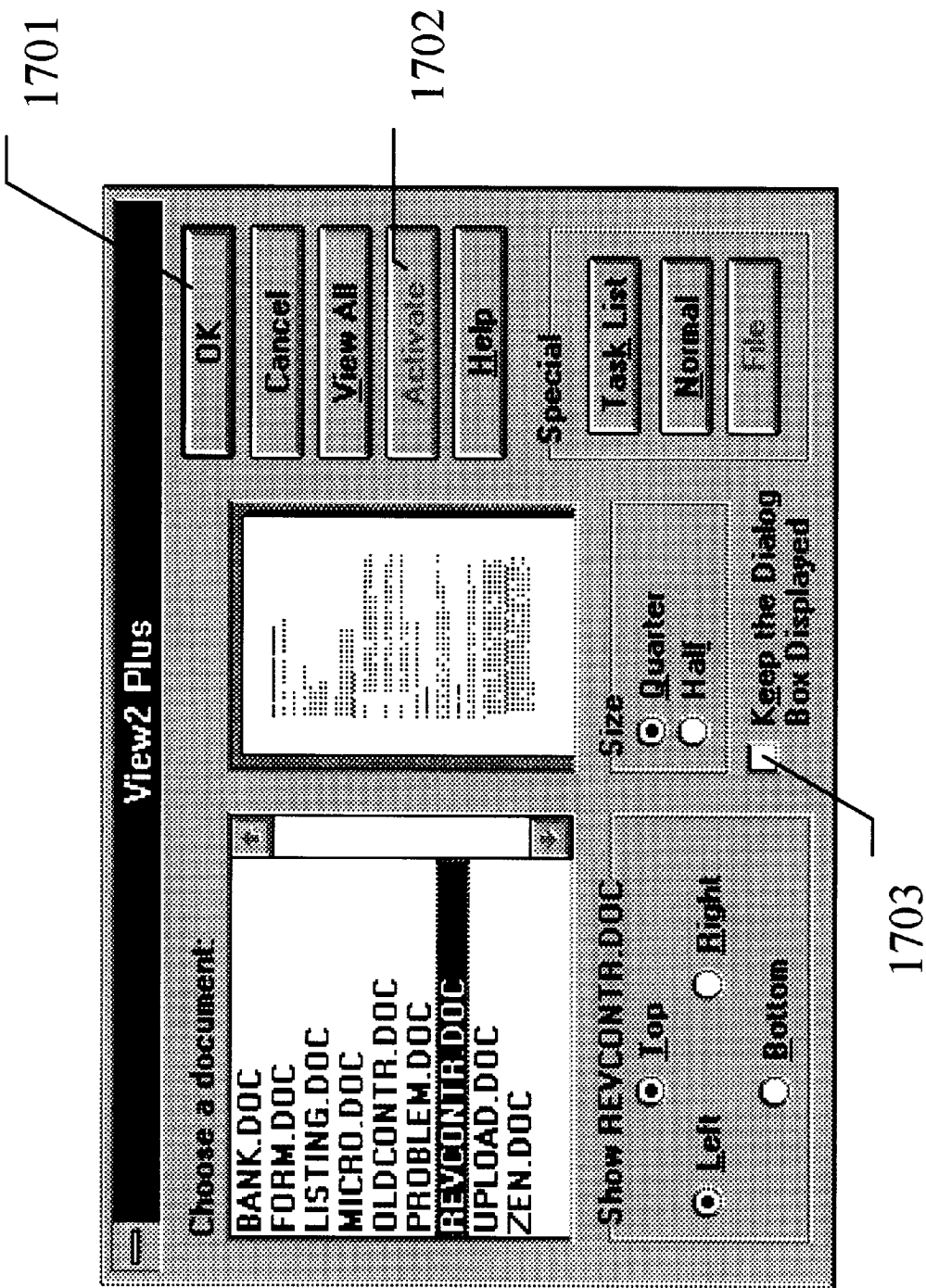
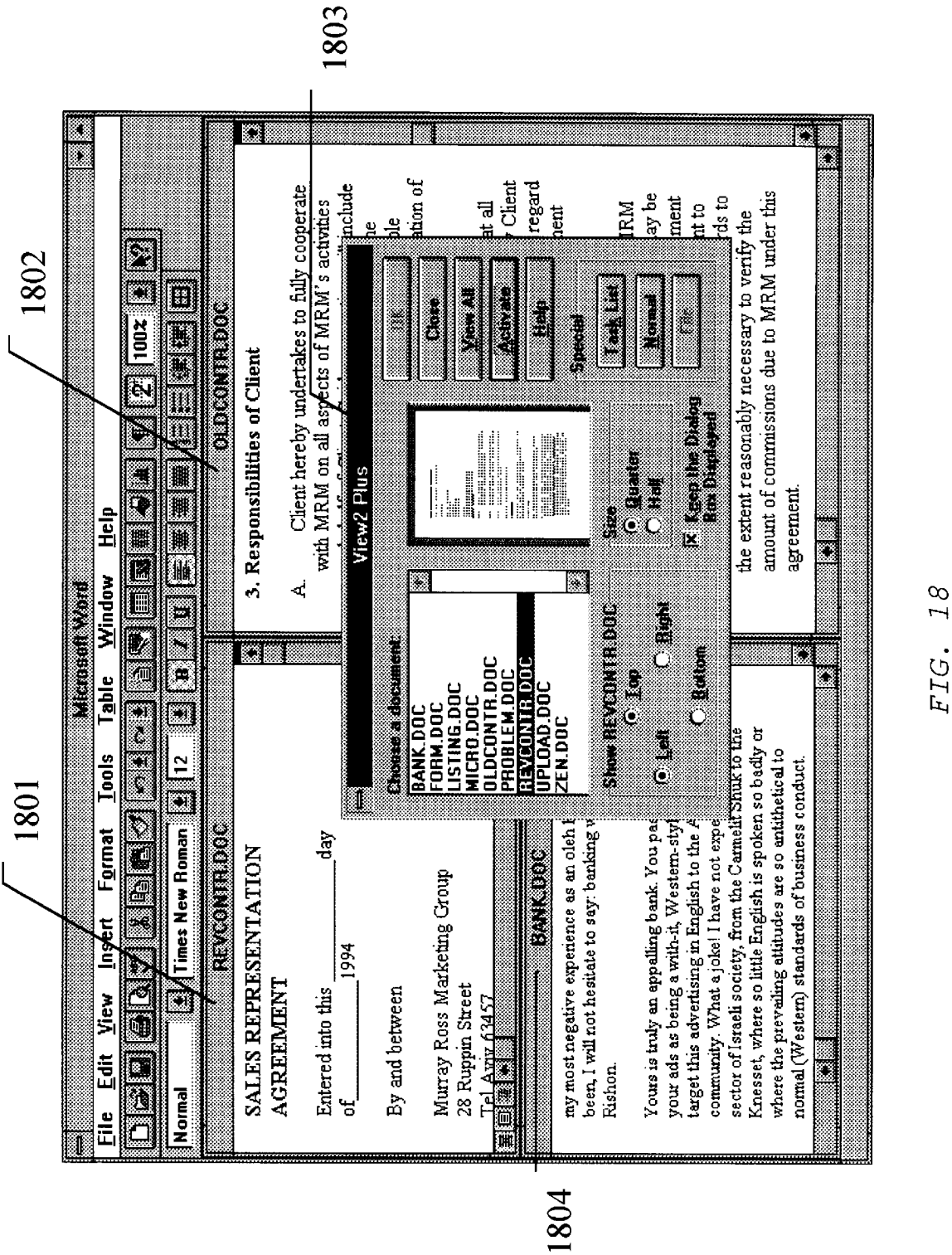


FIG. 17



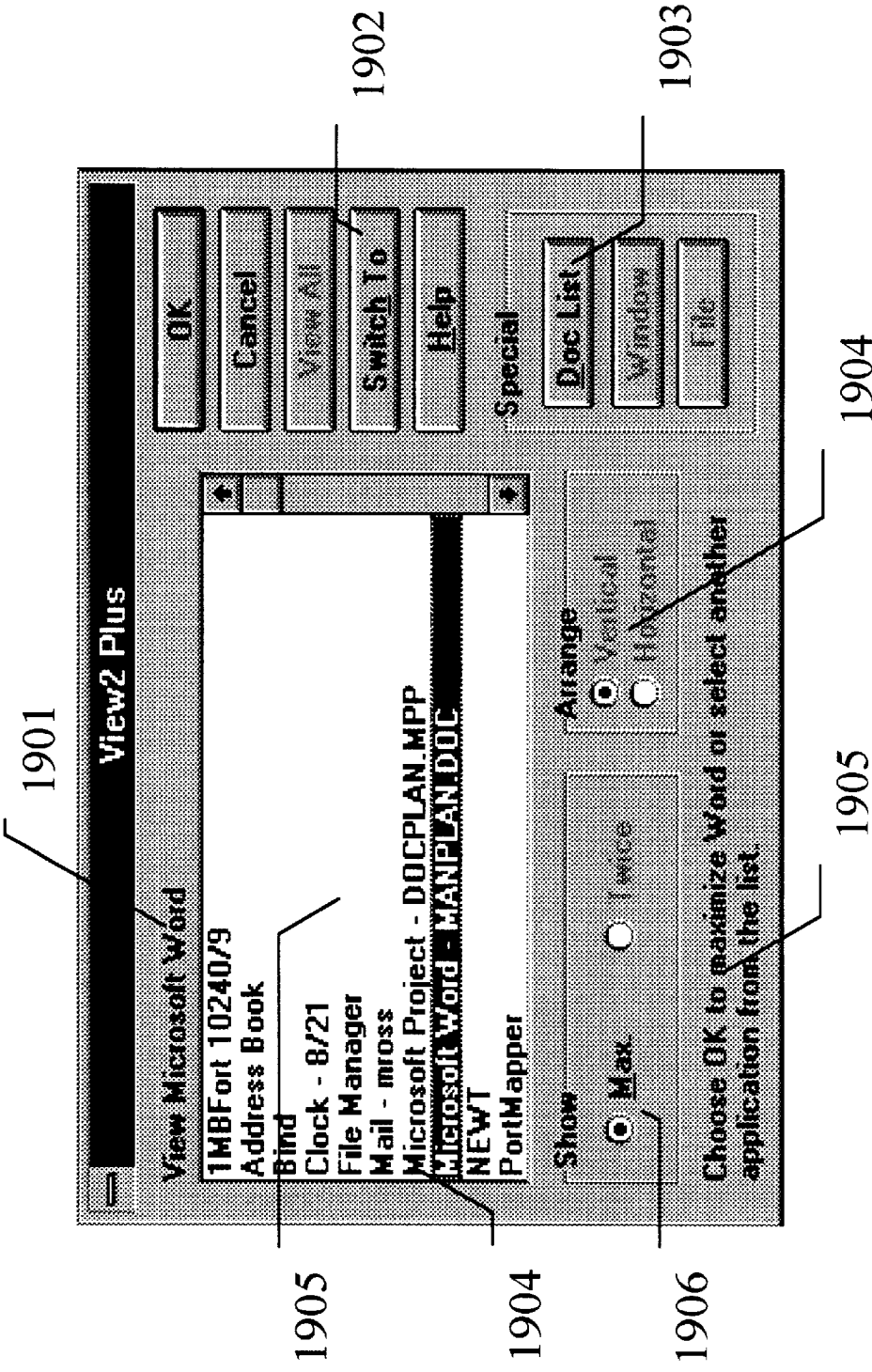


FIG. 19

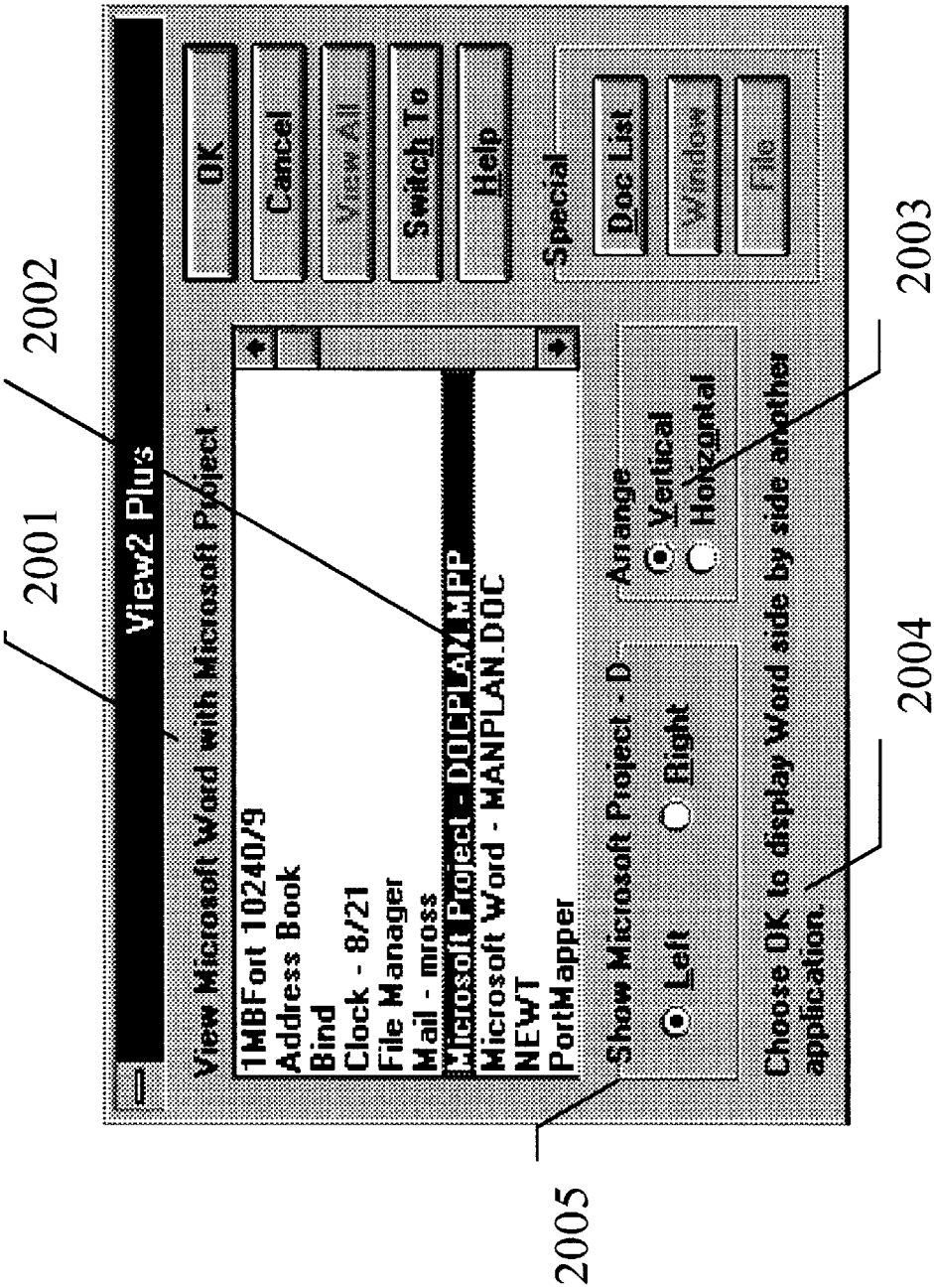


FIG. 20

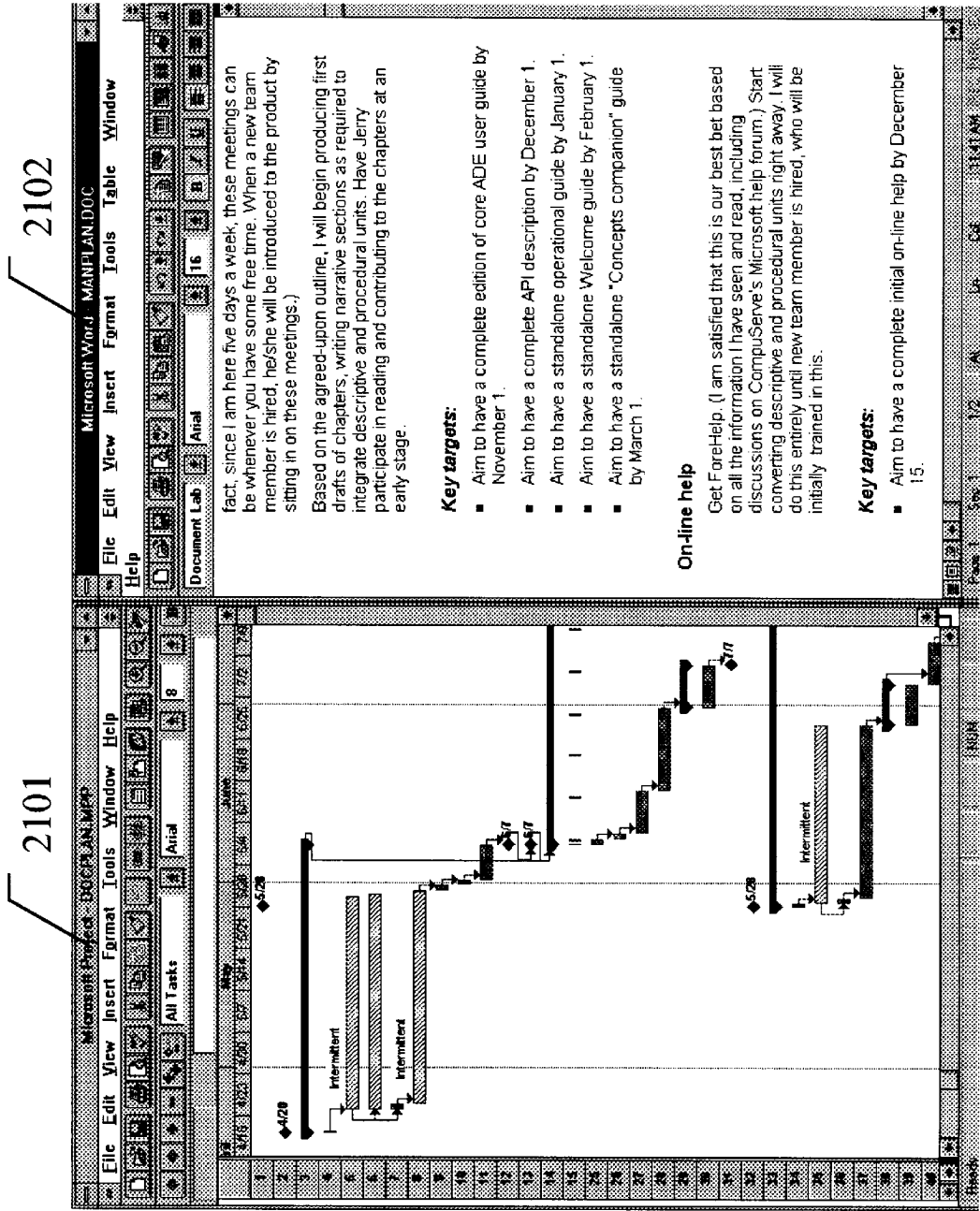


FIG. 21

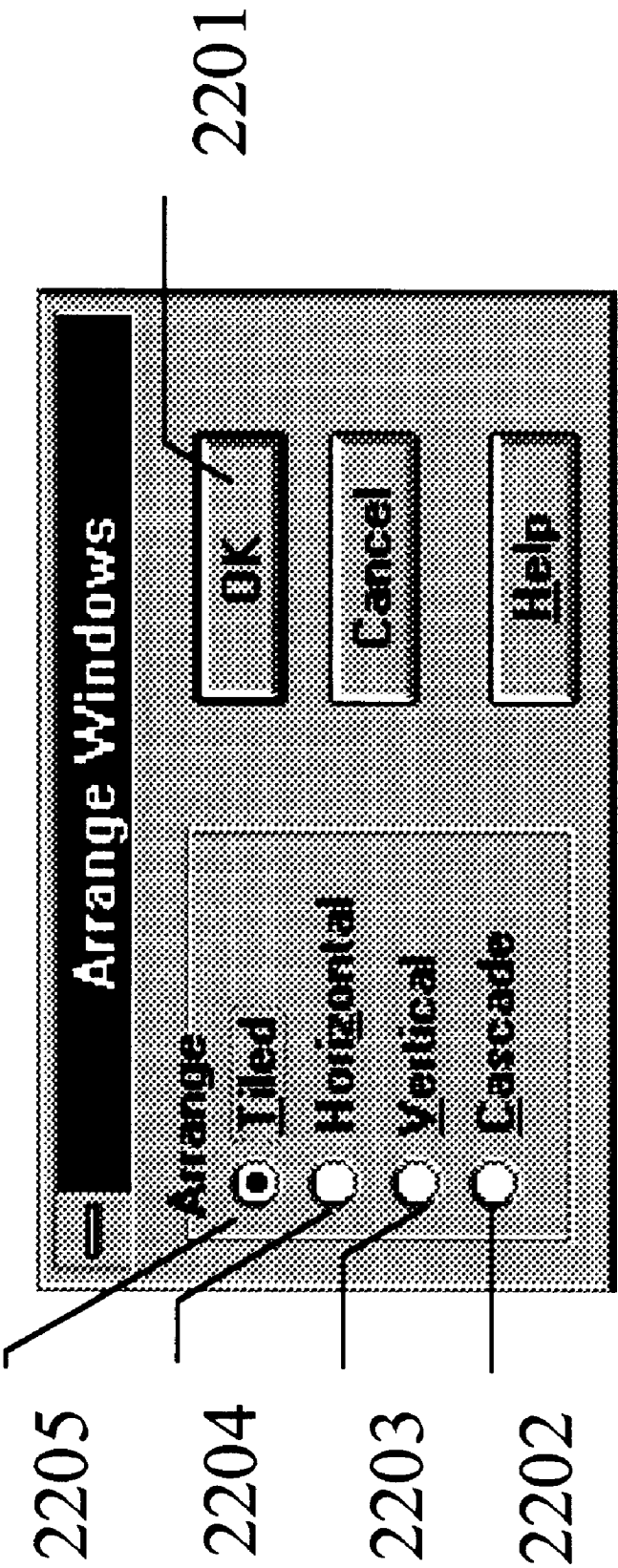


FIG. 22

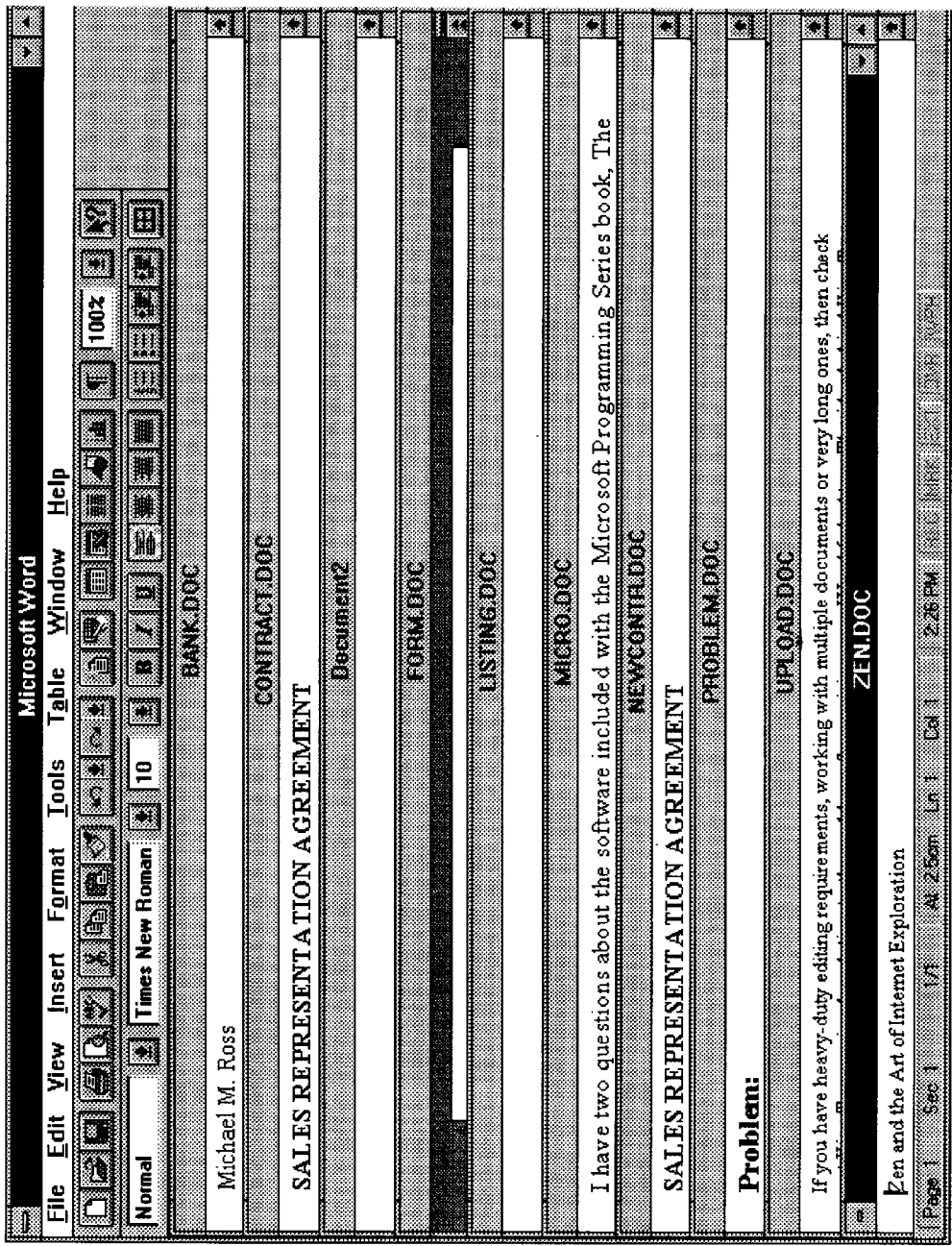


FIG. 23

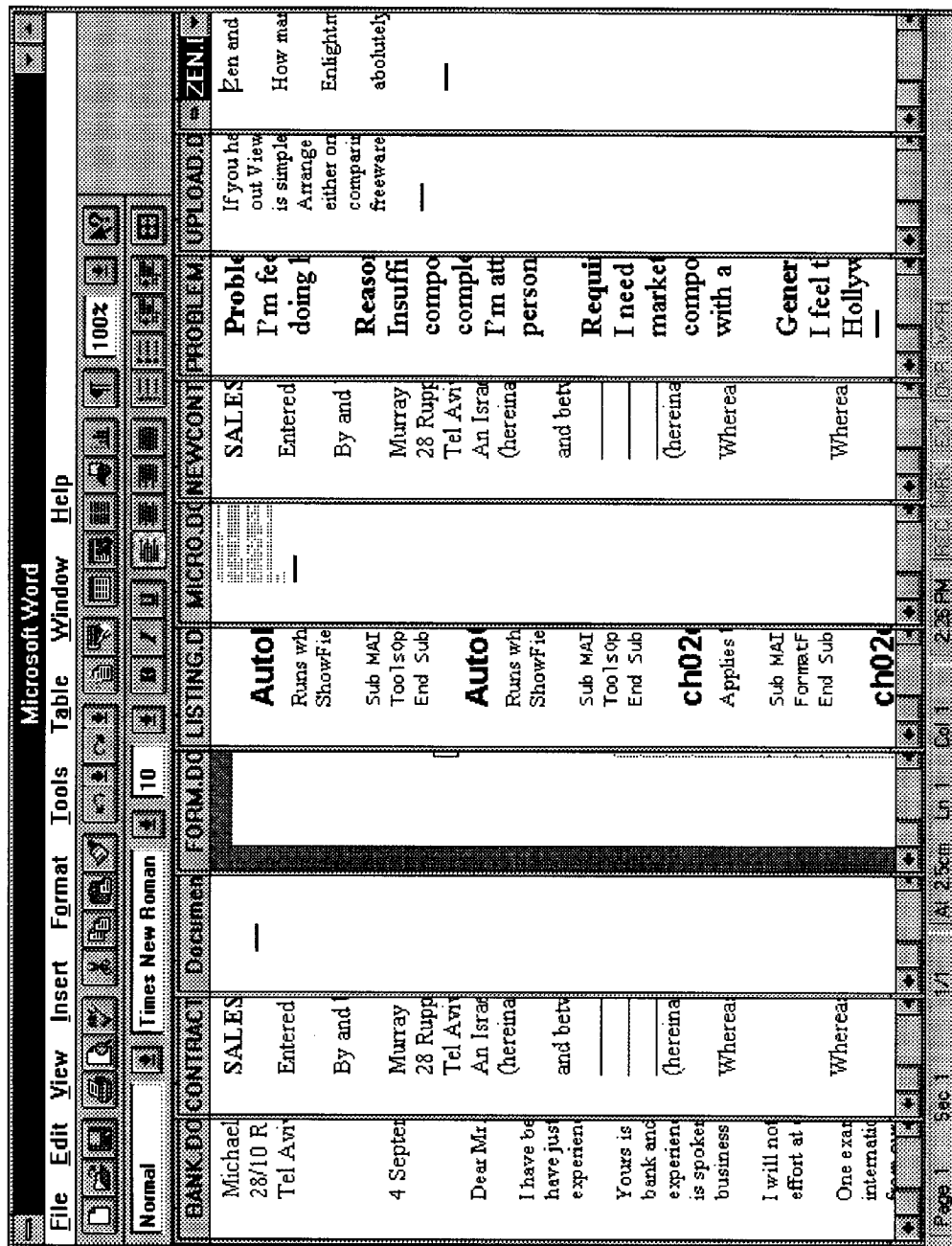


FIG. 24

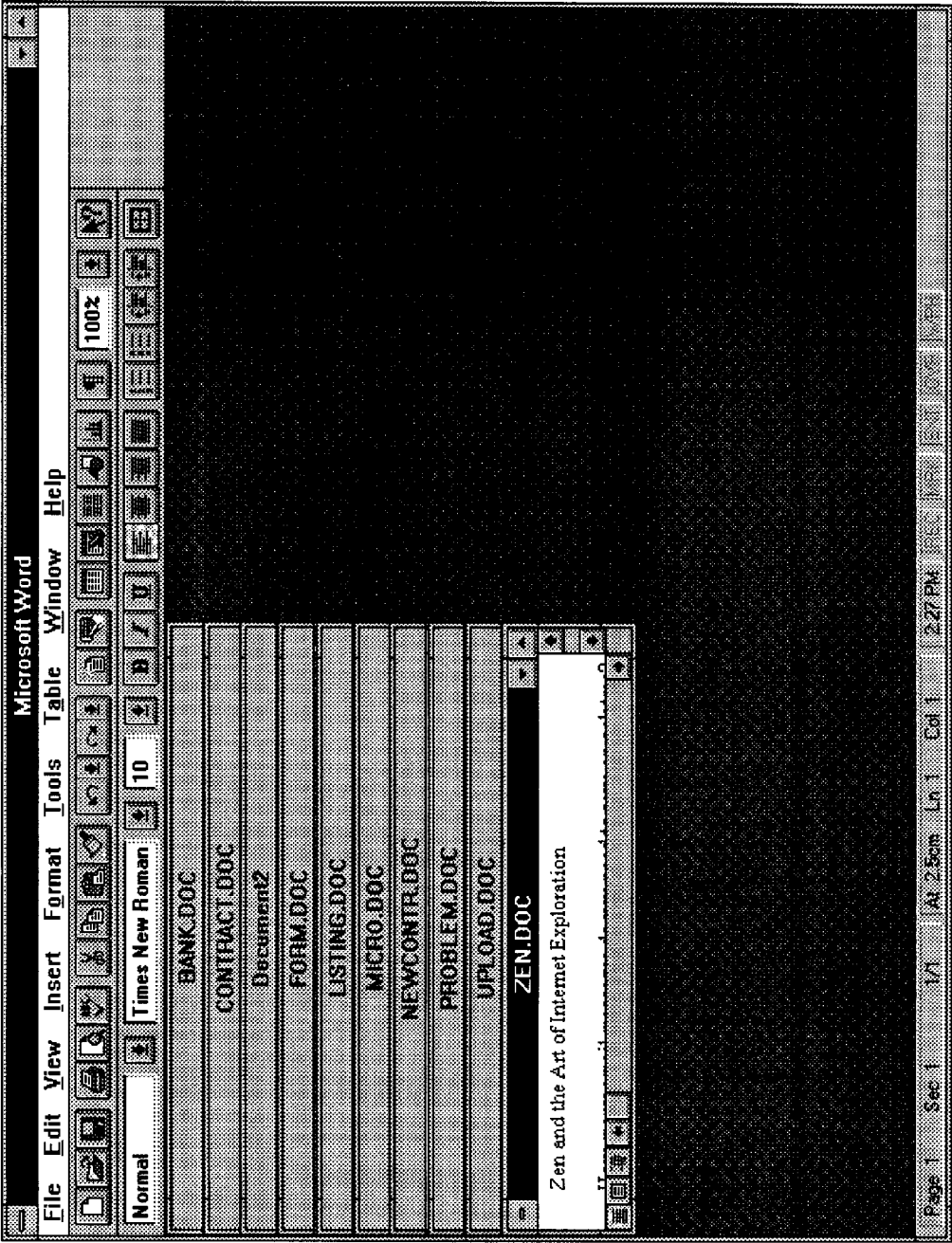


FIG. 25

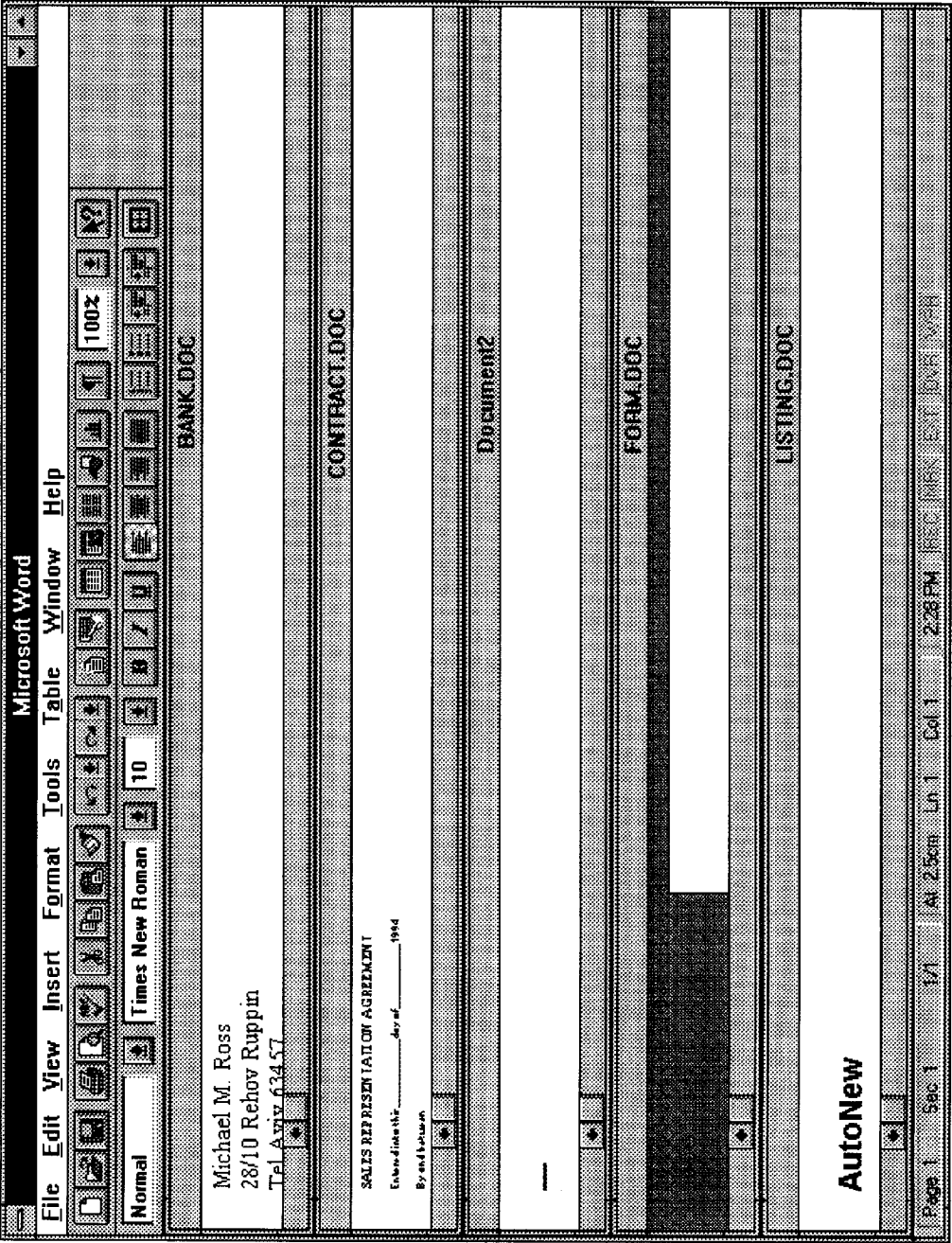


FIG. 26

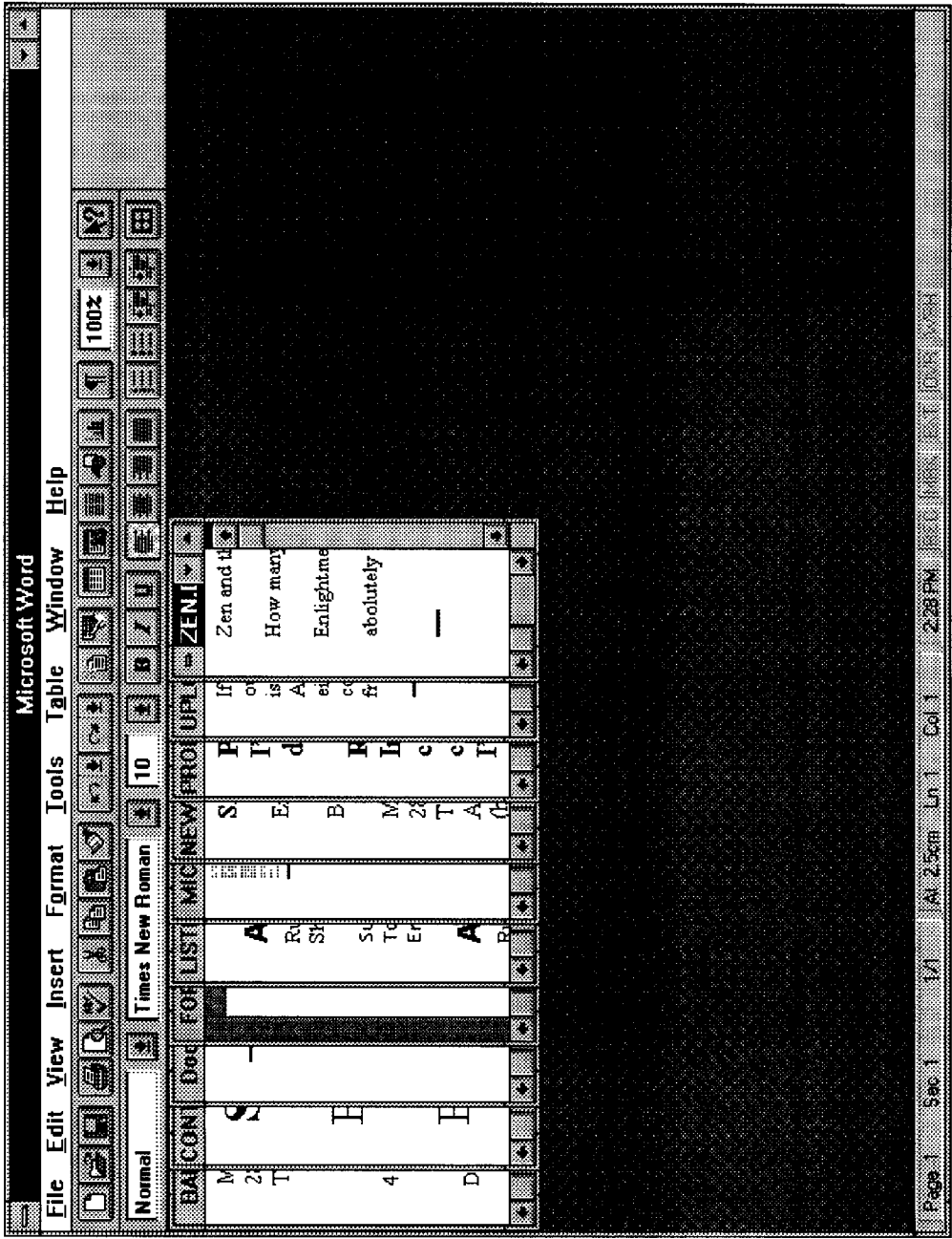


FIG. 27

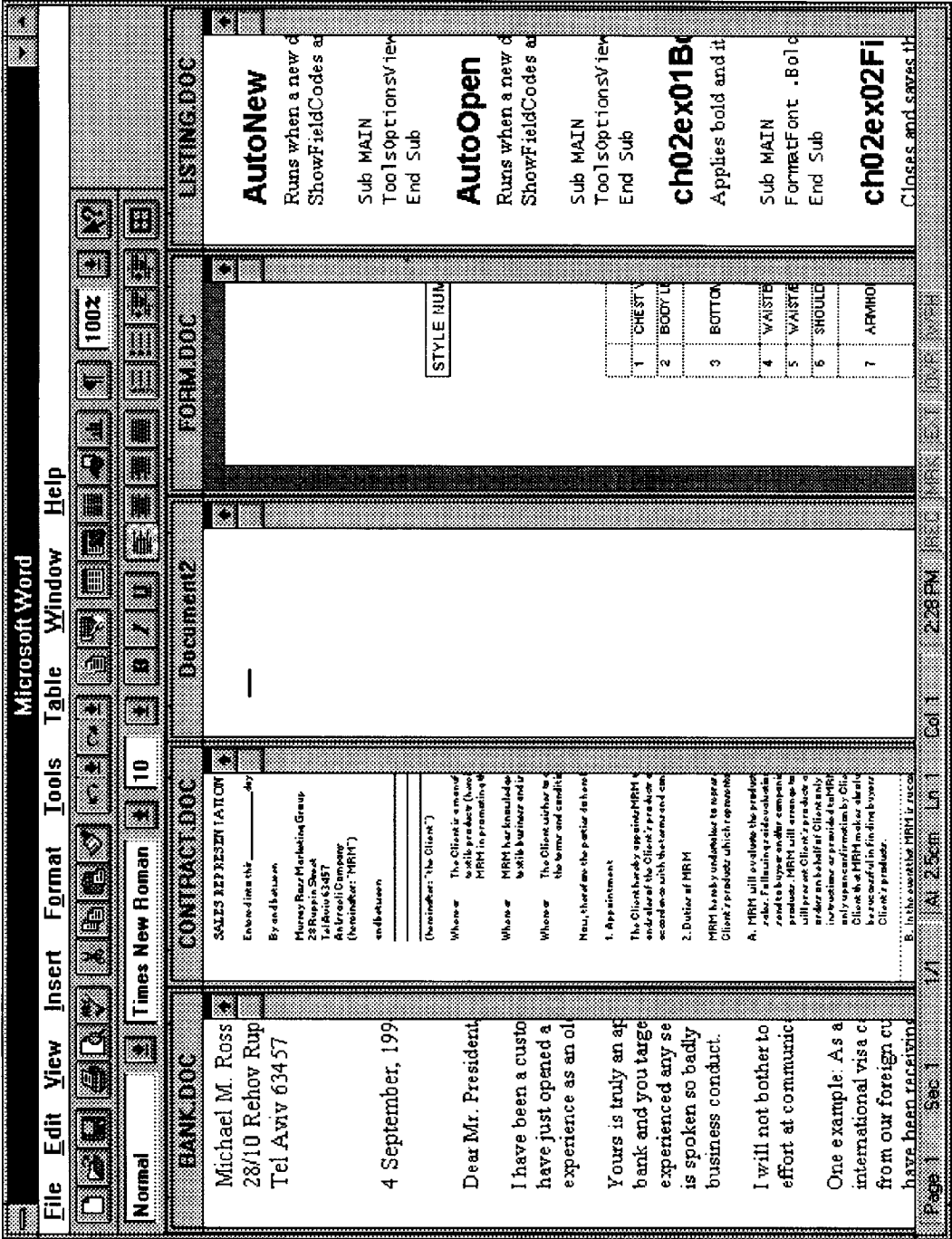


FIG. 28

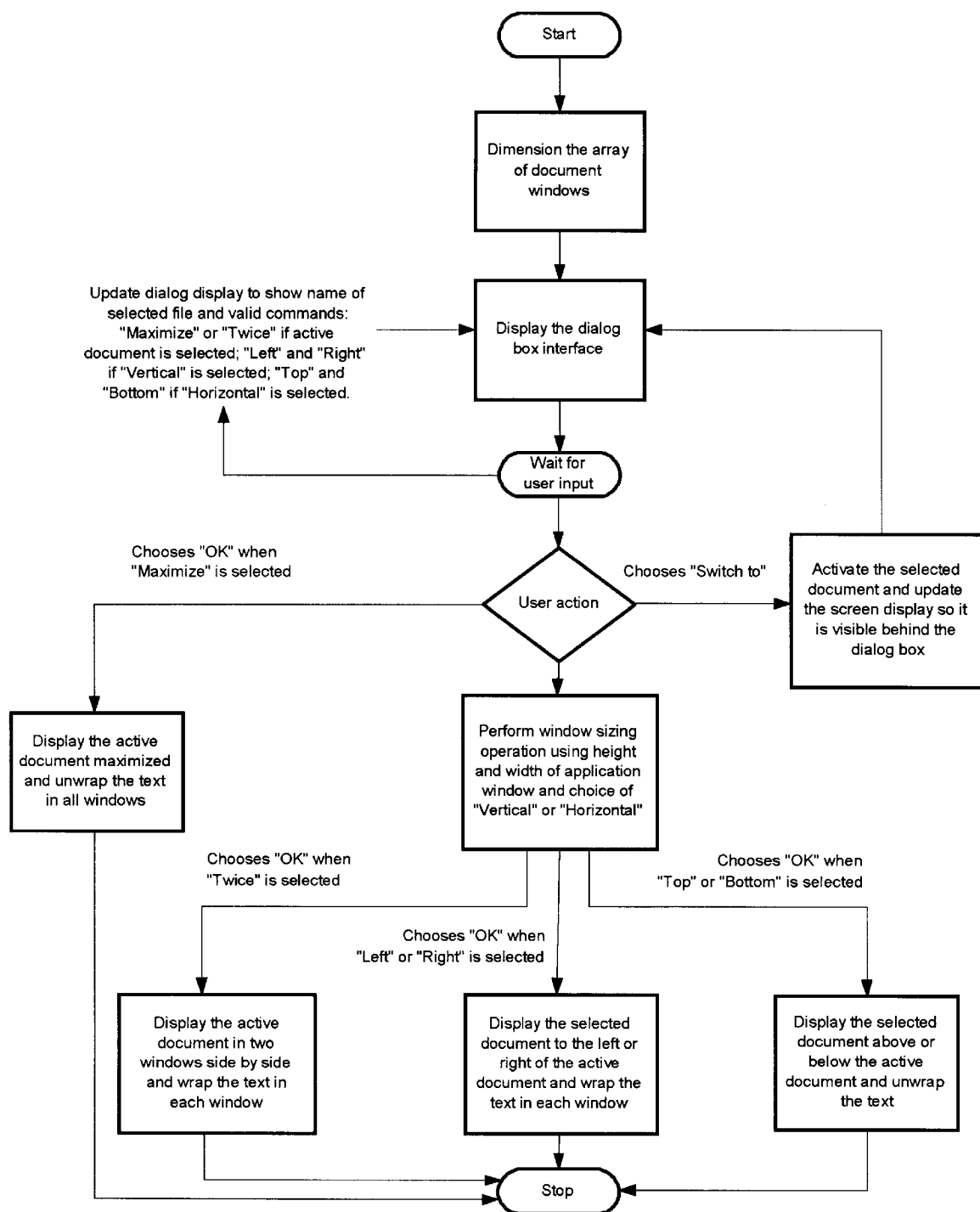


FIG. 29

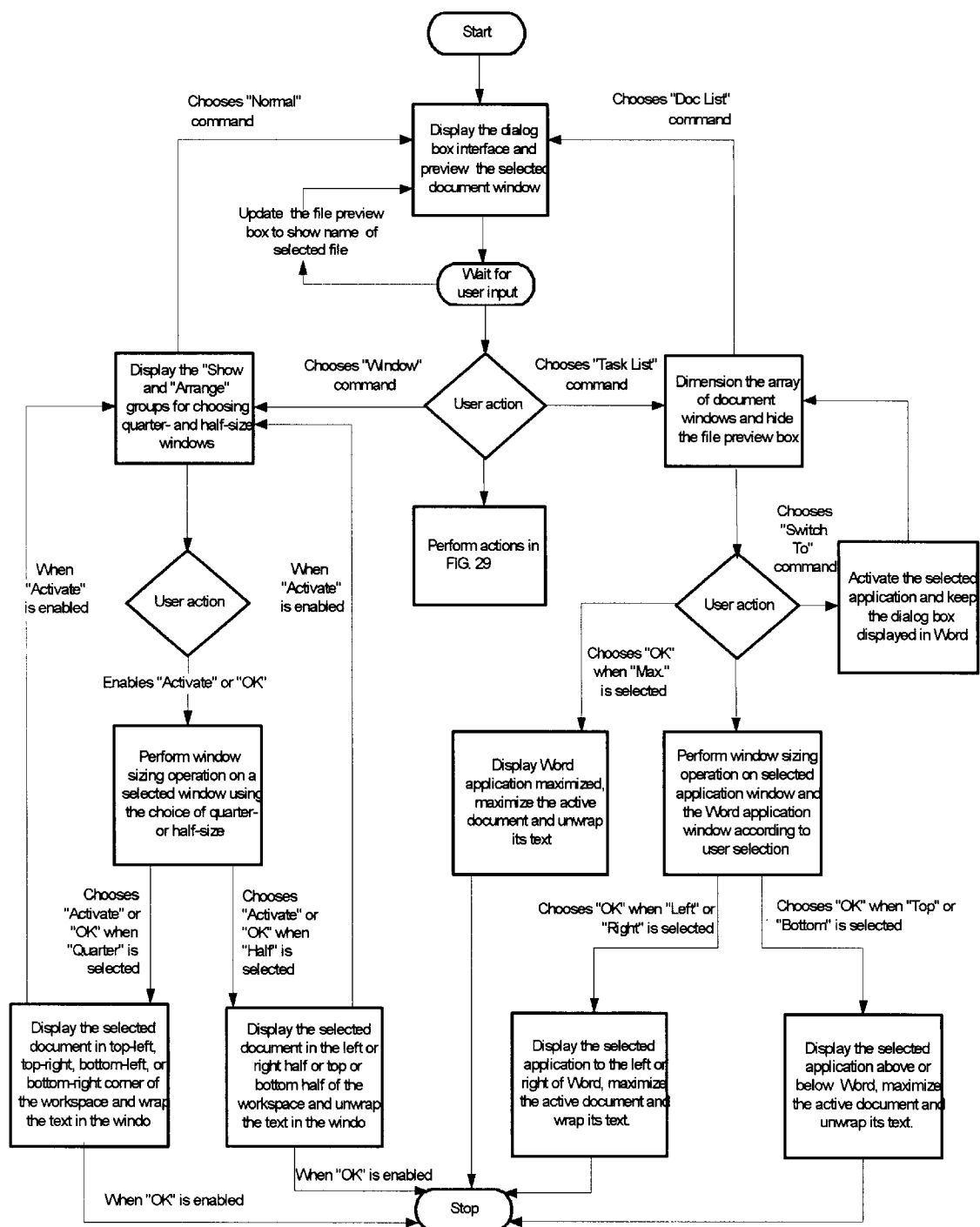


FIG. 30

DIALOG BOX METHOD AND SYSTEM FOR ARRANGING DOCUMENT WINDOWS

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FIELD OF THE INVENTION

The present invention relates generally to the word processing field. More specifically, this invention relates to the display of multiple documents in sophisticated desktop publishing applications running under graphical user interfaces.

BACKGROUND OF THE INVENTION

The graphical user interface, as exemplified by Microsoft Windows and the Apple Macintosh, enables users to work with more than one application program at the same time. In addition, the individual applications may have the capability of supporting many task or document windows, generally designated by the term "multiple document interface" (or MDI).

In the case of the powerful word processing applications, such as Microsoft Word, WordPerfect, and FrameMaker, the capability of performing independent work in multiple documents is generally considered an essential element of their functionality. It simply means that users do not have to close one file (by writing it from the computer's memory to a permanent storage system) before opening another file (by performing the reverse operation). There are many benefits derived from this, among which are: (i) the ability to switch, or activate, open windows quickly and so work alternately among different documents; (ii) the ability to copy, cut and paste text, graphic images, or other document objects from one window to another; and (iii) the ability to make comparisons between documents and implement revisions among different documents in a flexible manner.

While the multiple document interface offers many advantages over earlier interfaces, such as that provided in DOS-based applications, the potential advantage of this additional functionality of the MDI has not been fully realized in the case of word processing applications for several reasons.

Even though the number of document windows that may be opened is only limited by the resources of the computer hardware and the ability of the operating system and application to utilize these resources; the usefulness of having more than a few document windows open at once is limited by the inability to organize or view them in a useful fashion. In fact, because overlapping windows obscure each other, users typically see and work with just one document window at a time. This window state is described as "maximized." To view another document window, users may select the chosen window from a list, and then view this one in the maximized state. An alternative for users is to use a "tile" command that proportional spaces the windows so that each one occupies an equal amount of the application's work space (or some other space allocation as determined by an algorithm). Although the user exposes all the windows by tiling, the visible area of each document is inevitably reduced so that, in effect, each document is partially hidden in the same way as it would be if the windows were partially overlapping.

Neither maximizing nor tiling is entirely satisfactory when users are working with many document windows. The inadequacy of each method increases in proportion to the number of windows that users have open. In the case of five, 10 or 15 document windows, users can continue to switch from one maximized window to another by means of a list, but it becomes increasingly difficult to identify the document that occupies each window from this list. If users choose to tile the windows, then the amount of space occupied by each window is generally insufficient to work in the document, as most of the text (even on a single line) will be hidden from view without users' having constantly to scroll the window vertically or horizontally.

There are ergonomic considerations concerning the multiple document interface that until now appear to have been overlooked or neglected by word processing applications that are widely used for desktop publishing. These relate to the "preferred" way in which users work with a document. The first consideration deals with the limitations on the utility of a "WYSIWYG" interface and second with the "natural way" to work with multiple documents.

A key feature of sophisticated word processors is a "WYSIWYG" ("what you see is what you get") interface. This means that users see a representation of the document on the computer screen that broadly corresponds in many details (though not all) with the document as it will appear when printed out. This WYSIWYG, or page layout, view of a document window is not necessarily the only view provided by the word processor or even the preferred view in which users work. For example, greater computer system resources are required in this view, and this can reduce the speed of the computer's response to user input as when scrolling and typing, etc.

It is for this reason that word processors typically offer alternative views in which users can work with a document. Among these are a draft, or text mode, and an outline mode. (The draft mode displays text in a monospaced font with virtually no details of the page layout. The outline mode displays the heading levels of a document with or without the text that constitutes the body of the document.) In addition, there is generally a "normal" view in which the text is displayed in the user-selected font(s) and some limited layout information is represented. The normal view represents a trade-off between optimizing use of computer system resources and the accurate representation of the document on the computer screen. This is, generally speaking, the preferred way in which users perform most word processing tasks.

There is a further limitation of the page layout view that is hard to overlook: the vast majority of computer monitors have a physical screen with a horizontal (or "landscape") orientation, whereas the vast majority of documents composed by users in word processing applications have a vertical (or "portrait") orientation, corresponding with the standard page sizes (book, letter, or legal, etc.) This anomaly means that the users with normal eyesight using normally sized computer monitors are unable to see a whole document page in a document window while continuing to compose the document. This is because the magnification of the document in the window has to be reduced to a percentage of frequently less than 50% for users to see a complete page. Since the normal size of a readable typeface is from 10 to 12 points (the range typically used in newspapers and magazines), at 50% magnification the effective point size is reduced to 5 or 6 points at the most. This is the kind of "small print" that is commonly associated with eyestrain in paper documents. On modern computer monitors of up to 17

inches with a Super VGA resolution of 1024 by 768 pixels a significantly better than average screen display type of this size is typically considered difficult or impossible to read. The result is even more exacerbated when the display is rendered on one of the many personal computer monitors of 14 inches many with only a VGA resolution of 640 by 480 pixels.

The WYSIWYG capabilities of sophisticated word processors are, therefore, often underutilized because of the impracticality of working with text of this size. A common and somewhat inconvenient method employed by users is to alternate between the normal and page layout view in the same document window. The utility of this solution decreases as the need to switch views increases. When users are performing detailed page layout work, the need to see the WYSIWYG view of the document on a constant basis becomes almost a necessity.

The second consideration is that work with multiple documents be performed in the "natural way". A general theme of the graphical user interface (and a particular implication of the term "desktop publishing") is the concept that, to a lesser or greater degree, personal computers enable users to work with applications that symbolically duplicate their real desktop environment in the virtual environment of the computer. In fact, it is a fundamental yardstick of a well-designed application that it should present users with a highly intuitive interface, meaning one that can be understood and used with the minimum requirement to learn to think in new and, at first, "unnatural" ways. The success of the Macintosh and of Windows is based on the simplicity of this "virtual desktop" metaphor.

In light of this, it can be inferred that the natural way to work with an application is one that most closely corresponds with the users' familiar environment of the "real desktop." This has very real applicability for word processing applications where almost the complete set of terms and concepts used by these programs has been acquired from the "real world" activities of preparing copy and art for layout and of performing typesetting and printing functions.

There is a particular aspect of the real desktop that appears to be overlooked or neglected by the virtual desktop of word processing applications. Users handling paper documents are likely to store them in a file cabinet; this is analogous with the file management system of the computer. The documents that users are currently working with are likely to be on their desktop; this is analogous with the open document windows in a word processor. Users may pile the current documents on top of each other or strew them across the desktop; this is analogous with the current document window being maximized and the remaining windows being hidden beneath it or with tiling all the document windows. However, users are likely to arrange the documents in some way that makes it fairly quick and easy for them to pick up the documents they need. This is where the analogy with word processing applications breaks down. In addition, when working with related documents, users may often want to place documents next to each other, and, in the case of making detailed comparisons between them, it is most likely users will want to place the documents side by side.

There may be a reason why it may be more natural to place documents side by side, rather than in another configuration, such as above and below or partially overlapping each other. The reason is that when documents are placed side by side, readers require less eye movement to scan between lines of text, which can be kept in parallel, and it also makes it far easier to keep their place in both

documents. These factors have long been recognized by professional proofreaders, who invariably prefer to work with narrow columns of typeset material and will generally place the typeset material to one side of the original manuscript if a comparison is required.

The side-by-side placement of windows is an existing capability of some applications using the multiple document interface, such as the File Manager of Windows for Workgroups. The command that produces this result is usually called "Tile Vertically"; its action is to space equally along the horizontal plane of the application work space all document windows that are not minimized (reduced to their minimum size). For example, if there are two windows, each will occupy half the application work space; if there are five, each will occupy one-fifth of the work space. Unlike the present invention, such a command, even if available, is of little value in word processing applications because it gives users no control over which document windows to arrange and does not wrap the text in each window.

SUMMARY OF THE INVENTION

It is the principle objective of the present invention to enhance the utility of the multiple document interface system for word processing applications. This objective is accomplished by providing a convenient method for users to select and work with two document windows at the same time. These two windows can be for any two of as many documents as users have opened at one time or they may be of the same document. In fact, in accordance with the present invention, a virtually unlimited number of windows can be organized in the side-by-side (or above-and-below) configurations. Each window maintains its size and position until it is actively changed, so that users can expect to find the same window in the same position even when switching windows in the normal fashion.

Moreover, the present invention provides for an application whose functionality provides the user with an interface which exhibits more consistent behavior than some of the windowing-related functions of current word processing software applications.

In order to address the problems associated with prior art methods and apparatus, the present invention provides several capabilities.

The capability to switch selectively from one document to another without the list of open windows automatically closing after each selection. According to Microsoft interface standards available to the inventor, the list of windows is displayed beneath the Window menu on the menu bar of an MDI application. The present invention does not replace this, but supplies its own list of windows accessible from a single "dialog box" interface that is opened by its own command in the Window menu and remains open when switching windows.

The capability to select any two windows to display side by side (or above and below) each other quickly and intuitively. Users can select any open document window to display side by side (or above and below) the "active" document, which is defined as the window that is currently accepting user input, by making only one selection from the list. This capability also means that users only have to decide about the position of one of the two documents windows for the system to position and size both windows correctly. This capability also means that users can use the system to arrange any number of windows to one side (or above or below) the active document and can switch between them normally, leaving the active document in the same position.

In the side-by-side state, an additional capability of a preferred embodiment of the present invention is that the text is automatically wrapped in each window so that users do not have to scroll the document windows horizontally. Combined with this feature is the corresponding capability to unwrap the text automatically when the windows are maximized or displayed above and below each other.

Another capability is the ability to view two windows of the same document side by side (or above and below) each other, so that users can work in different parts or different views of either window at the same time. For example, the active window can be in the normal view (referred to above), while the second window can be in the page layout or outline view. This enables users to work with the document text at any magnification in the normal view window, while continuing to see a complete dynamically changing representation of the page layout in the other window. Of particular benefit is the fact that, when a word processing application is maximized in the horizontal rectangle of the physical screen and two windows are displayed side by side within it, each window is a vertical rectangle approximating the shape of a typical paper document. The system automatically selects the normal view and a magnification of 100% for both document windows.

In another preferred embodiment of the present invention, there is the capability to see a representation of a document window before switching to this window.

In this embodiment, there also exists the capability to display individual quarter- and half-sized windows if required.

In this preferred embodiment, there also exists the capability to display the application window of the word processor side by side (or above or below) a different application window. The active document window is shown maximized (with the text wrapped within it in the side-by-side configuration) in the application window of the word processor. This capability makes it more easy for users to perform word processing tasks that require the use of other applications, such as when linking and/or embedding objects from spreadsheet or image management programs.

BRIEF DESCRIPTION OF THE DRAWINGS

The file of this patent contains at least one drawing executed in color.

FIG. 1 shows the application window of Microsoft Word 6.0 for Windows with the Window menu displayed and the active document maximized.

FIG. 2 shows the application window of Word 6.0 after applying the Arrange All command.

FIG. 3 shows the dialog box interface of the first embodiment after opening it in the application window.

FIG. 4 shows the initial state of the dialog box interface of the first embodiment.

FIG. 5 shows the interface of the first embodiment after the user selects "Twice".

FIG. 6 shows the interface of the first embodiment after the user selects "Twice" and "Horizontal".

FIG. 7 shows the interface of the first embodiment after the user selects another file from the list box.

FIG. 8 shows the interface of the first embodiment after the user selects another file from the list box and chooses "Horizontal".

FIG. 9 shows the effect on the Word 6.0 application and the interface of the first embodiment after selecting another file from the list box and choosing "Switch to".

FIG. 10 shows the effect on the Word 6.0 application after the user chooses "OK" when the first embodiment's interface resembles FIG. 5 (when "Twice" is selected).

FIG. 11 shows the effect on the Word 6.0 application after the user chooses "OK" when the first embodiment's interface resembles FIG. 7 (when "Left" is selected).

FIG. 12 shows the effect on the Word 6.0 application after the user chooses "OK" when the first embodiment's interface resembles FIG. 8 (when "Top" is selected).

FIG. 13 shows the effect of choosing the layout view in one window after using the invention to view the same document side by side with itself.

FIG. 14 shows the initial state of the dialog box interface of the second embodiment.

FIG. 15 shows the interface of the second embodiment after the user selects another file from the list box.

FIG. 16 shows the interface of the second embodiment after the user chooses the "Window" command button.

FIG. 17 shows the interface of the second embodiment after the user clears the "Keep the Dialog Box Displayed" check box.

FIG. 18 shows the effect on the Word 6.0 application and the interface of the second embodiment after choosing "Activate".

FIG. 19 shows the interface of the second embodiment after the user chooses the "Task List" command button.

FIG. 20 shows the interface of the second embodiment after the user selects another task from the list box.

FIG. 21 shows the effect on the Windows 3.1 environment after the user chooses "OK" when the second embodiment's interface resembles FIG. 20 (when "Left" is selected).

FIG. 22 is a screen bitmap illustrating the dialog box interface opened by the Arrange Windows command.

FIG. 23 is a screen bitmap illustrating an arrangement obtained when the horizontal option item 2204 of FIG. 22 is chosen.

FIG. 24 is a screen bitmap illustrating an arrangement obtained when the vertical option item 2203 of FIG. 22 is chosen.

FIG. 25 is a screen bitmap illustrating an arrangement obtained when the originally active document was zoomed to 200%.

FIG. 26 is a screen bitmap illustrating an arrangement obtained when the originally active document was zoomed to 50%.

FIG. 27 is another screen bitmap illustrating an arrangement obtained when the originally active document was zoomed to 200%.

FIG. 28 is another screen bitmap illustrating an arrangement obtained when the originally active document was zoomed to 50%.

FIG. 29 shows a flow chart of one preferred embodiment of the present invention.

FIG. 30 shows a flow chart of the additional features of a second preferred embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Two preferred embodiments of the invention are presented in detail with reference to the drawings. These embodiments are programmed for and function as extensions of Microsoft Word for Windows. The present invention, however, is not limited to any particular word

processing application or any particular operating environment. Those skilled in the art will find that the system and methods of the present invention may be advantageously applied to any word processing application in any operating environment and to any other application that requires the ease of selecting and comparing pairs of document windows. Therefore, the description of the preferred embodiments which follows is for purposes of illustration and not limitation.

FIG. 1 shows the application window of Microsoft Word 6.0 for Windows in its standard configuration with menu bar and the standard and formatting toolbars visible. The Window menu **102** is open and lists in alphabetic order the open windows. The windows are identified by a number and the name of the file they contain.

In this particular example, the open windows number more than nine, which means the user cannot see or select from the complete list without selecting More Windows **104** to open the Activate dialog box. The name of the active window is checked in the window list **103**. Because the window is maximized in the application window, its file name is appended to the application title bar **101**.

FIG. 2 shows the results of choosing the "Arrange All" command in Window menu **102**. All open windows are tiled with the active window **201** in the top-left corner. The text is not wrapped in the tiled windows. Single lines are not visible as in windows **202** and **203** unless the magnification makes the type illegible as in window **204**.

FIG. 3 shows the Word 6.0 application window with the addition of the first embodiment of the invention after opening the dialog box interface **302** by clicking its toolbar button **301**. The details of the first embodiment's interface are shown in FIG. 4.

FIG. 4 shows the initial state of the dialog box interface of the first embodiment. The main features of this are dynamic text **401**, **409** and **411**; list box **412**, option button groups **407** and **410**; and command buttons **402** through **406** and **408**.

Dynamic text **401** initially displays the name of the file occupying the active window. List box **412** displays the names of the files occupying all the open windows in alphabetic order. The name of the active window's file is initially highlighted **413**. Dynamic text **411** initially says "Show" only. Option buttons **410** initially say "Max." (meaning Maximize) and "Twice." Option buttons **407**, which are initially disabled, say "Vertical" and "Horizontal."

If the user chooses "OK" **402** with the interface in this state, the dialog box closes, the active window is maximized (remaining the active window), and the text in all open documents is unwrapped.

If, instead of choosing "OK," the user chooses "Twice" while the active document is selected, the interface shown in FIG. 5 results. Dynamic text **502** says "Display your active document with itself." Option group **501** becomes enabled. In FIG. 6, the user has chosen "Horizontal" option **601** after choosing "Twice."

If the user chooses "OK" when the dialog box interface is in the state shown in FIG. 5 or FIG. 6 (that is, "Twice" is chosen), a new window of the active document is created. If the user chose "Vertical", the new window is displayed to the left of the active window as shown in FIG. 10. The document windows **1001** and **1002** are zoomed to 100% and the text in each window is wrapped. If the user chose

"Horizontal", the new window is displayed to the top of the active window. The documents are zoomed to 100% and the text in each window is unwrapped.

FIG. 13 illustrates that, in accordance with the present invention after using the system to display the same document window twice, the user can switch views in the windows to great advantage. In this case, the user has switched the window on the left side to layout view **1301** and reduced the magnification to see a complete page. Note that the proportions of the windows in the side-by-side configuration are close to that of a typical paper document (in portrait orientation). The user can continue to do detailed editing work in the window on the right side in normal view **1302**. Any changes the user makes in the normal-view window are reflected in the layout-view window, and vice versa.

If, before choosing "K", the user chooses another file from the list box, the state of the dialog box interface changes to that shown in FIG. 7. Dynamic text **701** includes the word "with:", indicating that the file name here will be displayed with the one selected in the list box; dynamic text **705** shows the name of this selected file; dynamic text **703** says "Display your active document side by side with another one." Option button group **704** changes to "Left" and "Right". Option button group **702** is enabled. If the user then chooses "Horizontal" from option group **702**, the state of the dialog box interface changes to that shown in FIG. 8. Option button group **804** changes to "Top" and "Bottom". Dynamic text **803** says "Display your active document above or below another one."

If the user chooses the "OK" command button when the dialog box interface is in the state shown in FIG. 7 or FIG. 8 (that is, after choosing a file other than the file contained in the active window from the list box), the dialog box closes and the active window is displayed with the selected file's window.

If the user chooses "Left" or "Right", meaning that "Vertical" was also chosen, the selected window is displayed to the left or right of the active window. If the user chooses "Left", the selected window **1101** is displayed to the left of the active window **1102** as shown in FIG. 11. The document windows are zoomed to 100% and the text in each window is wrapped. If the user chooses "Right", the selected window is displayed to the right of the active window. (The document windows are similarly zoomed to 100% and the text in each window is wrapped.)

If the user chooses "Top" or "Bottom", meaning that "Horizontal" was also chosen, the selected window is displayed above or below the active window. If the user chose "Top", the selected window **1201** is displayed above the active window **1202** as shown in FIG. 12. The document windows are zoomed to 100% and the text in each window is unwrapped. If the user chose "Bottom", the selected window is displayed below the active window. (The document windows are similarly zoomed to 100% and the text in each window is unwrapped.)

If the user chooses the "Switch to" command button **405** when the dialog box interface is in the state shown in FIG. 7 or FIG. 8 (that is, after choosing a file other than the file contained in the active window from the list box), the window containing the file selected by the user in the list box is activated **901** and appears on top of the other document windows while the dialog box **903** interface remains open, as shown in FIG. 9. The newly activated window can be in the maximized, minimized, or "restored" (an intermediate size) state whichever state it was in before being activated.

The dialog box is updated to show that the document window that has been switched to is now the active document. Dynamic text **902** shows the name of the file; the name of the file is highlighted in list box **909**. Dynamic text **908** says "Show" only. Option button group **907** says "Max." and "Twice". Option button group **905** is disabled. The "Cancel" button text becomes "Close" **904** to convey to the user that switching the active window is not reversible by canceling or "escaping" (for example, pressing the Esc key) from the dialog box.

The present invention utilizes the dynamic updating of dialog box controls to present the simplest interface for the user and the algorithm for sizing and positioning two of any number of windows.

With reference to the flowchart in FIG. **29**, the method of the first preferred embodiment involves the following actions. Dimensioning the array of document windows and storing the active and selected windows. Displaying the dialog box interface. Enabling the dynamic updating of the dialog interface. Activating another window while keeping the dialog box open. Performing the window sizing operation. The WordBasic code which implements one preferred version of the first embodiment is set forth in the Source Code Appendix at Section III under the title "A First Preferred Embodiment—View **2198**". This implementation works with both Word 6 and Word 7 as no API calls are used.

The WordBasic code appearing in the Source Code Appendix (at I.A.) under the title "DIMENSIONING THE ARRAY OF DOCUMENT WINDOWS AND STORING THE ACTIVE AND SELECTED WINDOWS" illustrates one method for dimensioning the array of document windows and storing the name and number of the active and selected windows in accordance with the present invention. Note that it is not sufficient to use the names of windows to identify them, since there can be identically named windows open with different paths. Variables are defined both for the window names and their number in the window list.

The WordBasic code appearing in the Source Code Appendix (at I.B.) under the title "DISPLAYING THE DIALOG BOX INTERFACE" illustrates the method for displaying the dialog box interface. Note that some dialog controls are hidden when the dialog box is initialized; other controls have variable names that are specified by statements in a dialog function illustrated in the third code sample.

The WordBasic code appearing in the Source Code Appendix (at I.C.) under the title "ENABLING THE DYNAMIC UPDATING OF THE DIALOG INTERFACE" illustrates the method for enabling the dynamic updating of the dialog interface. Note that this dialog function contains statements that alter the controls in the dialog box definition shown in the previous sample.

The WordBasic code appearing in the Source Code Appendix (at I.D.) under the title "ACTIVATING ANOTHER WINDOW WHILE KEEPING THE DIALOG BOX OPEN" illustrates the method for Activating another window while keeping the dialog box open and updating its controls.

The WordBasic code appearing in the Source Code Appendix (at I.E.) under the title "PERFORMING THE WINDOW SIZING OPERATION" illustrates the method for performing the window sizing operation.

FIG. **14** shows the initial state of the dialog box interface of the second embodiment. The main additional features to

the initial state of the interface (as compared with that of the first embodiment already described) are box **1401**, which graphically previews a document window, and command buttons "Task List" **1402** and "Window" **1403**.

Preview box **1401** initially displays the first page of the active document, which is the file preselected in the list box. This graphical representation provides a very small representation of the layout view of a document. It is meant purely as a visual cue to the content of the document.

When the user selects another file from the list box, the dialog box interface resembles FIG. **15**. The preview box displays the first page **1502** of the selected document **1503**. Therefore, the user can maintain a visual association between any file name in the list box and the visual content of this file without having to make the selected file the active document by choosing the "Switch To" command button.

An additional feature shown in FIG. **15** is the appearance of dynamic text **1501** after selecting another file from the list box. The dynamic text provides the name of the active file with the name of the selected file. This lets the user readily see what document windows will be shown together if the user chooses "OK".

FIG. **16** shows the state of a second embodiment's interface when the user chooses "Window" **1403**. The name of the command button becomes "Normal" **1604**, indicating that choosing the button returns the dialog box interface to its normal state. Dynamic text **1601** reads "Choose a document:". Dynamic text **1608** includes the name of any file the user selects in the list box. Option group **1607** displays four options arranged to correspond with the labels (clockwise from top) "Top", "Right", "Bottom", and "Left". Option group **1605** is relabeled the "Size" group and contains two options: "Quarter" and "Half".

In addition, there is a check box **1606** beneath it labeled "Keep the Dialog Box Displayed", and command button **1603**, which now is labeled "Activate" (instead of "Switch to") is the default button of the dialog box interface (meaning that it will respond to the user's pressing Enter on the keyboard). "OK" button **1602** is disabled.

FIG. **17** illustrates that when the user clears the check box **1703**, "OK" button **1701** is enabled and becomes the default button again, while the "Activate" button **1702** is disabled.

When the dialog box interface is in the state illustrated in FIG. **16** or FIG. **17** and the user selects "Quarter", which is the default selection, the user can select two options in the Show group in the following combinations: "Left" and "Top", "Top" and "Right", "Right" and "Bottom", or "Left" and "Bottom". If the user selects "Half", the user can select any one option in the Show group.

When the interface is in the state that resembles FIG. **16** and the user chooses the "Activate" button, the window containing the file selected by the user in the list box is activated **1801**, as shown in FIG. **18**. It appears on top of the other document windows and is sized and positioned according to the user's selection in the "Show" group. The dialog box interface **1803** remains open, permitting the user to activate another window or perform another action. In the example illustrated in FIG. **18**, the user has also activated a document **1804** in the bottom-left quarter of the workspace and a document **1802** in the right half of the workspace.

If the user's selection is to display a quarter-size window in any position, the text in the activated window is wrapped.

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If the user's selection is to display a half-size window left or right, the text in the activated window is wrapped. If the user's selection is to display a half-size window top or bottom, the text in the activated window is unwrapped.

When the interface is in the state that resembles FIG. 17 and the user chooses the "OK" button, the window containing the file selected by the user in the list box is activated in the same way as described above for FIG. 16, but the dialog box interface closes at the same time.

FIG. 19 shows the state of the second embodiment's interface when the user chooses "Task List" 1402. The name of the command button becomes "Doc. List" 1903, indicating that choosing this button returns the dialog box interface to its normal state of showing a list of documents. Dynamic text 1901 reads "View Microsoft Word". List box 1908 replaces the normally displayed list box and preview box 1401. This new list box is a task list of all the applications that are running in the Windows environment. Microsoft Word is preselected in the list 1907, indicating that it is the active application. The "Arrange" options 1904 are disabled; only the "Max." option is enabled in the "Show" group 1906. Dynamic text 1905 says "Choose OK to maximize Word or select another application from the list."

If the user chooses "OK" when the dialog box interface is this state, the dialog box interface closes and the Word application window is maximized. In addition, the active document window within Word is maximized and its text is unwrapped.

If, instead of choosing "OK", the user chooses another application from the list box 2002, the state of the dialog box interface changes to that shown in FIG. 20. Dynamic text 2001 provides the name of the selected application appended to the words "View Microsoft Word with". This indicates that the Word application will be displayed with another application selected in the list box if the user chooses "OK". Dynamic text 2005 shows the name of this selected application; dynamic text 1804 says "Choose OK to display Word side by side another application". Option button group 2005 changes to "Left" and "Right". Option group 2003 is enabled. If the user then chooses "Horizontal" from option group 2003, option button group 2005 changes to "Top" and "Bottom". Dynamic text 2004 says "Choose OK to display Word above or below another application".

If the user chooses the "Switch To" command button 1902 after choosing another application from the list box, as in FIG. 20, the selected application window is activated and appears on top of the Word application while the dialog box interface remains open and unchanged. If the selected application window was already in the maximized or restored state, it appears in this state; if it was minimized, it appears in the restored state.

If the user chooses the "OK" command button when the dialog box interface is the state shown in FIG. 20 (that is, after choosing an application other than Word in the list box), the dialog box closes and the Word application window is displayed with the selected application window.

If the user chooses "Left" or "Right", meaning that the user also chose "Vertical", the selected application is displayed to the left or right of the Word application. If the user chose "Left", the selected application window 2101 (Microsoft Project in this example) is displayed to the left of the Word application window 2102, as shown in FIG. 21.

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The active document window in Word is maximized and the text in the window is wrapped. If the user chose "Right", the selected application window is displayed to the right of the Word application window. The active document window in Word is similarly maximized and the text in the window is wrapped.

If the user chooses "Top" or "Bottom", meaning that the user also chose "Horizontal", the selected application is displayed above or below the Word application. If the user chose "Top", the selected application window is displayed above the Word application window. The active document window in Word is maximized and the text in the window is unwrapped. If the user chose "Bottom", the selected application window is displayed to the bottom of the Word application window. The active document window in Word is similarly maximized and the text in the window is unwrapped.

With reference to the flowchart in FIG. 30, the method of the second preferred embodiment involves the following actions. Displaying a preview box of the selected file. Activating another window while resizing and positioning it. Dimensioning the array of open applications. Performing the application window sizing operation. The WordBasic code which implements one preferred version of the second embodiment is set forth in the Source Code Appendix at Section IV under the title "A Second Preferred Embodiment—View2™ Plus". This implementation works with both Word 6 and Word 7.

The WordBasic code appearing in the Source Code Appendix (at II.A.) under the title "DISPLAYING A PREVIEW BOX OF THE SELECTED FILE" illustrates the method for displaying a preview box of the selected file. Note that if the selected file has not been saved, an empty string is returned for the document's path. In this case, it is temporarily made the active window, so that the file preview statement can work.

The WordBasic code appearing in the Source Code Appendix (at II.B.) under the title "ACTIVATING ANOTHER WINDOW WHILE RESIZING AND POSITIONING IT" illustrates the method for activating another document window while resizing and positioning it.

The WordBasic code appearing in the Source Code Appendix (at II.C.) under the title "DIMENSIONING THE ARRAY OF OPEN APPLICATIONS" illustrates the method for dimensioning the array of open applications.

The WordBasic code appearing in the Source Code Appendix (at II.D.) under the title "PERFORMING THE APPLICATION WINDOW SIZING OPERATION" illustrates the method for performing the application window sizing operation.

Although preferred specific embodiments of the present invention have been described herein in detail, it is desired to emphasize that this has been for the purpose of illustrating and describing the invention, and should not be considered as necessarily limitative of the invention, it being understood that many modifications, including, by way of example only, the word processing application used, can be made by those skilled in the art while still practicing the invention claimed herein.

SOURCE CODE APPENDIX¹

I. METHODS OF A FIRST PREFERRED EMBODIMENT.

5 A. DIMENSIONING THE ARRAY OF DOCUMENT WINDOWS AND STORING
 THE ACTIVE AND SELECTED WINDOWS

```

"DEFINE SHARED VARIABLES
Dim Shared WinList$, yours, yours$, other, other$

10  'NOTE NAME OF ACTIVE WINDOW
    yours$ = WindowName$()
    'NOTE NUMBER OF ACTIVE WINDOW
    yours = Window()

15  'DIMENSION THE WINDOW ARRAY
    numwin = CountWindows() - 1
    Dim WinList$(numwin)
    For count = 0 To numwin
        WinList$(count) = WindowName$(count + 1)
20  Next

    Function view2 (id$, action, suppvalue)

        Select Case action

25          Case 2
              'NOTE NUMBER OF SELECTED WINDOW
              other = DlgValue("winlist") + 1
              'NOTE NAME OF SELECTED WINDOW
30          other$ = DlgText$("winlist")

          Case Else
              End Select

35  End Function

```

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B. DISPLAYING THE DIALOG BOX INTERFACE

```

'DISPLAY THE DIALOG BOX
Begin Dialog UserDialog 381, 215, "View2", .view2
5
    'MAIN PANEL
    Text 12, 9, 220, 14, "Text", .active          '0
    Text 12, 184, 240, 26, "Text", .banter        '1
    ListBox 10, 25, 220, 99, WinList$, .winlist    '2
10
    'DYNAMIC CONTROLS
    GroupBox 10, 129, 220, 50, "Text", .putit      '3
    OptionGroup .leftright                          '4
    OptionButton 38, 145, 95, 19, "Text", .left     '5
15
    OptionButton 140, 145, 80, 19, "Text", .right   '6
    'MAIN PANEL
    GroupBox 250, 129, 123, 50, "Arrange", .arrange '7
    OptionGroup .split                              '8
    OptionButton 260, 140, 99, 19, "&Vertical", .ver  '9
20
    OptionButton 260, 155, 99, 19, "Hori&zontal", .hoz '10
    OKButton 252, 6, 120, 20                        '11
    CancelButton 252, 30, 120, 20, .can             '12
    'CANCEL/CLOSE BUTTON
    PushButton 252, 54, 120, 20, "Text ", .all      '13
25
    'MAX/VIEW/MIN BUTTON
    PushButton 252, 78, 120, 20, "&Switch to", .activ '14
    PushButton 252, 102, 120, 20, "&Help", .help      '15
    PushButton 252, 187, 120, 20, "&Extra", .more      '16
30
    'MORE PANEL
    PushButton 10, 187, 114, 20, "&Open File...", .open '17
    PushButton 130, 187, 115, 20, "&Close File", .clos '18
    PushButton 252, 187, 120, 20, "Hi&de", .hid      '19
35
End Dialog
Dim dlg As UserDialog          'DEFINE DIALOG RECORD
x = Dialog(dlg)                'DISPLAY THE DIALOG BOX
End Sub

40
Function view2 (id$, action, suppvalue)

    'SHOW/HIDE PANELS
    Select Case action
    'INITIALIZE DIALOG
45
    Case 1
        ShowHideMorePanel 0
        ShowHideHelpPanel 0
        DlgEnable "split", 0

```

```
'PRESELECT ACTIVE DOCUMENT IN LISTBOX
DlgValue "winlist", yours - 1

Case 2
5  'NOTE NUMBER OF SELECTED WINDOW
   other = DlgValue("winlist") + 1

Case Else
End Select
10 End Function

'DISPLAY MORE PANEL CONTROLS
Sub ShowHideMorePanel(ShowOrHide)
15 For count = 17 To 19
   DlgVisible count, ShowOrHide
Next
End Sub

20 'DISPLAY HELP PANEL CONTROLS
Sub ShowHideHelpPanel(ShowOrHide)
   For count = 20 To 25
   DlgVisible count, ShowOrHide
Next
25 End Sub
```



```

        End If

'DIM STANDARD CONTROLS IF MAX IS SELECTED
If yours = other And DlgValue("leftright") = 0 Then
5     DlgEnable "split", 0
    Else
        DlgEnable "split", 1
    End If

10 'CHANGE BANTER TEXT
If yours = other And DlgValue("leftright") = 0 Then
    DlgText$ "banter", "Maximize your active document."
    ElseIf yours = other And DlgValue("leftright") = 1 Then
        DlgText$ "banter", "Display your active document with
15 itself."
    ElseIf yours <> other And DlgValue("split") = 0 Then
        DlgText$ "banter", "Display your active document side
by side with another one."
    ElseIf yours <> other And DlgValue("split") = 1 Then
20     DlgText$ "banter", "Display your active document above
or below another one."
    End If

    Case Else
25 End Select
End Function

```

D. ACTIVATING ANOTHER WINDOW WHILE KEEPING THE
DIALOG BOX OPEN

```
'ACTIVATE FILE
5  If id$ = "activ" Then
    WindowList other
    yours = Window()
    yours$ = DlgText$("winlist")
    DlgText$ "active", "View " + yours$ + " with:"
10  DlgText "left", "&Max."
    DlgText "right", "&Twice"
    DlgText$ "can", "Close"
    DlgFocus "winlist"
    ScreenUpdating 1
15  ScreenUpdating 0
    End If
```

E. PERFORMING THE WINDOW SIZING OPERATION

```

'ARRANGE DIFFERENT WINDOWS
Sub ArrangeWindows
5  'VERTICAL SPLIT
  If DlgValue("split") = 0 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100          'SWITCH TO NORMAL VIEW
    ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
10  DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))  'SIZE
    WINDOW
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
    If DlgValue("leftright") = 0 Then DocMove 0, 0  Else
    DocMove(docwidth), 0      ' SET LEFT/RIGHT
15  ' ACTIVE DOCUMENT
    WindowList yours
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100          'SWITCH TO NORMAL VIEW
20  ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))  'SIZE
    WINDOW
    If DlgValue("leftright") = 0 Then DocMove(docwidth), 0
    Else DocMove 0, 0      'SET LEFT/RIGHT
25  End If
  'HORIZONTAL SPLIT
  If DlgValue("split") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100          'SWITCH TO NORMAL VIEW
30  ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)  'SIZE
    WINDOW
    docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
    If DlgValue("leftright") = 0 Then DocMove 0, 0  Else
35  DocMove 0, (docheight)      ' SET TOP/BOTTOM

  ' ACTIVE DOCUMENT
    WindowList yours
    If DocMaximize() Or DocMinimize() Then DocRestore
40  ViewZoom100          'SWITCH TO NORMAL VIEW
    ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)  'SIZE
    WINDOW
    If DlgValue("leftright") = 0 Then DocMove 0, (docheight)
45  Else DocMove 0, 0      'SET TOP/BOTTOM
  End If
End Sub

```

```

'ARRANGE SAME WINDOWS
Sub SameWindows
'MAXIMIZE WINDOW AND UNWRAP TEXT
If DlgValue("leftright") = 0 Then
5   For count = 1 To CountWindows()
        WindowList(count)
        ToolsOptionsView .WrapToWindow = 0
        DocMaximize 1
    Next
10   thisone$ = WindowName$(yours)
    Activate thisone$
End If

'DISPLAY ACTIVE WINDOW WITH NEW WINDOW OF ITSELF
15 'VERTICAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 0 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100 'SWITCH TO NORMAL VIEW
    ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
20   ToolsOptionsView .WrapToWindow = 1 'WRAP WINDOW
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'HALF SIZE
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
    DocMove 0, 0 'SET LEFT

25 'CREATE AND SIZE NEW WINDOW
    old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
    WindowNewWindow
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100 'SWITCH TO NORMAL VIEW
30   ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
    DocMove(docwidth), 0 'SET RIGHT
    WindowList(old) 'ACTIVATE ORIGINAL WINDOW
35 End If

'HORIZONTAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
40   ViewZoom100 'SWITCH TO NORMAL VIEW
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
    DocMove 0, 0 'SET TOP

45 'CREATE AND SIZE NEW WINDOW
    old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
    WindowNewWindow
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100 'SWITCH TO NORMAL VIEW

```

```
DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
DocMove 0, (docheight) ' SET BOTTOM
5 WindowList(old) 'ACTIVATE ORIGINAL WINDOW
End If
End Sub
```

II. METHODS OF A SECOND PREFERRED EMBODIMENT.

A. DISPLAYING A PREVIEW BOX OF THE SELECTED FILE

```

5  Function view2plus (id$, action, suppvale)

    Select Case action
    Case 2
        'PREVIEW SELECTED DOCUMENT
10  other = DlgValue("winlist") + 1
    If DlgFocus$() = "winlist" Then
        previewfilename$ = FileNameFromWindow$(other)
        'IF SELECTED WINDOW IS UNSAVED, TEMPORARILY ACTIVATE IT
        If previewfilename$ = "" Then
15      WindowList other
          DlgFilePreview$
          WindowList yours
        Else
20      DlgFilePreview$ previewfilename$
        End If
    End If
    Case Else
    End Select
    End Function
25

```

B. ACTIVATING ANOTHER WINDOW WHILE RESIZING AND POSITIONING IT

```

'ACTIVATE COMMAND
5  If id$ = "act" Then
    WindowList other
    yours = Window()
    yours$ = DlgText$("winlist")
    yours = Window()
10  If DlgText$("activ") = "&Normal" Then
    If DlgValue("split") = 1 Then Call halfcut
    If DlgValue("split") = 0 Then Call quartercut
    End If
    DlgText "left", "&Max."
    DlgText "right", "&Twice"
15  DlgText$ "can", "Close"
    DlgFocus "winlist"
    ScreenRefresh
    view2plus = 1
20  End If
    view2plus = 1
    End If

    Sub halfcut
25  'HORIZONTAL SPLIT
    If DlgValue("splitsplit") = 1 Or DlgValue("splitsplit") = 3 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100 'SWITCH TO NORMAL VIEW
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
30  DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
    WINDOW
        docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
        If DlgValue("splitsplit") = 1 Then DocMove 0, 0 Else
        DocMove 0, (docheight) ' SET TOP/BOTTOM
35  End If

    'VERTICAL SPLIT
    If DlgValue("splitsplit") = 0 Or DlgValue("splitsplit") = 2 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
40  ViewZoom100 'SWITCH TO NORMAL VIEW
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) 'SIZE
    WINDOW
        docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
45  If DlgValue("splitsplit") = 0 Then DocMove 0, 0 Else
        DocMove(docwidth), 0 ' SET LEFT/RIGHT
        End If
    End Sub

```

```

Sub quartercut
'TOP SPLIT
If DlgValue("splitsplit") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
5     ViewZoom100           'SWITCH TO NORMAL VIEW
    ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
        DocMove 0, 0
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
10    docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
    If DlgValue("leftrightsplit") = 0 Then DocMove 0, 0 Else
    DocMove(docwidth), 0      'SET LEFT/RIGHT
End If

15 'BOTTOM SPLIT
If DlgValue("splitsplit") = 3 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100           'SWITCH TO NORMAL VIEW
    ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
20    DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
        DocMove 0, 0
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
    docheight = DocWindowHeight() 'SET VARIABLE FOR DOC HEIGHT
    If DlgValue("leftrightsplit") = 0 Then DocMove 0, (docheight)
25 Else DocMove(docwidth), (docheight) 'SET LEFT/RIGHT
End If
End Sub

```

C. DIMENSIONING THE ARRAY OF OPEN APPLICATIONS

```

'API DECLARATIONS FOR TASK LIST
Declare Function FindWindow Lib "user" (ClassName As Long,
5 WindowTitle$) As Integer
Declare Function IsWindowVisible Lib "user" (hWnd As Integer) As
Integer

NumTasks = AppCount()
10 Dim Test$(NumTasks), AppNames$(NumTasks)
AppGetNames Test$()
For x = 0 To NumTasks - 1
hWnd = FindWindow(0, Test$(x))
If hWnd <> 0 Then
15 If IsWindowVisible(hWnd) Then
AppNames$(Count) = Test$(x)
Count = Count + 1
End If
End If
20 Next x
AppNames$(Count) = ""
SortArray AppNames$(), 0, 0, Count - 1
DlgListBoxArray "applist", AppNames$()
25 x = 0

```

D. PERFORMING THE APPLICATION WINDOW SIZING OPERATION

```

'ARRANGE APPLICATION WINDOWS
Declare Function LockWindowUpdate Lib "User" (hwndLock As Integer)
5 As Integer

Sub MAIN
ScreenUpdating 0
'GET DOCUMENT VARIABLES
10 vert$ = GetDocumentVar$("appos")
hoz$ = GetDocumentVar$("appos")
max$ = GetDocumentVar$("appos")
newapp$ = GetDocumentVar$("appname")
'CLEAR DOCUMENT VARIABLES
15 SetDocumentVar "appos", ""
SetDocumentVar "appname", ""

If vert$ = "left" Then
LockWindowUpdate(hwndLock)
20 If AppMaximize(newapp$) Or AppMinimize(newapp$) Then
AppRestore newapp$
AppMaximize 1
appwidth = AppWindowWidth()
appheight = AppWindowHeight()
25 AppRestore
AppSize appwidth / 2, appheight
AppMove 0, 0 ' SET LEFT/RIGHT
DocMaximize 1
ToolsOptionsView .WrapToWindow = 1
30 AppMinimize newapp$ 'BUG FIX
AppRestore newapp$
AppMove newapp$, 0, 0
AppSize newapp$, appwidth / 2, appheight
AppMove newapp$, (appwidth / 2), 0 ' SET LEFT/RIGHT
35 ScreenRefresh
End If

If vert$ = "right" Then
LockWindowUpdate(hwndLock)
40 If AppMaximize(newapp$) Or AppMinimize(newapp$) Then
AppRestore newapp$
AppMaximize 1
appwidth = AppWindowWidth()
appheight = AppWindowHeight()
45 AppRestore
AppSize appwidth / 2, appheight
AppMove(appwidth / 2), 0 ' SET LEFT/RIGHT
DocMaximize 1
ToolsOptionsView .WrapToWindow = 1

```

```

        AppMinimize newapp$ 'BUG FIX
        AppRestore newapp$
        AppMove newapp$, 0, 0
        AppSize newapp$, appwidth / 2, appheight
5      AppMove newapp$, 0, 0      ' SET LEFT/RIGHT
        ScreenRefresh
    End If

    If hoz$ = "bottom" Then
10      LockWindowUpdate(hwndLock)
        If AppMaximize(newapp$) Or AppMinimize(newapp$) Then
        AppRestore newapp$
        AppMaximize 1
        appwidth = AppWindowWidth()
15      appheight = AppWindowHeight()
        AppRestore
        AppSize appwidth, appheight / 2
        AppMove 0, 0      ' SET TOP
        DocMaximize 1
20      ToolsOptionsView .WrapToWindow = 0
        AppMinimize newapp$ 'BUG FIX
        AppRestore newapp$
        AppMove newapp$, 0, 0
        AppSize newapp$, appwidth, appheight / 2
25      AppMove newapp$, 0, (appheight / 2)      ' SET BOTTOM
        ScreenRefresh
    End If

    If hoz$ = "top" Then
30      LockWindowUpdate(hwndLock)
        If AppMaximize(newapp$) Or AppMinimize(newapp$) Then
        AppRestore newapp$
        AppMaximize 1
        appwidth = AppWindowWidth()
35      appheight = AppWindowHeight()
        AppRestore
        AppSize appwidth, appheight / 2
        AppMove 0, (appheight / 2)      ' SET BOTTOM
        DocMaximize 1
40      ToolsOptionsView .WrapToWindow = 0
        AppMinimize newapp$ 'BUG FIX
        AppRestore newapp$
        AppMove newapp$, 0, 0
        AppSize newapp$, appwidth, appheight / 2
45      AppMove newapp$, 0, 0      ' SET TOP
        ScreenRefresh
    End If

    If max$ = "yes" Then

```

```
AppMaximize 1
DocMaximize 1
ToolsOptionsView .WrapToWindow = 0
End If
5 End Sub
```

III. A FIRST PREFERRED EMBODIMENT - VIEW2™.

```

5  Dim Shared WinList$, yours, yours$, other, other$, morepanel,
    HelpText$(81)

    Sub MAIN
        ScreenUpdating 0
        DisableInput 1
10   On Error Goto bye

        'OPEN DOCUMENT IF NONE OPEN
        If Window() = 0 Then
            FileNewDefault
15         DocMaximize 1
            morepanel = 1
        End If

        'PRINT PREVIEW MESSAGE
20   If MacroNameFromWindow$() = "" Then
            If FilePrintPreview() = - 1 Then
                button = MsgBox("Would you like to exit print preview and
use View2?", "View2", 36)
                If button = - 1 Then
25                     ClosePreview
                Else
                    Goto bye
                End If
            End If
30   End If

        yours$ = WindowName$()'NOTE NAME OF ACTIVE WINDOW
        yours = Window()'NOTE NUMBER OF ACTIVE WINDOW

35   'DIMENSION THE WINDOW ARRAY
        numwin = CountWindows() - 1
        Dim WinList$(numwin)
        For count = 0 To numwin
            WinList$(count) = WindowName$(count + 1)
40   Next

        'DISPLAY THE DIALOG BOX
        Begin Dialog UserDialog 381, 215, "View2", .view2

45         'MAIN PANEL
            Text 10, 9, 220, 14, "Text", .active          '0
            Text 10, 184, 240, 26, "Text", .banter         '1
            ListBox 10, 25, 220, 99, WinList$(), .winlist  '2

```

```

'DYNAMIC CONTROLS
GroupBox 10, 129, 220, 50, "Text", .putit '3
OptionGroup .leftright '4
5 OptionButton 38, 145, 95, 19, "Text", .left '5
OptionButton 140, 145, 80, 19, "Text", .right '6

'MAIN PANEL
GroupBox 250, 129, 123, 50, "Arrange", .arrange '7
OptionGroup .split '8
10 OptionButton 260, 140, 99, 19, "&Vertical", .ver '9
OptionButton 260, 155, 99, 19, "Hori&zontal", .hoz '10
OKButton 252, 6, 120, 20 '11
CancelButton 252, 30, 120, 20, .can '12
'CANCEL/CLOSE BUTTON
15 PushButton 252, 54, 120, 20, "Text ", .all '13
'MAX/VIEW/MIN BUTTON
PushButton 252, 78, 120, 20, "&Switch To", .activ '14
PushButton 252, 102, 120, 20, "&Help", .help '15
20 PushButton 252, 187, 120, 20, "&File", .more '16

'MORE PANEL
PushButton 10, 187, 114, 20, "&Open File...", .open '17
PushButton 130, 187, 115, 20, "&Close File", .clos '18
25 PushButton 252, 187, 120, 20, "Hi&de", .hid '19

'HELP PANEL
ListBox 2, 4, 377, 150, HelpText$, .helplist '20
PushButton 252, 162, 120, 20, "&About", .about '21
PushButton 252, 187, 120, 20, "&Back", .back '22
30 Text 10, 170, 220, 15, "(c) 1995 by Michael M. Ross." '23
Text 10, 185, 232, 15, " All rights reserved." '24
GroupBox 5, 155, 240, 52, "" '25

End Dialog
35 Dim dlg As UserDialog 'DEFINE DIALOG RECORD
x = Dialog(dlg) 'DISPLAY THE DIALOG BOX
bye:
If Err = 26 Then
    Beep
40 MsgBox "This command is not available because another dialog
box is active.", - 2
End If
End Sub

45 Function view2(id$, action, suppvalue)
On Error Goto exit
'SHOW/HIDE PANELS
Select Case action

```

```

'INITIALIZE DIALOG
Case 1
ShowHideHelpPanel 0

5  'SHOW HIDDEN PANEL IF ONLY DEFAULT DOC OPEN
   If morepanel = 1 Then
       DlgVisible "hid", 1
       DlgFocus "hid"
       DlgVisible "more", 0
10  DlgVisible "banter", 0
       ShowHideMorePanel 1
       DlgEnable "clos", 0
   Else
       ShowHideMorePanel 0
15  End If

       DlgEnable "split", 0
       DlgEnable "activ", 0

20  'PRESELECT ACTIVE DOCUMENT IN LISTBOX
       DlgValue "winlist", yours - 1

       Case 2
       'NOTE NUMBER OF SELECTED WINDOW
25  other = DlgValue("winlist") + 1
       'NOTE NAME OF SELECTED WINDOW
       other$ = DlgText$("winlist")

       'BUTTON CONTROL
30  If id$ = "can" Then
       thisone$ = WindowName$(yours)
       Activate thisone$
       Goto exit
   End If
35  If id$ = "OK" Then
       If yours = other And DlgValue("leftright") = 0 Then Goto
pass 'IF ONLY MAXIMIZING
       thisone$ = WindowName$(yours)
       Activate thisone$
40  If MacroNameFromWindow$() <> "" Then 'TEST FOR MACRO
WINDOW
       MsgBox "This command is not available with macro
windows.", "View2", 48
45  Goto again
   End If
       thisone$ = WindowName$(other)
       Activate thisone$
       If MacroNameFromWindow$() <> "" Then 'TEST FOR MACRO

```

```

WINDOW
    MsgBox "This command is not available with macro
windows.", "View2", 48
    thisone$ = WindowName$(yours)
5    Activate thisone$
    Goto again
    End If
    If CommandValid("ToolsProtectDocument") = 0 Then 'TEST FOR
PROTECTED DOC
10    MsgBox "This command is not available with protected
documents.", "View2", 48
    thisone$ = WindowName$(yours)
    Activate thisone$
    Goto again
15    End If
pass:
    If yours <> other Then ArrangeWindows 'CALL ARRANGE WINDOWS
SUBROUTINE
    If yours = other Then SameWindows 'CALL SAME WINDOWS SUBROUTINE
20    Goto exit
    End If
again:

'PRESS EXTRA FOR MORE PANEL
25    If id$ = "more" Then
        DlgVisible "hid", 1
        DlgFocus "hid"
        DlgVisible "more", 0
        DlgVisible "banter", 0
30    ShowHideMorePanel 1
    End If
    view2 = 1

'OPEN FILE DIALOG
35    If id$ = "open" Then
        view2 = 1
        Dim dlg As FileOpen
        GetCurValues dlg

40    n = Dialog(dlg)
    Return$ = dlg.Name

    If Return$ = "*. *" Or Return$ = "*.doc" Or Return$ = "*.dot" Or
Return$ = "*.rtf" Or Return$ = "*.txt" Then Goto exit 'FIND FILE
45    BUGFIX

    If Return$ = "" Then Goto exit
    Return$ = Return$ + " "

```

```

While Return$ <> ""
    If Left$(Return$, 1) = Chr$(34) Then
        FName$ = Left$(Return$, InStr(2, Return$, Chr$(34)))
        Return$ = LTrim$(Mid$(Return$, Len(FName$) + 1))
    Else
        FName$ = Left$(Return$, InStr(1, Return$, Chr$(32)))
        Return$ = LTrim$(Mid$(Return$, Len(FName$)))
    End If
FileOpen FName$
Call NewList
DocMaximize 1
ScreenRefresh
Wend

view2 = 1
End If

'CLOSE FILE
If id$ = "clos" Then
    before = CountWindows() 'RECORD WINDOW COUNT
    WindowList other
    DocClose 0
    If before > CountWindows() Then
        Call NewList
        ScreenRefresh
    Else
        WindowList yours
    End If
End If

'ACTIVATE FILE
If id$ = "activ" Then
    thisone$ = WindowName$(other)
    Activate thisone$
    If DocMinimize() Then
        DocMaximize 1
        DlgText$ "all", "&View All"
    End If
    yours = Window()
    yours$ = DlgText$("winlist")
    DlgText$ "active", "View " + yours$
    DlgText "left", "&Max."
    DlgText "right", "&Twice"
    DlgText$ "can", "Close"
    DlgFocus "winlist"
    ScreenRefresh
End If

```

```

'PRESS BACK TO HIDE MORE PANEL
If id$ = "hid" Then
    DlgVisible "more", 1
    DlgFocus "more"
5    DlgFocus "winlist"
    ShowHideMorePanel 0
    DlgVisible "banter", 1
    End If
view2 = 1
10

'PRESS HELP FOR HELP PANEL
If id$ = "help" Then
    HelpStringText
15    DlgListBoxArray "helplist", HelpText$()
    DlgVisible "back", 1
    DlgFocus "back"
    ShowHideMorePanel 0
    ShowHideMainPanel 0
20    ShowHideDynamicPanel 0
    ShowHideHelpPanel 1
End If

'KEEP OFF THE LIST
25 If id$ = "helplist" Then DlgFocus "back"

'PRESS BACK FOR MAIN PANEL
If id$ = "back" Then
    DlgVisible "OK", 1
30    DlgFocus "OK"
    ShowHideHelpPanel 0
    ShowHideMainPanel 1
    ShowHideDynamicPanel 1
    ShowHideMorePanel 0
35    DlgFocus("winlist")

If yours <> other And DlgValue("split") = 0 Then
    DlgText "left", "&Left"
    DlgText "right", "&Right"
40 ElseIf yours <> other And DlgValue("split") = 1 Then
    DlgText "left", "&Top"
    DlgText "right", "&Bottom"
ElseIf yours = other Then
    DlgText "left", "&Max."
45    DlgText "right", "&Twice"
End If
End If

Case Else

```

```

End Select

'DYNAMIC AND STATIC TEXT CONTROLS
Select Case action
5 Case 1
  'RETURN NAME OF ACTIVE DOCUMENT
  DlgText$ "active", "View " + yours$

  'RETURN NAME OF SELECTED DOCUMENT
10 DlgText$ "putit", "Show"

  'SET BUTTON NAMES
  DlgText$ "all", "Vie&w All"
  DlgText$ "can", "Cancel"
15

  'SET DYNAMIC CONTROLS
  DlgText$ "left", "&Max."
  DlgText$ "right", "&Twice"

20 'SET BANTER TEXT
  DlgText$ "banter", "Maximize your active document or choose
  another one."
  ScreenRefresh

25 Case 2
  'SHOW NAME OF SELECTED DOCUMENT IF DIFFERENT
  If other <> yours Then
    DlgText$ "putit", "Show " + other$
    DlgText$ "active", "View " + yours$ + " with:"
30 Else
    DlgText$ "putit", "Show"
    DlgText$ "active", "View " + yours$
  End If

35 'SET DYNAMIC CONTROLS
  If DlgFocus$() <> "back" And DlgFocus$() <> "helplist" Then
    If yours <> other And DlgValue("split") = 0 Then
      DlgText "left", "&Left"
      DlgText "right", "&Right"
40 ElseIf yours <> other And DlgValue("split") = 1 Then
      DlgText "left", "&Top"
      DlgText "right", "&Bottom"
      ElseIf yours = other Then
        DlgText "left", "&Max."
45 DlgText "right", "&Twice"
      End If
    End If

  'DIM STANDARD CONTROLS IF MAX IS SELECTED

```

```

If yours = other And DlgValue("leftright") = 0 Then
    DlgEnable "split", 0
Else
    DlgEnable "split", 1
5 End If

'ENABLE/DISABLE SWITCH TO
If yours = other Then
    DlgEnable "activ", 0
10 Else
    DlgEnable "activ", 1
End If

'ENABLE/DISABLE CLOSE FILE
15 If DlgListBoxArray("winlist") = 1 Then
    DlgEnable "clos", 0
Else
    DlgEnable "clos", 1
End If

20 'DISPLAY THE ABOUT MESSAGE
If id$ = "about" Then
    view2 = 1
    number = CountWindows()
25 If number = 1 Then
        MsgBox "You have 1 window open.", "View2 Trivia", 64
        MsgBox "View2 is freeware. If you find it useful, let
me know and let other Word users know too.", "About View2", 64
        MsgBox "Send comments or suggestions to
30 mross@adpt.co.il or (CompuServe)100274,2520.", "About View2", 64
        DlgFocus "back"
    Else
        MsgBox "You have" + Str$(number) + " windows open.", "
View2 Trivia ", 64
35 MsgBox "View2 is freeware. If you find it useful, let
me know and let other Word users know too.", "About View2", 64
        MsgBox "Send comments or suggestions to
mross@adpt.co.il or (CompuServe)100274,2520.", "About View2", 64
        DlgFocus "back"
40 End If
End If

'TOGGLE BUTTON(MAXIMIZE/VIEW ALL/MINIMIZE)
45 If id$ = "all" Then
    If DlgText$("all") = "Mi&n. All" Then
        For count = 1 To CountWindows()
            WindowList(count)
            DocMinimize

```

```

        Next
        thisone$ = WindowName$(yours)
        Activate thisone$
        view2 = 1
5       DlgText$ "all", "Ma&x. All"
        ScreenRefresh
    ElseIf DlgText$("all") = "Ma&x. All" Then
        For count = 1 To CountWindows()
            WindowList(count)
10           DocMaximize 1
        Next
        WindowList yours
        view2 = 1
        DlgText$ "all", "Vie&w All"
15       DlgFocus "winlist"
        ScreenRefresh
    Else
        For count = 1 To CountWindows()
            WindowList(count)
20           If DocMaximize() Or DocMinimize() Then DocRestore
        Next
        WindowList yours
        WindowArrangeAll
        DlgText$ "all", "Mi&n. All"
25       DlgText$ "can", "Close"
        ScreenRefresh
    End If
End If

30   'CHANGE BANTER TEXT
    If yours = other And DlgValue("leftright") = 0 Then
        DlgText$ "banter", "Maximize your active document or
        choose another one."
        ElseIf yours = other And DlgValue("leftright") = 1 Then
35       DlgText$ "banter", "Display your active document with
        itself."
        ElseIf yours <> other And DlgValue("split") = 0 Then
            DlgText$ "banter", "Display your active document side
            by side with another one."
40       ElseIf yours <> other And DlgValue("split") = 1 Then
            DlgText$ "banter", "Display your active document above
            or below another one."
        End If
45   Case Else
        End Select
        exit:
        End Function

```

```

'DISPLAY MAIN PANEL CONTROLS
Sub ShowHideMainPanel(ShowOrHide)
For count = 0 To 2
DlgVisible count, ShowOrHide
5 Next
For count = 7 To 16
DlgVisible count, ShowOrHide
Next
End Sub
10
'DISPLAY DYNAMIC CONTROLS
Sub ShowHideDynamicPanel(ShowOrHide)
For count = 3 To 6
DlgVisible count, ShowOrHide
15 Next
End Sub

'DISPLAY MORE PANEL CONTROLS
Sub ShowHideMorePanel(ShowOrHide)
20 For count = 17 To 19
DlgVisible count, ShowOrHide
Next
End Sub

'DISPLAY HELP PANEL CONTROLS
Sub ShowHideHelpPanel(ShowOrHide)
25 For count = 20 To 25
DlgVisible count, ShowOrHide
Next
30 End Sub

'REFRESH ARRAY AND UPDATE TEXT
Sub NewList
On Error Goto zip
35 before = DlgListBoxArray("winlist")      'RECORD WINDOW COUNT
numwin = CountWindows() - 1
Dim WinList$(numwin)
For count = 0 To numwin
WinList$(count) = WindowName$(count + 1)
40 Next
DlgListBoxArray "winlist", WinList$()

If before <> DlgListBoxArray("winlist") Then 'IF WINDOW COUNT HAS
'CHANGED THEN A FILE'S BEEN OPENED OR CLOSED, SO UPDATE ALL THIS
45 STUFF

yours = Window()      'NOTE NUMBER OF ACTIVE WINDOW

'PRESELECT ACTIVE DOCUMENT IN LISTBOX

```

```

DlgValue "winlist", yours - 1
other = DlgValue("winlist") + 1    'NOTE NUMBER OF SELECTED
WINDOW

5  'RETURN NAME OF ACTIVE DOCUMENT
   yours$ = WindowName$() 'NOTE NAME OF ACTIVE DOC
   DlgText$ "active", "View " + yours$

   'SET DYNAMIC CONTROLS
10  DlgText$ "left", "&Max."
   DlgText$ "right", "&Twice"
   DlgText$ "all", "Vie&w All"

   'SET BANTER TEXT
15  DlgText$ "banter", "Maximize your active document or choose
   another one."
   DlgEnable "split", 0
   DlgFocus "winlist"
   DlgText$ "can", "Close" 'CHANGE CANCEL TO CLOSE
20
   'ENABLE/DISABLE CLOSE FILE BUTTON
   If DlgListBoxArray("winlist") = 1 Then
       DlgEnable "clos", 0
       Else
25       DlgEnable "clos", 1
   End If
   End If

   zip:
30   x = 0
   End Sub

   'HELP TEXT SUBROUTINE
   Sub HelpStringText
35   HelpText$(0) = " HELP                                >>Scroll
   down>>"
   HelpText$(1) = " "
   HelpText$(2) = " Do side-by-side or up-and-down editing in "
   HelpText$(3) = " Word. When working with multiple"
40   HelpText$(4) = " documents, View2 gives you control "
   HelpText$(5) = " over your desktop, letting you arrange the "
   HelpText$(6) = " windows you want vertically or horizontally."
   HelpText$(7) = " "
   HelpText$(8) = " INSTRUCTIONS:"
45   HelpText$(9) = " View2 is easy to use. It has dynamic"
   HelpText$(10) = " controls and text to guide you."
   HelpText$(11) = " "
   HelpText$(12) = " 1. When you start View2, the name of your"
   HelpText$(13) = "      active document is above the list box"

```

```

HelpText$(14) = "    and is also preselected in the list."
HelpText$(15) = " 2. You can select any open document from"
HelpText$(16) = "    the list. Its name appears beneath the
5 list"
HelpText$(17) = "    with the actions you can perform on it."
HelpText$(18) = " 3. When you choose OK, View2 arranges"
HelpText$(19) = "    the document you select with your"
HelpText$(20) = "    active document, either side by side or"
HelpText$(21) = "    up and down, according to your choice."
10 HelpText$(22) = " 4. If you do not select another document,"
HelpText$(23) = "    View2 maximizes your active one."
HelpText$(24) = "    Choose this option when you're ready to"
HelpText$(25) = "    return to full-screen editing because"
HelpText$(26) = "    it unwraps the text in all open windows."
15 HelpText$(27) = " "
HelpText$(28) = " To do side-by-side editing:"
HelpText$(29) = " 1. Select the Vertical option button if you"
HelpText$(30) = "    want to view the document you select"
HelpText$(31) = "    to the left or right of your active one."
20 HelpText$(32) = " 2. Choose the Left or Right option buttons"
HelpText$(33) = "    that appear below the list box."
HelpText$(34) = " "
HelpText$(35) = " To do up-and-down editing:"
HelpText$(36) = " 1. Select the Horizontal option button if"
25 HelpText$(37) = "    you want to view the document you "
HelpText$(38) = "    select above or below your active one."
HelpText$(39) = " 2. Choose the Top or Bottom option "
HelpText$(40) = "    buttons that appear below the list box."
HelpText$(41) = " "
30 HelpText$(42) = " To do same-document editing:"
HelpText$(43) = " 1. Leave your active document selected"
HelpText$(44) = "    in the list if you want to maximize it or"
HelpText$(45) = "    view it with a new window of itself."
HelpText$(46) = " 2. Choose the Max. or Twice option"
35 HelpText$(47) = "    buttons that appear below the list box."
HelpText$(48) = " 3. If you choose Twice, choose the"
HelpText$(49) = "    Vertical or Horizontal buttons."
HelpText$(50) = " "
HelpText$(51) = " To make another document the active one:"
40 HelpText$(52) = " 1. Select the document in the list box."
HelpText$(53) = " 2. Choose the Active button. The document"
HelpText$(54) = "    is displayed and its name appears above"
HelpText$(55) = "    the list box."
HelpText$(56) = " "
45 HelpText$(57) = " To arrange, minimize, or maximize all your"
HelpText$(58) = "    windows:"
HelpText$(59) = " 1. Choose the View All button to arrange"
HelpText$(60) = "    all your open documents. The button"
HelpText$(61) = "    toggles to Min. All."

```

```

HelpText$(62) = " 2. Choose the Min. All button to minimize"
HelpText$(63) = "    all your open documents. The button"
HelpText$(64) = "    toggles to Max. All."
HelpText$(65) = " 3. Choose the Max. All button to maximize"
5 HelpText$(66) = "    all your open documents. The button"
HelpText$(67) = "    toggles to View All."
HelpText$(68) = " "
HelpText$(69) = " To open a new file:"
HelpText$(70) = " 1. Choose the Extra button to display the"
10 HelpText$(71) = "    hidden panel."
HelpText$(72) = " 2. Choose the Open File button. The File"
HelpText$(73) = "    Open dialog box appears."
HelpText$(74) = " 3. The file you select to open becomes the"
HelpText$(75) = "    active document."
15 HelpText$(76) = " "
HelpText$(77) = " To close a file or new window:"
HelpText$(78) = " 1. Select the file or new window in the"
HelpText$(79) = "    list box."
HelpText$(80) = " 2. Choose the Close File button from the"
20 HelpText$(81) = "    hidden panel."
End Sub

'ARRANGE DIFFERENT WINDOWS
Sub ArrangeWindows
25 On Error Goto problem
'VERTICAL SPLIT
If DlgValue("split") = 0 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    ViewZoom100 'SWITCH TO NORMAL VIEW
30 ToolsOptionsView.WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
    If DlgValue("leftright") = 0 Then DocMove 0, 0 Else
35 DocMove(docwidth), 0 ' SET LEFT/RIGHT

' ACTIVE DOCUMENT
WindowList yours
    If DocMaximize() Or DocMinimize() Then DocRestore
40 ViewZoom100 'SWITCH TO NORMAL VIEW
    ToolsOptionsView.WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
    If DlgValue("leftright") = 0 Then DocMove(docwidth), 0
45 Else DocMove 0, 0 'SET LEFT/RIGHT
End If

'HORIZONTAL SPLIT
If DlgValue("split") = 1 Then

```

```

        If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100      'SWITCH TO NORMAL VIEW
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
5   WINDOW
        docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
        If DlgValue("leftright") = 0 Then DocMove 0, 0 Else
        DocMove 0, (docheight)      ' SET TOP/BOTTOM

10  ' ACTIVE DOCUMENT
        WindowList yours
        If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100      'SWITCH TO NORMAL VIEW
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
15  DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
        WINDOW
        If DlgValue("leftright") = 0 Then DocMove 0, (docheight)
        Else DocMove 0, 0      'SET TOP/BOTTOM
        End If
20  problem:
        End Sub

        'ARRANGE SAME WINDOWS
25  Sub SameWindows
        On Error Goto problem
        'MAXIMIZE WINDOW AND UNWRAP TEXT
        If DlgValue("leftright") = 0 Then
        For count = 1 To CountWindows()
30          WindowList(count)
              ToolsOptionsView .WrapToWindow = 0
        Next
        WindowList yours
        DocMaximize 1
35  End If

        'DISPLAY ACTIVE WINDOW WITH NEW WINDOW OF ITSELF
        'VERTICAL SPLIT
        If DlgValue("leftright") = 1 And DlgValue("split") = 0 Then
40          If DocMaximize() Or DocMinimize() Then DocRestore
              ViewZoom100      'SWITCH TO NORMAL VIEW
              ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
              ToolsOptionsView .WrapToWindow = 1 'WRAP WINDOW
              DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7))      'HALF SIZE
45          docwidth = DocWindowWidth()      'SET VARIABLE FOR DOC WIDTH
              DocMove 0, 0      ' SET LEFT

        'CREATE AND SIZE NEW WINDOW
        old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER

```

```

        WindowNewWindow
        If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100          'SWITCH TO NORMAL VIEW
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
5      DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
        DocMove(docwidth), 0      'SET RIGHT
        WindowList(old)          'ACTIVATE ORIGINAL WINDOW
End If
10
'HORIZONTAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100          'SWITCH TO NORMAL VIEW
15      DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
        DocMove 0, 0      'SET TOP

'CREATE AND SIZE NEW WINDOW
20      old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
        WindowNewWindow
        If DocMaximize() Or DocMinimize() Then DocRestore
        ViewZoom100          'SWITCH TO NORMAL VIEW
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
25      WINDOW
        docheight = DocWindowHeight() 'SET VARIABLE FOR DOC WIDTH
        DocMove 0, (docheight)      ' SET BOTTOM
        WindowList(old)          'ACTIVATE ORIGINAL WINDOW
End If
30      problem:
End Sub

```

IV. A SECOND PREFERRED EMBODIMENT - VIEW2™ PLUS.

A. THIS IS A SIMPLE PARSER FOR CALLING THE WORD 6
OR WORD 7 VERSIONS OF THE SECOND EMBODIMENT.

5

[IT IS REQUIRED BECAUSE THE SECOND EMBODIMENT MAKES A FEW API
CALLS THAT HAVE TO BE 16-BIT FOR WORD 6 AND 32-BIT FOR WORD 7.]

Sub MAIN

10

'WORD 6
If InStr(AppInfo\$(2), "6.0") <> 0 Then
View2Plus16

15

'WORD 7
ElseIf InStr(AppInfo\$(2), "7.0") <> 0 Then
View2Plus32
End If

20

End Sub

B. MAIN MACRO OF THE FIRST EMBODIMENT FOR WORD 6
(WITH 16-BIT API DECLARATIONS).

```

[IT CONTAINS THE CODE FOR DIMENSIONING THE DOCUMENT AND
5  APPLICATION ARRAY, DISPLAYING THE DIALOG BOX, AND PREVIEWING,
    SIZING, POSITION, AND ACTIVATING DOCUMENT WINDOWS. IT ALSO
    CONTAINS A TIMER MECHANISM TO CALL THE SUPPLEMENTAL MACRO BECAUSE
    WORDBASIC CANNOT CALL OTHER MACROS WITHOUT RETURNING CONTROL TO
    THE CALLING MACRO.]

10
    'DECLARE SHARED VARIABLES
    Dim Shared WinList$, firstyours, yours, yours$, other, other$,
15  oldyours, oldyours$, newyours, newyours$, yourapp$, newapp$,
    morepanel

    'API DECLARATIONS FOR HELP FILE
    Declare Function WinHelp Lib "User" (hWnd As Integer, lpHelpFile
20  As String, wCommand As Integer, dwData As String) As Integer

    'API DECLARATIONS FOR TASK LIST
    Declare Function FindWindow Lib "user" (ClassName As Long,
    WindowTitle$) As Integer
25  Declare Function IsWindowVisible Lib "user" (hWnd As Integer) As
    Integer

    'PREVENT SCREEN REFRESH API DECLARATIONS
    Declare Function GetDesktopWindow Lib "user" () As Integer
30  Declare Sub LockWindowUpdate Lib "user" (hWnd As Integer)

    Sub MAIN
    ScreenUpdating 0
    DisableInput 1
    On Error Goto bye
35

    'OPEN DOCUMENT IF NONE OPEN
    If Window() = 0 Then
        FileNewDefault
        DocMaximize 1
40  morepanel = 1
    End If

```

```

'PRINT PREVIEW MESSAGE
If MacroNameFromWindow$() = "" Then
    If FilePrintPreview() = - 1 Then
        button = MsgBox("Would you like to exit print preview and
5 use View2 Plus?", "View2 Plus", 36)
        If button = - 1 Then
            ClosePreview
        Else
            Goto bye
10        End If
    End If
End If

'NOTE NAME AND NUMBER OF ACTIVE DOC
15 yours$ = WindowName$()
yours = Window()
firstyours = Window()

'DIMENSION THE WINDOW ARRAY
20 numwin = CountWindows() - 1
Dim WinList$(numwin)
For count = 0 To numwin
    WinList$(count) = WindowName$(count + 1)
Next

25 'DIMENSION THE APPLICATION ARRAY
If InStr(AppInfo$(1), "95") <> 0 Then
    AppHide "Program Manager"
End If
30 Dim AppNames$(AppCount()), TempArray$(AppCount())
AppGetNames TempArray$()
For x = 0 To AppCount() - 1
    If IsWindowVisible(FindWindow(0, TempArray$(x))) = 1 Then
        AppNames$(num) = TempArray$(x)
35        num = num + 1
    End If
Next x
AppNames$(num) = ""
SortArray AppNames$(0, 0, num - 1)
40 If InStr(AppInfo$(1), "95") <> 0 Then
    AppShow "Program Manager"
    AppActivate "Microsoft Word", 1
End If

45 'DISPLAY THE DIALOG BOX
Begin Dialog UserDialog 550, 235, "View2 Plus", .view2plus

    'MAIN PANEL
    Text 17, 7, 395, 14, "Text", .active    '0

```

```

Text 255, 7, 160, 14, "Text", .selected      '1
ListBox 15, 23, 220, 123, WinList$, .winlist  '2
ListBox 15, 23, 379, 123, AppNames$, .applist '3

5      'DYNAMIC PANEL
GroupBox 15, 153, 222, 50, "Text", .putit      '4
OptionGroup .leftright                        '5
    OptionButton 38, 169, 95, 19, "Text", .left '6
    OptionButton 140, 169, 80, 19, "Text", .right '7
10     Text 17, 208, 370, 26, "Text", .banter   '8

      'HIDDEN SPLIT PANEL
GroupBox 15, 153, 222, 80, "Text", .splitit
'9
15     OptionGroup .leftrightsplit             'QUARTER      '10
    OptionButton 28, 185, 95, 19, "&Left", .leftsplit
'11
    OptionButton 140, 185, 80, 19, "&Right", .rightsplit
'12
20     OptionGroup .splitsplit                 'HALF/QUARTER  '13
    OptionButton 28, 185, 95, 19, "&Left", .lefthalfsplit
'14
    OptionButton 85, 164, 105, 19, "&Top", .versplit
'15
25     OptionButton 140, 185, 80, 19, "&Right",
.righthalfsplit '16
    OptionButton 85, 209, 105, 19, "&Bottom", .hozsplit
'17

30     'MAIN PANEL
FilePreview 255, 23, 140, 125, .prev          '18
GroupBox 255, 153, 142, 50, "Text", .arrange '19
OptionGroup .split                            '20
    OptionButton 270, 164, 99, 19, "Text", .ver '21
35     OptionButton 270, 179, 99, 19, "Text", .hoz '22
    CheckBox 255, 207, 160, 25, "Keep the Dialog Box
Displayed", .keep '23
    OKButton 415, 6, 120, 20                  '24
    CancelButton 415, 30, 120, 20, .can       '25
40     PushButton 415, 54, 120, 20, "Text", .all '26
    PushButton 415, 78, 120, 20, "Text", .act '27
    PushButton 415, 102, 120, 20, "&Help", .help '28
    GroupBox 415, 130, 120, 100, "Mode", .file '29
    PushButton 430, 150, 90, 20, "Text", .app '30
45     PushButton 430, 175, 90, 20, "Text", .activ '31
    PushButton 430, 200, 90, 20, "Text", .fil '32

      'HIDDEN FILE PANEL
PushButton 15, 210, 120, 20, "&Open File...", .open '33

```

```

        PushButton 145, 210, 120, 20, "&Close File", .clos      '34
        PushButton 275, 210, 120, 20, "Co&py File...", .cop      '35

5      End Dialog
      Dim dlg As UserDialog          'DEFINE DIALOG RECORD
      x = Dialog(dlg)                'DISPLAY THE DIALOG BOX
      bye:
      If Err = 26 Then
10         Beep
           MsgBox "This command is not available because another dialog
box is active.", - 2
      End If
      End Sub

15      Function view2plus(id$, action, suppvalue)
      On Error Goto exit
      'INITIALIZE DIALOG
      Select Case action

20         'INITIALIZE DIALOG
         Case 1
           ShowHideSplitPanel 0

25         'SHOW HIDDEN FILE PANEL IF ONLY DEFAULT DOC OPEN
         If morepanel = 1 Then
           DlgText "fil", "Hi&de"
           DlgVisible "banter", 0
           ShowHideHiddenPanel 1
30           DlgEnable "clos", 0
         Else
           DlgText$ "fil", "&File"
           ShowHideHiddenPanel 0
         End If

35         DlgVisible "applist", 0
         DlgVisible "keep", 0
         DlgEnable "split", 0
         DlgEnable "act", 0

40         'PRESELECT ACTIVE DOCUMENT IN LISTBOX
         DlgValue "winlist", yours - 1

         'RETURN NAME OF ACTIVE DOCUMENT
45         DlgText$ "active", "View " + yours$
         DlgText$ "selected", ""

         'RETURN NAME OF SELECTED DOCUMENT
         other$ = DlgText$("winlist")

```

```

DlgText$ "putit", "Show"

'SET CONTROL NAMES
DlgText$ "all", "&View All"
5 DlgText$ "activ", "&Window"
  DlgText$ "can", "Cancel"
  DlgText$ "ver", "&Vertical"
  DlgText$ "hoz", "Hori&zontal "
  DlgText$ "act", "Switc&h To"
10 DlgText$ "app", "Tas&k List"
  DlgText$ "arrange", "Arrange"
  DlgText$ "left", "&Max."
  DlgText$ "right", "&Twice"

15 Case 2
  'NOTE NAME AND NUMBER OF SELECTED DOC
  other$ = DlgText$("winlist")
  other = DlgValue("winlist") + 1

20 'NOTE NAME OF SELECTED APPLICATION
  newapp$ = DlgText$("applist")

  'BUTTON CONTROL
  If id$ = "can" Then
25     thisone$ = WindowName$(yours)
        Activate thisone$
        Goto exit
  End If

30 If id$ = "OK" Then
  WindowList other
    If DlgText$("app") = "Tas&k List" Then
      If yours = other And DlgValue("leftright") = 0 And
        DlgText$("activ") = "&Window" Then Goto pass 'IF ONLY
35 MAXIMIZING
      If DlgText$("activ") = "&Normal" Then Goto thisbit
      If yours <> other Then ArrangeWindows 'CALL ARRANGE
  WINDOWS SUBROUTINE
    If yours = other Then
40     If MacroNameFromWindow$() <> "" Then 'TEST FOR MACRO
        WINDOW
          MsgBox "This command is not available with macro
windows.", "View2 Plus", 48
          WindowList yours
45     view2plus = 1
          Goto again
        End If
      End If
  pass:

```

```

    If yours = other Then SameWindows 'CALL SAME WINDOWS SUBROUTINE
    Goto exit
    thisbit:
    If DlgValue("split") = 0 Then Call halfcut
    5   If DlgValue("split") = 1 Then Call quartercut
        Goto exit
    Else
        ArrangeApps
    End If
    10  End If
        again:

        'OPEN FILE DIALOG
        If id$ = "open" Then
    15         view2plus = 1
            Dim dlg As FileOpen
            GetCurValues dlg

            n = Dialog(dlg)
    20     Return$ = dlg.Name

            If Return$ = "*.doc" Or Return$ = "*.dot" Or Return$ = "*.rtf" Or
            Return$ = "*.txt" Then Goto exit'FIND FILE BUGFIX

    25     If Return$ = "" Then Goto exit
            Return$ = Return$ + " "

            While Return$ <> ""

    30         If Left$(Return$, 1) = Chr$(34) Then
                    FName$ = Left$(Return$, InStr(2, Return$, Chr$(34)))
                    Return$ = LTrim$(Mid$(Return$, Len(FName$) + 1))
                Else
                    FName$ = Left$(Return$, InStr(1, Return$, Chr$(32)))
    35         Return$ = LTrim$(Mid$(Return$, Len(FName$)))
                End If

            FileOpen FName$
            Call NewList
    40     DocMaximize 1
            ScreenRefresh
            Wend

            view2plus = 1
    45     End If

            'CLOSE FILE
            If id$ = "clos" Then
                before = CountWindows() 'RECORD WINDOW COUNT

```

```

WindowList other
Dim dlg As FileSummaryInfo
GetCurValues dlg
previewfilename$ = dlg.Template
5   If CommandValid("DlgFilePreview$ previewfilename$") = - 1
Then
    DlgFilePreview$ previewfilename$
Else
    FileNewDefault
10   Dim dlg As FileSummaryInfo
    GetCurValues dlg
    previewfilename$ = dlg.Template
    DlgFilePreview$ previewfilename$
    FileClose 2
15   End If
    DocClose 0
    If before > CountWindows() Then
        Call NewList
        ScreenRefresh
20   Else
        WindowList yours
        previewfilename$ = FileNameFromWindow$(other)
        DlgFilePreview$ previewfilename$
    End If
25   view2plus = 1
End If

'COPY/SAVE FILE
If id$ = "cop" Then
30   view2plus = 1
    WindowList other

'GET PATH OF SELECTED FILE AND DISPLAY SAVE AS DIALOG BOX
If FileNameFromWindow$() <> "" Then
35   oldyours$ = FileName$()
    oldyours = Window()
    Dim dlg As FileSaveAs
    Dialog dlg
    FileSaveAs dlg
40   newyours$ = FileName$()
    newyours = Window()
    If oldyours$ <> newyours$ Then
        Call NewList 'REFRESH ARRAY
        DocMaximize 1
45   'QUICK UPDATE BEHIND MESSAGE BOX
        DlgValue "winlist", yours - 1
        yours$ = WindowName$()
        DlgText$ "active", "View " + yours$

```

```

        DlgText$ "selected", ""
        DlgText$ "putit", "Show"
        DlgText$ "left", "&Max."
        DlgText$ "right", "&Twice"
5       DlgEnable "split", 0
        ScreenRefresh

        'GIVE COPY OPTION
        button = MsgBox("Would you like to reopen the document you
10       copied?" + Chr$(10) + oldyours$, "View2 Plus", 36)
        If button = - 1 Then      'YES
            FileOpen oldyours$
            Call NewList          'REFRESH ARRAY
            DocMaximize 1
            oldyours = ()         'EMPTY VARIABLES
15             newyours = ()
            oldyours$ = ""
            newyours$ = ""
        Else                      'NO
20             WindowList yours
            view2plus = 1
            oldyours = ()        'EMPTY VARIABLES
            newyours = ()
            oldyours$ = ""
25             newyours$ = ""
        End If
        End If
        view2plus = 1
    End If
30
    'IF FILE IS NOT SAVED
    If FileNameFromWindow$() = "" Then
        button = MsgBox("Would you like to save " + other$ + "?",
        "View2 Plus", 36)
35        If button = - 1 Then
            Dim dlg As FileSaveAs
            Dialog dlg
            FileSaveAs dlg
            Call NewList
            WindowList yours
40            Else
                WindowList yours
            End If
        End If
    End If
45    End If

    'ACTIVATE COMMAND
    If id$ = "act" Then
    If DlgText$("app") = "Tas&k List" Then

```

```

        thisone$ = WindowName$(other)
        Activate thisone$
        If DocMinimize() Then
            DocMaximize 1
5           DlgText$ "all", "&View All"
        End If
        yours = Window()
        yours$ = DlgText$("winlist")
        If DlgText$("activ") = "&Normal" Then
10         If DlgValue("split") = 0 Then Call halfcut
            If DlgValue("split") = 1 Then Call quartercut
        End If
        DlgText "left", "&Max."
        DlgText "right", "&Twice"
15         DlgText$ "can", "Close"
        DlgFocus "winlist"
        ScreenRefresh
        view2plus = 1
    ElseIf DlgText$("app") = "&Doc List" Then
20         DlgFocus "applist"
        If AppRestore(newapp$) Then
            hWnd = GetDesktopWindow
            LockWindowUpdate(hWnd)
            AppMinimize newapp$
25             LockWindowUpdate(0)
        End If
        AppRestore newapp$
        ScreenRefresh
    End If
30     view2plus = 1
    End If

    'PRESS FILE FOR HIDDEN CONTROLS
    If id$ = "fil" Then
35         view2plus = 1
        If DlgText$("fil") = "&File" Then
            DlgText "fil", "Hi&de"
            DlgVisible "banter", 0
            ShowHideHiddenPanel 1
40             view2plus = 1
        Else
            DlgText "fil", "&File"
            DlgVisible "banter", 1
            ShowHideHiddenPanel 0
45             view2plus = 1
        End If
    End If

    'PRESS HELP TO CALL HELP FILE

```

```

If id$ = "help" Then
    progdir$ = GetPrivateProfileString$("Microsoft Word", \
        "ProgramDir", "WINWORD6.INI")

5     If DlgText$("app") = "&Doc List" Then
        x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Task List Mode")
        ElseIf DlgText$("activ") = "&Normal" Then
        x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Window Mode")
        ElseIf DlgText$("fil") = "Hi&de" Then
10     x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "File Mode")
        Else
        x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Normal Mode")
        End If

15     view2plus = 1
    End If

    'TOGGLE BUTTON DOC/TASK LIST
    If id$ = "app" Then
20         view2plus = 1
        If DlgText$("app") = "Tas&k List" Then
            If DlgText$("activ") = "&Normal" Then
                DlgText$ "activ", "&Window"
                DlgText$ "act", "Switc&h To"
25                 ShowHideSplitPanel 0
                ShowHideDynamicPanel 1
            End If
            before = DlgValue("winlist") + 1
            Call AppList
30             DlgVisible "winlist", 0
            DlgVisible "prev", 0
            DlgVisible "keep", 0
            DlgVisible "applist", 1
            DlgFocus "applist"
35             DlgText "app", "&Doc List"
            DlgText "arrange", "Arrange"
            DlgText "active", "View Microsoft Word"
            DlgText$ "selected", ""
            DlgText "ver", "&Vertical"
40             DlgText "hoz", "Hori&zontal"
            DlgEnable "OK", 1
            DlgEnable "all", 0
            DlgEnable "activ", 0
            DlgEnable "fil", 0
45             DlgText "fil", "&File"
            ShowHideHiddenPanel 0
            DlgVisible "banter", 1
            view2plus = 1
        Else

```

```

other = yours
Call NewList
DlgValue "winlist", yours - 1
DlgVisible "applist", 0
5   DlgVisible "winlist", 1
    DlgVisible "prev", 1
    DlgText "app", "Tas&k List"
    DlgText "active", "View " + yours$
    DlgText$ "selected", ""
10   DlgEnable "active", 1
    DlgEnable "all", 1
    DlgEnable "activ", 1
    DlgEnable "fil", 1
    DlgEnable "right", 1
15   DlgFocus "winlist"
    view2plus = 1
End If
End If

20   'TOGGLE BUTTON(SPECIAL/NORMAL SPLIT)
    If id$ = "activ" Then
        If DlgText$("activ") = "&Window" Then
            DlgText "activ", "&Normal"
            DlgText "act", "&Activate"
25   DlgText$ "active", "Choose a document:"
            DlgText$ "selected", ""
            DlgText$ "splitit", "Show " + other$
            DlgText "ver", "Hal&f"
            DlgText "hoz", "&Quarter"
30   DlgText$ "arrange", "Size"
            ShowHideDynamicPanel 0
            ShowHideSplitPanel 1
            DlgEnable "split", 1
            DlgEnable "OK", 0
35   DlgEnable "fil", 0
            DlgText "fil", "&File"
            ShowHideHiddenPanel 0
            DlgVisible "keep", 1
            DlgValue "keep", 0
40   view2plus = 1
        Else
            DlgText "activ", "&Window"
            DlgText "act", "Switc&h To"
            DlgText "active", "View " + yours$
45   DlgText$ "selected", ""
            DlgText "ver", "&Vertical"
            DlgText "hoz", "Hori&zontal"
            DlgText$ "arrange", "Arrange"
            ShowHideSplitPanel 0

```

```

        DlgVisible "keep", 0
        ShowHideDynamicPanel 1
        DlgEnable "active", 1
        DlgEnable "act", 1
5       DlgEnable "OK", 1
        DlgEnable "fil", 1
        DlgFocus "winlist"
        view2plus = 1
    End If
10    End If

    'TOGGLE BUTTON(MAXIMIZE/VIEW ALL/MINIMIZE)
    If id$ = "all" Then
        If DlgText$("all") = "Mi&n. All" Then
15         For count = 1 To CountWindows()
            WindowList(count)
            DocMinimize
        Next
        thisone$ = WindowName$(yours)
20         Activate thisone$
        view2plus = 1
        DlgText$ "all", "Ma&x. All"
        ScreenRefresh
    ElseIf DlgText$("all") = "Ma&x. All" Then
25         For count = 1 To CountWindows()
            WindowList(count)
            DocMaximize 1
        Next
        WindowList yours
30         view2plus = 1
        DlgText$ "all", "&View All"
        DlgFocus "winlist"
        ScreenRefresh
    Else
35         For count = 1 To CountWindows()
            WindowList(count)
            If DocMaximize() Or DocMinimize() Then DocRestore
        Next
        WindowList yours
40         WindowArrangeAll
        DlgText$ "all", "Mi&n. All"
        DlgText$ "can", "Close"
        ScreenRefresh
        view2plus = 1
45     End If
    End If

    Case Else
    exit:

```

```

End Select

'DYNAMIC AND STATIC TEXT CONTROLS
Select Case action
5   Case 1

      'SET INITIAL BANTER TEXT
      If CountWindows() > 1 Then
10         DlgText$ "banter", "Choose OK to maximize your active
            document or select another one from the list."
      Else
         DlgText$ "banter", "Choose OK to maximize your active
            document."
15      End If

      Case 2

      'DISPLAY FILE PREVIEW
20      If DlgFocus$() = "winlist" Then
         previewfilename$ = FileNameFromWindow$(other)
         'THIS TEMPORARILY MAKES AN UNSAVED DOCUMENT THE ACTIVE ONE
         SO THAT THE FILE PREVIEW STATEMENT CAN WORK
         If previewfilename$ = "" Then
25             thisone$ = WindowName$(other)
             Activate thisone$
             DlgFilePreview$
             thisone$ = WindowName$(yours)
             Activate thisone$
30         Else
            DlgFilePreview$ previewfilename$
         End If
      End If

35      'ENABLE/DISABLE SWITCH TO
      If DlgText$("app") = "Task List" Then
      If DlgText$("activ") = "&Window" Then
         If yours = other Then
            DlgEnable "act", 0
40         Else
            DlgEnable "act", 1
         End If
      End If
      End If

45      'ENABLE/DISABLE CLOSE FILE
      If CountWindows() = 1 Then
         DlgEnable "clos", 0
      Else

```

```

        DlgEnable "clos", 1
    End If

    'VIEW TEXT
5   If DlgText$("app") = "&Doc List" Then
        If yourapp$ <> newapp$ Then
            other$ = DlgText$("winlist")
            DlgText$ "putit", "Show " + newapp$
            DlgText "active", "View Microsoft Word with " + newapp$
10          DlgText$ "selected", ""
            DlgEnable "act", 1
        ElseIf yourapp$ = newapp$ Then
            DlgText$ "putit", "Show"
            DlgText "active", "View Microsoft Word"
15          DlgText$ "selected", ""
            DlgEnable "act", 0
        End If
    End If

20   If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
    List" Then
        If other <> yours Then
            DlgText$ "active", "View " + yours$ + " with:"
            DlgText$ "selected", other$
25          ElseIf other = yours Then
            DlgText$ "active", "View " + yours$
            DlgText$ "selected", ""
        End If
    End If

30   'SHOW TEXT
    If DlgText$("activ") = "&Normal" Then
        If other <> yours Then
            other$ = DlgText$("winlist")
35          DlgText$ "splitit", "Show " + other$
        ElseIf other = yours Then
            DlgText$ "splitit", "Show " + yours$
        End If
    End If

40   If DlgText$("app") = "Tas&k List" And DlgText$("activ") =
    "&Window" Then
        If other <> yours Then
            other$ = DlgText$("winlist")
45          DlgText$ "putit", "Show " + other$
        ElseIf other = yours Then
            DlgText$ "putit", "Show"
        End If
    End If

```

```

'SET SPLIT DYNAMIC CONTROLS
If DlgText$("activ") = "&Normal" And id$ = "activ" Or
DlgText$("activ") = "&Normal" And id$ = "ver" Or
DlgText$("activ") = "&Normal" And id$ = "hoz" Then
5   If DlgValue("split") = 1 Then      'QUARTER
      DlgVisible "lefthalfsplit", 0 'HIDE HALF LEFT
      DlgVisible "righthalfsplit", 0 'HIDE HALF RIGHT
      DlgVisible "leftrightsplit", 1 'SHOW RIGHT
      If DlgValue("splitsplit") = 0 Or DlgValue("splitsplit")
10  = () Then 'LEFT OR NONE SELECTED
          DlgValue "leftrightsplit", 0 'SELECT LEFT
          DlgValue "splitsplit", 1 'SELECT TOP
          ElseIf DlgValue("splitsplit") = 1 Then 'TOP SELECTED
              DlgValue "leftrightsplit", 0 'SELECT LEFT
15          DlgValue "splitsplit", 1 'SELECT TOP
              ElseIf DlgValue("splitsplit") = 2 Then 'RIGHT SELECTED
                  DlgValue "splitsplit", 1 'SELECT TOP
                  DlgValue "leftrightsplit", 1 'SELECT RIGHT
                  ElseIf DlgValue("splitsplit") = 3 Then 'BOTTOM
20          SELECTED
              DlgValue "leftrightsplit", 0 'SELECT LEFT
              DlgValue "splitsplit", 3 'SELECT BOTTOM
          End If
      Else
25          DlgVisible "leftrightsplit", 0 'HIDE QUARTER LEFT
          DlgVisible "lefthalfsplit", 1 'SHOW HALF LEFT
          DlgVisible "righthalfsplit", 1 'SHOW HALF RIGHT
          DlgValue "splitsplit", 0 'SELECT LEFT
          If DlgValue("leftrightsplit") = 0 Or
30          DlgValue("leftrightsplit") = () Then 'LEFT OR NONE SELECTED
              DlgValue("splitsplit"), 0 'SELECT LEFT
          Else
              DlgValue "splitsplit", 2 'SELECT RIGHT
          End If
35      End If
  End If

'ENABLE/DISABLE OK/ACTIVATE BUTTONS
If DlgText$("activ") = "&Normal" Then
40      If DlgValue("keep") = 0 Then
          DlgEnable "OK", 1
          DlgEnable "act", 0
          DlgFocus "winlist"
      Else
45          DlgEnable "OK", 0
          DlgEnable "act", 1
      End If
  End If

```

```

'SET DYNAMIC CONTROLS FOR DOCUMENT LIST
If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
List" Then
    If yours <> other And DlgValue("split") = 0 Then
        DlgText "left", "&Left"
        DlgText "right", "&Right"
    ElseIf yours <> other And DlgValue("split") = 1 Then
        DlgText "left", "&Top"
        DlgText "right", "&Bottom"
    ElseIf yours = other Then
        DlgText "left", "&Max."
        DlgText "right", "&Twice"
    End If
End If

'SET DYNAMIC CONTROLS FOR APPLICATION LIST
If DlgText$("app") = "&Doc List " Then
    If yourapp$ <> newapp$ And DlgValue("split") = 0 Then
        DlgText "left", "&Left"
        DlgText "right", "&Right"
    ElseIf yourapp$ <> newapp$ And DlgValue("split") = 1 Then
        DlgText "left", "&Top"
        DlgText "right", "&Bottom"
    ElseIf yourapp$ = newapp$ Then
        DlgText "left", "&Max."
        DlgText "right", "&Twice"
        DlgValue "leftright", 0
        DlgEnable "right", 0
    End If
End If

If DlgText$("app") = "&Doc List" Then
    If yourapp$ = newapp$ Then
        DlgEnable "split", 0
        DlgEnable "right", 0
    ElseIf yourapp$ <> newapp$ Then
        DlgEnable "split", 1
        DlgEnable "right", 1
    End If
End If

'HOLD FOCUS ON ACTIVATE IN SPECIAL MODE
If DlgText$("activ") = "&Normal" And DlgValue("keep") = 1 Then
    If DlgFocus$() <> "act" Then DlgFocus "act"
End If

'DIM STANDARD CONTROLS IF MAX IS SELECTED
If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
List" Then

```

```

If yours = other And DlgValue("leftright") = 0 Then
    DlgEnable "split", 0
Else
    DlgEnable "split", 1
5 End If
End If

' BANTER TEXT FOR DOCUMENT LIST
If DlgText$("app") = "Task List" Then
10 If yours = other And DlgValue("leftright") = 0 Then
    If CountWindows() > 1 Then
        DlgText$ "banter", "Choose OK to maximize your active
document or select another one from the list."
    Else
15 DlgText$ "banter", "Choose OK to maximize your active
document."
    End If
    ElseIf yours = other And DlgValue("leftright") = 1 Then
        DlgText$ "banter", "Choose OK to display your active document
20 with itself."
    ElseIf yours <> other And DlgValue("split") = 0 Then
        DlgText$ "banter", "Choose OK to display your active
document side by side another one."
    ElseIf yours <> other And DlgValue("split") = 1 Then
25 DlgText$ "banter", "Choose OK to display your active
document above or below another one."
    End If
End If

30 ' BANTER TEXT FOR APPLICATION LIST
If DlgText$("app") = "&Doc List" Then
    If yourapp$ = newapp$ Then
        DlgText$ "banter", "Choose OK to maximize Word or
select another application from the list."
35 ElseIf yourapp$ <> newapp$ And DlgValue("split") = 0 Then
        DlgText$ "banter", "Choose OK to display Word side by
side another application."
    ElseIf yourapp$ <> newapp$ And DlgValue("split") = 1 Then
        DlgText$ "banter", "Choose OK to display Word above or
40 below another application."
    End If
End If

Case Else
45 End Select
End Function

'DISPLAY MAIN PANEL CONTROLS
Sub ShowHideMainPanel(ShoworHide)

```

```

For count = 0 To 3
  DlgVisible count, ShowOrHide
Next
For count = 18 To 31
5  DlgVisible count, ShowOrHide
Next
End Sub

'DISPLAY DYNAMIC CONTROLS
10 Sub ShowHideDynamicPanel(ShowOrHide)
  For count = 4 To 8
    DlgVisible count, ShowOrHide
  Next
End Sub

15 'DISPLAY SPLIT PANEL CONTROLS
Sub ShowHideSplitPanel(ShowOrHide)
  For count = 9 To 17
    DlgVisible count, ShowOrHide
20 Next
End Sub

'DISPLAY HIDDEN PANEL CONTROLS
Sub ShowHideHiddenPanel(ShowOrHide)
25 For count = 33 To 35
  DlgVisible count, ShowOrHide
Next
End Sub

30 'REFRESH ARRAY AND UPDATE TEXT
Sub NewList
  On Error Goto zip
  before = DlgListBoxArray("winlist")      'RECORD WINDOW COUNT
  numwin = CountWindows() - 1
35 Dim WinList$(numwin)
  For count = 0 To numwin
    WinList$(count) = WindowName$(count + 1)
  Next
  DlgListBoxArray "winlist", WinList$()

40 'UPDATE WINDOW VARIABLES
  yours$ = WindowName$()
  other$ = WindowName$()
  yours = Window()
  other = Window()
45 DlgValue "winlist", yours - 1
  DlgFocus "winlist"
  DlgText$ "can", "Close"
  DlgText$ "all", "&View All"

```

```

previewfilename$ = FileNameFromWindow$(other)
'THIS TEMPORARILY MAKES AN UNSAVED DOCUMENT THE ACTIVE ONE SO
THAT THE FILE PREVIEW STATEMENT CAN WORK
If previewfilename$ = "" Then
5   WindowList other
   Stop
   DlgFilePreview$
   WindowList yours
Else
10  DlgFilePreview$ previewfilename$
End If

zip:
x = 0
15 End Sub

'APPLICATION ARRAY
Sub AppList

20  hWnd = GetDesktopWindow
   LockWindowUpdate(hWnd)
   AppHide "View2 Plus"
   If InStr(AppInfo$(1), "95") <> 0 Then AppHide "Program Manager"
   Dim AppNames$(AppCount()), TempArray$(AppCount())
25  AppGetNames TempArray$()
   For x = 0 To AppCount() - 1
       If IsWindowVisible(FindWindow(0, TempArray$(x))) = 1 Then
           AppNames$(num) = TempArray$(x)
           num = num + 1
30  End If
   Next x
   AppNames$(num) = ""
   SortArray AppNames$(0), 0, 0, num - 1
   DlgListBoxArray "applist", AppNames$()
35  If InStr(AppInfo$(1), "95") <> 0 Then
       AppShow "Program Manager"
       AppActivate, 1
   End If
40  AppShow "View2 Plus"
   LockWindowUpdate(0)
   ScreenRefresh

   DlgText "applist", "Microsoft Word"
45  yourapp$ = DlgText$("applist")
   newapp$ = DlgText$("applist")
End Sub

'ARRANGE DIFFERENT WINDOWS

```

```

Sub ArrangeWindows
On Error Goto problem

'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
5  If CommandValid("ToolsProtectDocument") = 0 Then
    FileNewDefault
    If DocMaximize() Or DocMinimize() Then DocRestore
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
10  docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
    docheight = DocWindowHeight() 'SET VARIABLE FOR DOC HEIGHT
    FileClose
15  End If

'VERTICAL SPLIT
If DlgValue("split") = 0 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
20  If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
    ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
25  If CommandValid("ToolsProtectDocument") Then docwidth =
DocWindowWidth()
    If DlgValue("leftright") = 0 Then DocMove 0, 0 Else
DocMove(docwidth), 0 ' SET LEFT/RIGHT

30  ' ACTIVE DOCUMENT
    WindowList yours
    If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
35  ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
    If DlgValue("leftright") = 0 Then DocMove(docwidth), 0
    Else DocMove 0, 0 'SET LEFT/RIGHT
40  End If

'HORIZONTAL SPLIT
If DlgValue("split") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
45  If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
    ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW

```

```

        If CommandValid("ToolsProtectDocument") Then docheight =
DocWindowHeight()
        If DlgValue("leftright") = 0 Then DocMove 0, 0    Else
DocMove 0, (docheight)    ' SET TOP/BOTTOM
5
    ' ACTIVE DOCUMENT
        WindowList yours
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
10    ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)    'SIZE
WINDOW
        If DlgValue("leftright") = 0 Then DocMove 0, (docheight)
15    Else DocMove 0, 0    'SET TOP/BOTTOM
        End If
        problem:
        End Sub

20    'ARRANGE SAME WINDOWS
        Sub SameWindows
        On Error Goto problem

        'MAXIMIZE WINDOW AND UNWRAP TEXT
25    If DlgValue("leftright") = 0 Then
            For count = 1 To CountWindows()
                WindowList(count)
                ToolsOptionsView .WrapToWindow = 0
            Next
30    WindowList yours
        DocMaximize 1
        Goto problem
        End If

35    'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
        If CommandValid("ToolsProtectDocument") = 0 Then
            FileNewDefault
            If DocMaximize() Or DocMinimize() Then DocRestore
            DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))    'SIZE
40    WINDOW
            docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
            DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)    'SIZE
WINDOW
            If CommandValid("ToolsProtectDocument") Then docheight =
45    DocWindowHeight()
            FileClose
        End If

        'DISPLAY ACTIVE WINDOW WITH NEW WINDOW OF ITSELF

```

```

'VERTICAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 0 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
5 ViewZoom .ZoomPercent = "100"
    ToolsOptionsView .WrapToWindow = 1 'WRAP WINDOW
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'HALF SIZE
    If CommandValid("ToolsProtectDocument") Then docwidth =
DocWindowWidth()
10 DocMove(docwidth), 0 'SET RIGHT

'CREATE AND SIZE NEW WINDOW
old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
WindowNewWindow
15 If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
    ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
20 WINDOW
    DocMove 0, 0 ' SET LEFT
    WindowList(old) 'ACTIVATE ORIGINAL WINDOW
End If

25 'HORIZONTAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
30 ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
    If CommandValid("ToolsProtectDocument") Then docheight =
DocWindowHeight()
35 DocMove 0, (docheight) ' SET BOTTOM

'CREATE AND SIZE NEW WINDOW
old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
WindowNewWindow
40 If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
45 DocMove 0, 0 'SET TOP
    WindowList(old) 'ACTIVATE ORIGINAL WINDOW
End If
problem:
End Sub

```

```

Sub halfcut

'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
If CommandValid("ToolsProtectDocument") = 0 Then
5   FileNewDefault
   If DocMaximize() Or DocMinimize() Then DocRestore
   DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
   docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
10  DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
   docheight = DocWindowHeight() 'SET VARIABLE FOR DOC HEIGHT
   FileClose
End If

15  'HORIZONTAL SPLIT
If DlgValue("splitsplit") = 1 Or DlgValue("splitsplit") = 3 Then
   If DocMaximize() Or DocMinimize() Then DocRestore
   If MacroNameFromWindow$() = "" Then ViewZoom100 Else
20  ViewZoom.ZoomPercent = "100"
   ToolsOptionsView.WrapToWindow = 0 'UNWRAP TEXT
   DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
   If CommandValid("ToolsProtectDocument") Then docheight =
25  DocWindowHeight()
   If DlgValue("splitsplit") = 1 Then DocMove 0, 0 Else
   DocMove 0, (docheight) ' SET TOP/BOTTOM
End If

30  'VERTICAL SPLIT
If DlgValue("splitsplit") = 0 Or DlgValue("splitsplit") = 2 Then
   If DocMaximize() Or DocMinimize() Then DocRestore
   If MacroNameFromWindow$() = "" Then ViewZoom100 Else
35  ViewZoom.ZoomPercent = "100"
   ToolsOptionsView.WrapToWindow = 1 'WRAP TEXT
   DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
   If CommandValid("ToolsProtectDocument") Then docwidth =
40  DocWindowWidth()
   If DlgValue("splitsplit") = 0 Then DocMove 0, 0 Else
   DocMove(docwidth), 0 ' SET LEFT/RIGHT
End If
out:
End Sub

45  Sub quartercut

'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
If CommandValid("ToolsProtectDocument") = 0 Then

```

```

        FileNewDefault
        If DocMaximize() Or DocMinimize() Then DocRestore
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) 'SIZE
5      WINDOW
        docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
      WINDOW
        docheight = DocWindowHeight() 'SET VARIABLE FOR DOC HEIGHT
        FileClose
10    End If

    'TOP SPLIT
    If DlgValue("splitsplit") = 1 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
15      If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
        DocMove 0, 0
20      If CommandValid("ToolsProtectDocument") Then docwidth =
        DocWindowWidth()
        If CommandValid("ToolsProtectDocument") Then docheight =
        DocWindowHeight()
        If DlgValue("leftrightsplit") = 0 Then DocMove 0, 0 Else
25      DocMove(docwidth), 0 'SET LEFT/RIGHT
        End If

    'BOTTOM SPLIT
    If DlgValue("splitsplit") = 3 Then
30      If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
35      DocMove 0, 0
        If CommandValid("ToolsProtectDocument") Then docwidth =
        DocWindowWidth()
        If CommandValid("ToolsProtectDocument") Then docheight =
        DocWindowHeight()
40      If DlgValue("leftrightsplit") = 0 Then DocMove 0, (docheight)
        Else DocMove(docwidth), (docheight) 'SET LEFT/RIGHT
        End If
        off:
        End Sub
45      'CALL ARRANGE APP WINDOW MACRO
        Sub ArrangeApps

        If DlgEnable("split") = - 1 Then

```

```

If DlgValue("split") = 0 Then
    If DlgValue("leftright") = 0 Then
        vert$ = "right"
    ElseIf DlgValue("leftright") = 1 Then
5       vert$ = "left"
    End If
    timeout$ = Time$()
    OnTime timeout$, "View2PlusExtra16", 0
    If MacroNameFromWindow$() <> "" Then
10       FileNewDefault
        fix$ = "kill"
        SetDocumentVar "macrowin", fix$
    End If
    SetDocumentVar "appos", vert$
15     SetDocumentVar "appname", newapp$
End If

If DlgValue("split") = 1 Then
    If DlgValue("leftright") = 0 Then
20       hoz$ = "top"
    ElseIf DlgValue("leftright") = 1 Then
        hoz$ = "bottom"
    End If
    timeout$ = Time$()
25     OnTime timeout$, "View2PlusExtra16", 0
    If MacroNameFromWindow$() <> "" Then
        FileNewDefault
        fix$ = "kill"
        SetDocumentVar "macrowin", fix$
30     End If
    SetDocumentVar "appos", hoz$
    SetDocumentVar "appname", newapp$
End If
End If
35

If DlgEnable("split") = 0 Then
    max$ = "yes"
    timeout$ = Time$()
    OnTime timeout$, "View2PlusExtra16", 0
40     If MacroNameFromWindow$() <> "" Then
        FileNewDefault
        fix$ = "kill"
        SetDocumentVar "macrowin", fix$
    End If
45     SetDocumentVar "appos", max$
    yourdoc$ = Str$(yours) 'CONVERT ACTIVE DOC # TO STRING FOR
DOC VAR
    SetDocumentVar "actdoc", yourdoc$
End If

```

127

5,929,854

128

End Sub

129

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130

—

—

C. THIS IS THE SUPPLEMENTAL MACRO OF THE SECOND EMBODIMENT FOR WORD 6 (WITH 16-BIT API DECLARATIONS).

[IT CONTAINS THE CODE FOR SIZING AND POSITIONING APPLICATION

5 WINDOWS. IT IS ACTIVATED FROM THE MAIN MACRO USING A TIMER MECHANISM BECAUSE THE MODAL DIALOG BOX IN THE MAIN MACRO HAS TO BE CLOSED BEFORE THE WORD WINDOW CAN BE RESIZED.]

```
'PREVENT SCREEN REFRESH API DECLARATIONS
10 Declare Function GetDesktopWindow Lib "user"() As Integer
Declare Sub LockWindowUpdate Lib "user"(hWnd As Integer)

Sub MAIN

15 For x = 1 To 49
Print "View2 Plus:" + Str$(x) + "%"
Next x
Print "View2 Plus: 50%... please wait..."

20 On Error Goto ErrorRecovery
hWnd = GetDesktopWindow
LockWindowUpdate(hWnd)

'SET VARIABLES
25 fix$ = GetDocumentVar$("macrowin")
vert$ = GetDocumentVar$("appos")
hoz$ = GetDocumentVar$("appos")
max$ = GetDocumentVar$("appos")
newapp$ = GetDocumentVar$("appname")
30 yourdoc$ = GetDocumentVar$("actdoc")

'CLEAR DOC VARIABLES
SetDocumentVar "appos", ""
SetDocumentVar "appname", ""
35 SetDocumentVar "macrowin", ""
SetDocumentVar "docact", ""

If max$ <> "yes" Then
AppMaximize 1
40 appwidth = AppWindowWidth() 'SET VARIABLE FOR DOC WIDTH
appheight = AppWindowHeight() 'SET VARIABLE FOR DOC WIDTH
AppRestore

'SELECTED APP ON RIGHT
```

```

If vert$ = "left" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth / 2, appheight
5    AppMove newapp$, (appwidth / 2), 0 ' SET LEFT/RIGHT
    AppSize appwidth / 2, appheight
    AppMove 0, 0 ' SET LEFT/RIGHT
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
10    ToolsOptionsView .WrapToWindow = 1
End If

'SELECTED APP ON LEFT
If vert$ = "right" Then
15    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth / 2, appheight
    AppMove newapp$, 0, 0 ' SET LEFT/RIGHT
    AppSize appwidth / 2, appheight
20    AppMove(appwidth / 2), 0 ' SET LEFT/RIGHT
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 1
End If

25 'SELECTED APP ON BOTTOM
If hoz$ = "bottom" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
30    AppSize newapp$, appwidth, appheight / 2
    AppMove newapp$, 0, (appheight / 2) ' SET BOTTOM
    AppSize appwidth, appheight / 2
    AppMove 0, 0 ' SET TOP
    DocMaximize 1
35    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 0
End If

'SELECTED APP ON TOP
40 If hoz$ = "top" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth, appheight / 2
    AppMove newapp$, 0, 0 ' SET TOP
45    AppSize appwidth, appheight / 2
    AppMove 0, (appheight / 2) ' SET BOTTOM
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 0

```

```
End If
End If

'MAXIMIZE WORD
5 If max$ = "yes" Then
    AppMaximize 1
    For count = 1 To CountWindows()
        WindowList(count)
        ToolsOptionsView.WrapToWindow = 0
10    Next
    yours = Val(yourdoc$)'CONVERT ACTIVE DOC STRING TO #
    WindowList yours
    DocMaximize 1
End If
15 'CLOSE TEMP DOC FOR MACRO WINDOWS
If fix$ = "kill" Then FileClose 2

ErrorRecovery:
20 LockWindowUpdate(0)

For x = 51 To 100
    Print "View2 Plus:" + Str$(x) + "%"
Next x
25 Print "View2 Plus: 100%... complete."

End Sub
```

D. THE MAIN MACRO OF THE SECOND EMBODIMENT FOR WORD 7
 (WITH 32-BIT API DECLARATIONS).

```
[IT CONTAINS THE CODE FOR DIMENSIONING THE DOCUMENT AND
5  APPLICATION ARRAY, DISPLAYING THE DIALOG BOX, AND PREVIEWING,
  SIZING, POSITION, AND ACTIVATING DOCUMENT WINDOWS. IT ALSO
  CONTAINS A TIMER MECHANISM TO CALL THE SUPPLEMENTAL MACRO BECAUSE
  WORDBASIC CANNOT CALL OTHER MACROS WITHOUT RETURNING CONTROL TO
  THE CALLING MACRO.]

10  'DECLARE SHARED VARIABLES
    Dim Shared WinList$, yours$, yours$, other$, other$, oldyours$,
    oldyours$, newyours$, newyours$, yourapp$, newapp$, morepanel

15  'API DECLARATIONS FOR HELP FILE
    Declare Function WinHelpA Lib "User32"(hWnd As Integer,
    lpHelpFile As String, wCommand As Integer, dwData As String) As
    Integer

20  'API DECLARATIONS FOR TASK LIST
    Declare Function FindWindowA Lib "user32"(ClassName As Long,
    WindowTitle$) As Integer
    Declare Function IsWindowVisible Lib "user32"(hWnd As Integer) As
    Integer

25  'PREVENT SCREEN REFRESH API DECLARATIONS
    Declare Function GetDesktopWindow Lib "user32"() As Integer
    Declare Sub LockWindowUpdate Lib "user32"(hWnd As Integer)

30  Sub MAIN
    ScreenUpdating 0
    DisableInput 1
    On Error Goto bye

35  'OPEN DOCUMENT IF NONE OPEN
    If Window() = 0 Then
        FileNewDefault
        DocMaximize 1
        morepanel = 1

40  End If

    'PRINT PREVIEW MESSAGE
```

```

If MacroNameFromWindow$() = "" Then
    If FilePrintPreview() = - 1 Then
        button = MsgBox("Would you like to exit print preview and
use View2 Plus?", "View2 Plus", 36)
5       If button = - 1 Then
            ClosePreview
        Else
            Goto bye
        End If
10    End If
End If

'NOTE NAME AND NUMBER OF ACTIVE DOC
yours$ = WindowName$()
15 yours = Window()

'DIMENSION THE WINDOW ARRAY
numwin = CountWindows() - 1
Dim WinList$(numwin)
20 For count = 0 To numwin
    WinList$(count) = WindowName$(count + 1)
Next

'DIMENSION THE APPLICATION ARRAY
25 If InStr(AppInfo$(1), "95") <> 0 Then
    AppHide "Program Manager"
End If
Dim AppNames$(AppCount()), TempArray$(AppCount())
AppGetNames TempArray$()
30 For x = 0 To AppCount() - 1
    If IsWindowVisible(FindWindowA(0, TempArray$(x))) = 1 Then
        AppNames$(num) = TempArray$(x)
        num = num + 1
    End If
35 Next x
AppNames$(num) = ""
SortArray AppNames$(0, 0, num - 1)
If InStr(AppInfo$(1), "95") <> 0 Then
    AppShow "Program Manager"
40 AppActivate "Microsoft Word", 1
End If

'DISPLAY THE DIALOG BOX
Begin Dialog UserDialog 550, 235, "View2 Plus", .view2plus
45
    'MAIN PANEL
    Text 17, 7, 395, 14, "Text", .active           '0
    Text 255, 7, 160, 14, "Text", .selected        '1
    ListBox 15, 23, 220, 123, WinList$(), .winlist  '2

```

```

ListBox 15, 23, 379, 123, AppNames$(), .applist '3

'DYNAMIC PANEL
GroupBox 15, 153, 222, 50, "Text", .putit '4
5 OptionGroup .leftright '5
    OptionButton 38, 169, 95, 19, "Text", .left '6
    OptionButton 140, 169, 80, 19, "Text", .right '7
Text 17, 208, 370, 26, "Text", .banter '8

10 'HIDDEN SPLIT PANEL
GroupBox 15, 153, 222, 80, "Text", .splitit
'9
OptionGroup .leftrightsplit 'QUARTER '10
    OptionButton 28, 185, 95, 19, "&Left", .leftsplit
15 '11
    OptionButton 140, 185, 80, 19, "&Right", .rightsplit
'12
    OptionGroup .splitsplit 'HALF/QUARTER '13
    OptionButton 28, 185, 95, 19, "&Left", .lefthalfsplit
20 '14
    OptionButton 85, 164, 105, 19, "&Top", .versplit
'15
    OptionButton 140, 185, 80, 19, "&Right",
25 .righthalfsplit '16
    OptionButton 85, 209, 105, 19, "&Bottom", .hozsplit
'17

'MAIN PANEL
FilePreview 255, 23, 140, 125, .prev '18
30 GroupBox 255, 153, 142, 50, "Text", .arrange '19
OptionGroup .split '20
    OptionButton 270, 164, 99, 19, "Text", .ver '21
    OptionButton 270, 179, 99, 19, "Text", .hoz '22
CheckBox 255, 207, 160, 25, "Keep the Dialog Box
35 Displayed", .keep '23
OKButton 415, 6, 120, 20 '24
CancelButton 415, 30, 120, 20, .can '25
PushButton 415, 54, 120, 20, "Text", .all '26
PushButton 415, 78, 120, 20, "Text", .act '27
40 PushButton 415, 102, 120, 20, "&Help", .help '28
GroupBox 415, 130, 120, 100, "Mode", .file '29
PushButton 430, 150, 90, 20, "Text", .app '30
PushButton 430, 175, 90, 20, "Text", .activ '31
PushButton 430, 200, 90, 20, "Text", .fil '32
45 'HIDDEN FILE PANEL
PushButton 15, 210, 120, 20, "&Open File...", .open '33
PushButton 145, 210, 120, 20, "&Close File", .clos '34
PushButton 275, 210, 120, 20, "Co&py File...", .cop '35

```

```

End Dialog
Dim dlg As UserDialog          'DEFINE DIALOG RECORD
5  x = Dialog(dlg)             'DISPLAY THE DIALOG BOX
bye:
If Err = 26 Then
    Beep
    MsgBox "This command is not available because another dialog
10 box is active.", - 2
End If
End Sub

Function view2plus(id$, action, suppvalue)
15 On Error Goto exit
'INITIALIZE DIALOG
Select Case action

'INITIALIZE DIALOG
20 Case 1
ShowHideSplitPanel 0

'SHOW HIDDEN FILE PANEL IF ONLY DEFAULT DOC OPEN
If morepanel = 1 Then
25     DlgText "fil", "Hi&de"
    DlgVisible "banter", 0
    ShowHideHiddenPanel 1
    DlgEnable "clos", 0
Else
30     DlgText$ "fil", "&File"
    ShowHideHiddenPanel 0
End If

DlgVisible "applist", 0
35 DlgVisible "keep", 0
DlgEnable "split", 0
DlgEnable "act", 0

'PRESELECT ACTIVE DOCUMENT IN LISTBOX
40 DlgValue "winlist", yours - 1

'RETURN NAME OF ACTIVE DOCUMENT
DlgText$ "active", "View " + yours$
DlgText$ "selected", ""
45 'RETURN NAME OF SELECTED DOCUMENT
other$ = DlgText$("winlist")
DlgText$ "putit", "Show"

```

```

' SET CONTROL NAMES
DlgText$ "all", "&View All"
DlgText$ "activ", "&Window"
DlgText$ "can", "Cancel"
5 DlgText$ "ver", "&Vertical"
  DlgText$ "hoz", "Hori&zontal "
  DlgText$ "act", "Switc&h To"
  DlgText$ "app", "Tas&k List"
  DlgText$ "arrange", "Arrange"
10 DlgText$ "left", "&Max."
  DlgText$ "right", "&Twice"

Case 2
' NOTE NAME AND NUMBER OF SELECTED DOC
15 other$ = DlgText$("winlist")
  other = DlgValue("winlist") + 1

' NOTE NAME OF SELECTED APPLICATION
newapp$ = DlgText$("applist")
20

' BUTTON CONTROL
If id$ = "can" Then
  thisone$ = WindowName$(yours)
  Activate thisone$
25 Goto exit
End If

If id$ = "OK" Then
WindowList other
30 If DlgText$("app") = "Tas&k List" Then
  If yours = other And DlgValue("leftright") = 0 And
  DlgText$("activ") = "&Window" Then Goto pass 'IF ONLY
MAXIMIZING
  If DlgText$("activ") = "&Normal" Then Goto thisbit
35 If yours <> other Then ArrangeWindows 'CALL ARRANGE
WINDOWS SUBROUTINE
  If yours = other Then
    If MacroNameFromWindow$() <> "" Then 'TEST FOR MACRO
WINDOW
40 MsgBox "This command is not available with macro
  windows.", "View2 Plus", 48
  WindowList yours
  view2plus = 1
  Goto again
45 End If
End If

pass:
If yours = other Then SameWindows 'CALL SAME WINDOWS SUBROUTINE
Goto exit

```

```

thisbit:
If DlgValue("split") = 0 Then Call halfcut
If DlgValue("split") = 1 Then Call quartercut
Goto exit
5 Else
ArrangeApps
End If
End If
again:
10 'OPEN FILE DIALOG
If id$ = "open" Then
view2plus = 1
Dim dlg As FileOpen
15 GetCurValues dlg

n = Dialog(dlg)
Return$ = dlg.Name
If Return$ = "" Then Goto exit
20 Return$ = Return$ + " "
While Return$ <> ""
If Left$(Return$, 1) = Chr$(34) Then
FName$ = Left$(Return$, InStr(2, Return$, Chr$(34)))
Return$ = LTrim$(Mid$(Return$, Len(FName$) + 1))
25 Else
FName$ = Left$(Return$, InStr(1, Return$, Chr$(32)))
Return$ = LTrim$(Mid$(Return$, Len(FName$)))
End If
FileOpen FName$
30 Call NewList
DocMaximize 1
ScreenRefresh
Wend

35 view2plus = 1
End If

'CLOSE FILE
If id$ = "clos" Then
40 before = CountWindows() 'RECORD WINDOW COUNT
WindowList other
Dim dlg As FileSummaryInfo
GetCurValues dlg
previewfilename$ = dlg.Template
45 If CommandValid("DlgFilePreview$ previewfilename$") = - 1
Then
DlgFilePreview$ previewfilename$
Else
FileNewDefault

```

```

        Dim dlg As FileSummaryInfo
        GetCurValues dlg
        previewfilename$ = dlg.Template
        DlgFilePreview$ previewfilename$
5         FileClose 2
    End If
    DocClose 0
    If before > CountWindows() Then
        Call NewList
10    ScreenRefresh
    Else
        WindowList yours
        previewfilename$ = FileNameFromWindow$(other)
        DlgFilePreview$ previewfilename$
15    End If
        view2plus = 1
    End If

    'COPY/SAVE FILE
20    If id$ = "cop" Then
        view2plus = 1
        WindowList other

    'GET PATH OF SELECTED FILE AND DISPLAY SAVE AS DIALOG BOX
25    If FileNameFromWindow$() <> "" Then
        oldyours$ = FileName$()
        oldyours = Window()
        Dim dlg As FileSaveAs
        Dialog dlg
30    FileSaveAs dlg
        newyours$ = FileName$()
        newyours = Window()
        If oldyours$ <> newyours$ Then
            Call NewList 'REFRESH ARRAY
35            DocMaximize 1

            'QUICK UPDATE BEHIND MESSAGE BOX
            DlgValue "winlist", yours - 1
            yours$ = WindowName$()
40            DlgText$ "active", "View " + yours$
            DlgText$ "selected", ""
            DlgText$ "putit", "Show"
            DlgText$ "left", "&Max."
            DlgText$ "right", "&Twice"
45            DlgEnable "split", 0
            ScreenRefresh

            'GIVE COPY OPTION
            button = MsgBox("Would you like to reopen the document you

```

```

copied?" + Chr$(10) + oldyours$, "View2 Plus", 36)
    If button = - 1 Then      'YES
        FileOpen oldyours$
        Call NewList        'REFRESH ARRAY
        DocMaximize 1
5         oldyours = ()      'EMPTY VARIABLES
        newyours = ()
        oldyours$ = ""
        newyours$ = ""
10        Else              'NO
            WindowList yours
            view2plus = 1
            oldyours = ()    'EMPTY VARIABLES
            newyours = ()
15            oldyours$ = ""
            newyours$ = ""
        End If
    End If
    view2plus = 1
20 End If

'IF FILE IS NOT SAVED
If FileNameFromWindow$() = "" Then
    button = MsgBox("Would you like to save " + other$ + "?",
25    "View2 Plus", 36)
    If button = - 1 Then
        Dim dlg As FileSaveAs
        Dialog dlg
        FileSaveAs dlg
30        Call NewList
        WindowList yours
    Else
        WindowList yours
    End If
35 End If
End If

'ACTIVATE COMMAND
If id$ = "act" Then
40 If DlgText$("app") = "Tas&k List" Then
    thisone$ = WindowName$(other)
    Activate thisone$
    If DocMinimize() Then
        DocMaximize 1
45        DlgText$ "all", "&View All"
    End If
    yours = Window()
    yours$ = DlgText$("winlist")
    If DlgText$("activ") = "&Normal" Then

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```

        If DlgValue("split") = 0 Then Call halfcut
        If DlgValue("split") = 1 Then Call quartercut
        End If
        DlgText "left", "&Max."
5       DlgText "right", "&Twice"
        DlgText$ "can", "Close"
        DlgFocus "winlist"
        ScreenRefresh
        view2plus = 1
10      ElseIf DlgText$("app") = "&Doc List" Then
        DlgFocus "applist"
        If AppRestore(newapp$) Then
            hWnd = GetDesktopWindow
            LockWindowUpdate(hWnd)
15            AppMinimize newapp$
            LockWindowUpdate(0)
        End If
        AppRestore newapp$
        ScreenRefresh
20      End If
        view2plus = 1
        End If

        'PRESS FILE FOR HIDDEN CONTROLS
25      If id$ = "fil" Then
        view2plus = 1
        If DlgText$("fil") = "&File" Then
            DlgText "fil", "Hi&de"
            DlgVisible "banter", 0
30            ShowHideHiddenPanel 1
            view2plus = 1
        Else
            DlgText "fil", "&File"
            DlgVisible "banter", 1
35            ShowHideHiddenPanel 0
            view2plus = 1
        End If
        End If

40      'PRESS HELP TO CALL HELP FILE
        If id$ = "help" Then
        progdir$ =
        GetPrivateProfileString$("HKEY_CURRENT_USER\software\Microsoft\Wo
        rd\7.0\Options", "ProgramDir", "")
45
            If DlgText$("app") = "&Doc List" Then
            x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Task List Mode")
            ElseIf DlgText$("activ") = "&Normal" Then
            x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Window Mode")

```

```

        ElseIf DlgText$("fil") = "Hi&de" Then
x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "File Mode")
        Else
x = WinHelp(hWnd, "progdir$\vew2plus.hlp", 257, "Normal Mode")
5      End If

view2plus = 1
End If

10  'TOGGLE BUTTON DOC/TASK LIST
If id$ = "app" Then
    view2plus = 1
    If DlgText$("app") = "Tas&k List" Then
        If DlgText$("activ") = "&Normal" Then
15          DlgText$ "activ", "&Window"
            DlgText$ "act", "Switc&h To"
            ShowHideSplitPanel 0
            ShowHideDynamicPanel 1
        End If
20      before = DlgValue("winlist") + 1
        Call AppList
        DlgVisible "winlist", 0
        DlgVisible "prev", 0
        DlgVisible "keep", 0
25      DlgVisible "applist", 1
        DlgFocus "applist"
        DlgText "app", "&Doc List"
        DlgText "arrange", "Arrange"
        DlgText "active", "View Microsoft Word"
30      DlgText$ "selected", ""
        DlgText "ver", "&Vertical"
        DlgText "hoz", "Hori&zontal"
        DlgEnable "OK", 1
        DlgEnable "all", 0
35      DlgEnable "activ", 0
        DlgEnable "fil", 0
        DlgText "fil", "&File"
        ShowHideHiddenPanel 0
        DlgVisible "banter", 1
40      view2plus = 1
    Else
        other = yours
        Call NewList
        DlgValue "winlist", yours - 1
45      DlgVisible "applist", 0
        DlgVisible "winlist", 1
        DlgVisible "prev", 1
        DlgText "app", "Tas&k List"
        DlgText "active", "View " + yours$

```

```

        DlgText$ "selected", ""
        DlgEnable "active", 1
        DlgEnable "all", 1
        DlgEnable "activ", 1
5       DlgEnable "fil", 1
        DlgEnable "right", 1
        DlgFocus "winlist"
        view2plus = 1
    End If
10    End If

'TOGGLE BUTTON(SPECIAL/NORMAL SPLIT)
If id$ = "activ" Then
    If DlgText$("activ") = "&Window" Then
15        DlgText "activ", "&Normal"
        DlgText "act", "&Activate"
        DlgText$ "active", "Choose a document:"
        DlgText$ "selected", ""
        DlgText$ "splitit", "Show " + other$
20        DlgText "ver", "Hal&f"
        DlgText "hoz", "&Quarter"
        DlgText$ "arrange", "Size"
        ShowHideDynamicPanel 0
        ShowHideSplitPanel 1
25        DlgEnable "split", 1
        DlgEnable "OK", 0
        DlgEnable "fil", 0
        DlgText "fil", "&File"
        ShowHideHiddenPanel 0
30        DlgVisible "keep", 1
        DlgValue "keep", 0
        view2plus = 1
    Else
35        DlgText "activ", "&Window"
        DlgText "act", "Switc&h To"
        DlgText "active", "View " + yours$
        DlgText$ "selected", ""
        DlgText "ver", "&Vertical"
        DlgText "hoz", "Hori&zontal"
40        DlgText$ "arrange", "Arrange"
        ShowHideSplitPanel 0
        DlgVisible "keep", 0
        ShowHideDynamicPanel 1
        DlgEnable "active", 1
45        DlgEnable "act", 1
        DlgEnable "OK", 1
        DlgEnable "fil", 1
        DlgFocus "winlist"
        view2plus = 1
    End If

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        End If
    End If

    'TOGGLE BUTTON(MAXIMIZE/VIEW ALL/MINIMIZE)
5   If id$ = "all" Then
        If DlgText$("all") = "Mi&n. All" Then
            For count = 1 To CountWindows()
                WindowList(count)
                DocMinimize
10            Next
                thisone$ = WindowName$(yours)
                Activate thisone$
                view2plus = 1
                DlgText$ "all", "Ma&x. All"
15            ScreenRefresh
            ElseIf DlgText$("all") = "Ma&x. All" Then
                For count = 1 To CountWindows()
                    WindowList(count)
                    DocMaximize 1
20                Next
                    WindowList yours
                    view2plus = 1
                    DlgText$ "all", "&View All"
                    DlgFocus "winlist"
25                ScreenRefresh
            Else
                For count = 1 To CountWindows()
                    WindowList(count)
                    If DocMaximize() Or DocMinimize() Then DocRestore
30                Next
                    WindowList yours
                    WindowArrangeAll
                    DlgText$ "all", "Mi&n. All"
                    DlgText$ "can", "Close"
35                ScreenRefresh
                    view2plus = 1
            End If
        End If

40    Case Else
        exit:
    End Select

    'DYNAMIC AND STATIC TEXT CONTROLS
45    Select Case action

        Case 1

            'SET INITIAL BANTER TEXT

```

```

If CountWindows() > 1 Then
    DlgText$ "banter", "Choose OK to maximize your active
document or select another one from the list."
Else
5    DlgText$ "banter", "Choose OK to maximize your active
document."
End If

Case 2
10    'DISPLAY FILE PREVIEW
    If DlgFocus$() = "winlist" Then
        previewfilename$ = FileNameFromWindow$(other)
        'THIS TEMPORARILY MAKES AN UNSAVED DOCUMENT THE ACTIVE ONE
15    SO THAT THE FILE PREVIEW STATEMENT CAN WORK
        If previewfilename$ = "" Then
            thisone$ = WindowName$(other)
            Activate thisone$
            DlgFilePreview$
20            thisone$ = WindowName$(yours)
            Activate thisone$
        Else
            DlgFilePreview$ previewfilename$
        End If
25    End If

    'ENABLE/DISABLE SWITCH TO
    If DlgText$("app") = "Tas&k List" Then
    If DlgText$("activ") = "&Window" Then
30        If yours = other Then
            DlgEnable "act", 0
        Else
            DlgEnable "act", 1
        End If
35    End If
    End If

    'ENABLE/DISABLE CLOSE FILE
    If CountWindows() = 1 Then
40        DlgEnable "clos", 0
    Else
        DlgEnable "clos", 1
    End If

45    'VIEW TEXT
    If DlgText$("app") = "&Doc List" Then
        If yourapp$ <> newapp$ Then
            other$ = DlgText$("winlist")
            DlgText$ "putit", "Show " + newapp$

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```

        DlgText "active", "View Microsoft Word with " + newapp$
        DlgText$ "selected", ""
        DlgEnable "act", 1
    ElseIf yourapp$ = newapp$ Then
5       DlgText$ "putit", "Show"
        DlgText "active", "View Microsoft Word"
        DlgText$ "selected", ""
        DlgEnable "act", 0
    End If
10    End If

    If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
    List" Then
        If other <> yours Then
15           DlgText$ "active", "View " + yours$ + " with:"
            DlgText$ "selected", other$
        ElseIf other = yours Then
            DlgText$ "active", "View " + yours$
            DlgText$ "selected", ""
20        End If
    End If

    'SHOW TEXT
    If DlgText$("activ") = "&Normal" Then
25        If other <> yours Then
            other$ = DlgText$("winlist")
            DlgText$ "splitit", "Show " + other$
        ElseIf other = yours Then
            DlgText$ "splitit", "Show " + yours$
30        End If
    End If

    If DlgText$("app") = "Tas&k List" And DlgText$("activ") =
    "&Window" Then
35        If other <> yours Then
            other$ = DlgText$("winlist")
            DlgText$ "putit", "Show " + other$
        ElseIf other = yours Then
            DlgText$ "putit", "Show"
40        End If
    End If

    'SET SPLIT DYNAMIC CONTROLS
    If DlgText$("activ") = "&Normal" And id$ = "activ" Or
45    DlgText$("activ") = "&Normal" And id$ = "ver" Or
    DlgText$("activ") = "&Normal" And id$ = "hoz" Then
        If DlgValue("split") = 1 Then
            'QUARTER
            DlgVisible "lefthalfsplit", 0 'HIDE HALF LEFT
            DlgVisible "righthalfsplit", 0 'HIDE HALF RIGHT

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```

        DlgVisible "leftrightsplit", 1      'SHOW RIGHT
        If DlgValue("splitsplit") = 0 Or DlgValue("splitsplit")
= () Then 'LEFT OR NONE SELECTED
        DlgValue "leftrightsplit", 0 'SELECT LEFT
5         DlgValue "splitsplit", 1 'SELECT TOP
        ElseIf DlgValue("splitsplit") = 1 Then 'TOP SELECTED
        DlgValue "leftrightsplit", 0 'SELECT LEFT
        DlgValue "splitsplit", 1 'SELECT TOP
        ElseIf DlgValue("splitsplit") = 2 Then 'RIGHT SELECTED
10        DlgValue "splitsplit", 1 'SELECT TOP
        DlgValue "leftrightsplit", 1 'SELECT RIGHT
        ElseIf DlgValue("splitsplit") = 3 Then 'BOTTOM
SELECTED
        DlgValue "leftrightsplit", 0 'SELECT LEFT
15        DlgValue "splitsplit", 3 'SELECT BOTTOM
        End If
    Else
        DlgVisible "leftrightsplit", 0      'HALF
        DlgVisible "lefthalfsplit", 1 'HIDE QUARTER LEFT
        DlgVisible "righthalfsplit", 1 'SHOW HALF LEFT
20        DlgVisible "righthalfsplit", 1 'SHOW HALF RIGHT
        DlgValue "splitsplit", 0      'SELECT LEFT
        If DlgValue("leftrightsplit") = 0 Or
        DlgValue("leftrightsplit") = () Then 'LEFT OR NONE SELECTED
        DlgValue("splitsplit"), 0      'SELECT LEFT
25        Else
        DlgValue "splitsplit", 2 'SELECT RIGHT
        End If
    End If
End If
30
'ENABLE/DISABLE OK/ACTIVATE BUTTONS
If DlgText$("activ") = "&Normal" Then
    If DlgValue("keep") = 0 Then
        DlgEnable "OK", 1
35        DlgEnable "act", 0
        DlgFocus "winlist"
    Else
        DlgEnable "OK", 0
        DlgEnable "act", 1
40    End If
End If

'SET DYNAMIC CONTROLS FOR DOCUMENT LIST
If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
45 List" Then
    If yours <> other And DlgValue("split") = 0 Then
        DlgText "left", "&Left"
        DlgText "right", "&Right"
    ElseIf yours <> other And DlgValue("split") = 1 Then

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        DlgText "left", "&Top"
        DlgText "right", "&Bottom"
    ElseIf yours = other Then
        DlgText "left", "&Max."
        DlgText "right", "&Twice"
5      End If
    End If

    'SET DYNAMIC CONTROLS FOR APPLICATION LIST
10  If DlgText$("app") = "&Doc List" Then
        If yourapp$ <> newapp$ And DlgValue("split") = 0 Then
            DlgText "left", "&Left"
            DlgText "right", "&Right"
        ElseIf yourapp$ <> newapp$ And DlgValue("split") = 1 Then
15      DlgText "left", "&Top"
            DlgText "right", "&Bottom"
        ElseIf yourapp$ = newapp$ Then
            DlgText "left", "&Max."
            DlgText "right", "&Twice"
20      DlgValue "leftright", 0
            DlgEnable "right", 0
        End If
    End If

25  If DlgText$("app") = "&Doc List" Then
        If yourapp$ = newapp$ Then
            DlgEnable "split", 0
            DlgEnable "right", 0
        ElseIf yourapp$ <> newapp$ Then
30      DlgEnable "split", 1
            DlgEnable "right", 1
        End If
    End If

35  'HOLD FOCUS ON ACTIVATE IN SPECIAL MODE
    If DlgText$("activ") = "&Normal" And DlgValue("keep") = 1 Then
        If DlgFocus$() <> "act" Then DlgFocus "act"
    End If

40  'DIM STANDARD CONTROLS IF MAX IS SELECTED
    If DlgText$("activ") = "&Window" And DlgText$("app") = "Tas&k
    List" Then
        If yours = other And DlgValue("leftright") = 0 Then
            DlgEnable "split", 0
45      Else
            DlgEnable "split", 1
        End If
    End If

```

```

' BANTER TEXT FOR DOCUMENT LIST
If DlgText$("app") = "Task List" Then
    If yours = other And DlgValue("leftright") = 0 Then
        If CountWindows() > 1 Then
5           DlgText$ "banter", "Choose OK to maximize your active
document or select another one from the list."
        Else
            DlgText$ "banter", "Choose OK to maximize your active
document."
10        End If
        ElseIf yours = other And DlgValue("leftright") = 1 Then
            DlgText$ "banter", "Choose OK to display your active document
with itself."
        ElseIf yours <> other And DlgValue("split") = 0 Then
15           DlgText$ "banter", "Choose OK to display your active
document side by side another one."
        ElseIf yours <> other And DlgValue("split") = 1 Then
            DlgText$ "banter", "Choose OK to display your active
document above or below another one."
20        End If
    End If

' BANTER TEXT FOR APPLICATION LIST
If DlgText$("app") = "&Doc List" Then
25     If yourapp$ = newapp$ Then
        DlgText$ "banter", "Choose OK to maximize Word or
select another application from the list."
        ElseIf yourapp$ <> newapp$ And DlgValue("split") = 0 Then
            DlgText$ "banter", "Choose OK to display Word side by
30     side another application."
        ElseIf yourapp$ <> newapp$ And DlgValue("split") = 1 Then
            DlgText$ "banter", "Choose OK to display Word above or
below another application."
        End If
35     End If

    Case Else
    End Select
End Function

40
'DISPLAY MAIN PANEL CONTROLS
Sub ShowHideMainPanel(ShoworHide)
    For count = 0 To 3
        DlgVisible count, ShoworHide
45     Next
    For count = 18 To 31
        DlgVisible count, ShoworHide
    Next
End Sub

```

```

'DISPLAY DYNAMIC CONTROLS
Sub ShowHideDynamicPanel(ShowOrHide)
For count = 4 To 8
  DlgVisible count, ShowOrHide
5 Next
End Sub

'DISPLAY SPLIT PANEL CONTROLS
Sub ShowHideSplitPanel(ShowOrHide)
10 For count = 9 To 17
  DlgVisible count, ShowOrHide
Next
End Sub

15 'DISPLAY HIDDEN PANEL CONTROLS
Sub ShowHideHiddenPanel(ShowOrHide)
For count = 33 To 35
  DlgVisible count, ShowOrHide
Next
20 End Sub

'REFRESH ARRAY AND UPDATE TEXT
Sub NewList
On Error Goto zip
25 before = DlgListBoxArray("winlist")      'RECORD WINDOW COUNT
numwin = CountWindows() - 1
Dim WinList$(numwin)
For count = 0 To numwin
  WinList$(count) = WindowName$(count + 1)
30 Next
DlgListBoxArray "winlist", WinList$()

'UPDATE WINDOW VARIABLES
yours$ = WindowName$()
35 other$ = WindowName$()
yours = Window()
other = Window()
DlgValue "winlist", yours - 1
DlgFocus "winlist"
40 DlgText$ "can", "Close"
DlgText$ "all", "&View All"

previewfilename$ = FileNameFromWindow$(other)
'THIS TEMPORARILY MAKES AN UNSAVED DOCUMENT THE ACTIVE ONE SO
45 THAT THE FILE PREVIEW STATEMENT CAN WORK
If previewfilename$ = "" Then
  WindowList other
Stop
  DlgFilePreview$

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        WindowList yours
    Else
        DlgFilePreview$ previewfilename$
    End If
5
    zip:
    x = 0
    End Sub

10
    'APPLICATION ARRAY
    Sub AppList

        hWnd = GetDesktopWindow
        LockWindowUpdate(hWnd)
15
        AppHide "View2 Plus"
        If InStr(AppInfo$(1), "95") <> 0 Then AppHide "Program Manager"
        Dim AppNames$(AppCount()), TempArray$(AppCount())
        AppGetNames TempArray$()
        For x = 0 To AppCount() - 1
20
            If IsWindowVisible(FindWindowA(0, TempArray$(x))) = 1 Then
                AppNames$(num) = TempArray$(x)
                num = num + 1
            End If
        Next x
25
        AppNames$(num) = ""
        SortArray AppNames$(0, 0, num - 1)
        DlgListBoxArray "applist", AppNames$()

        If InStr(AppInfo$(1), "95") <> 0 Then
30
            AppShow "Program Manager"
        End If

        AppShow "View2 Plus"
        LockWindowUpdate(0)
35
        ScreenRefresh

        DlgText "applist", "Microsoft Word"
        yourapp$ = DlgText$("applist")
        newapp$ = DlgText$("applist")
40
        End Sub

        'ARRANGE DIFFERENT WINDOWS
        Sub ArrangeWindows
        On Error Goto problem

45
        'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
        If CommandValid("ToolsProtectDocument") = 0 Then
            FileNewDefault
            If DocMaximize() Or DocMinimize() Then DocRestore

```

```

        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))    'SIZE
WINDOW
    docwidth = DocWindowWidth()'SET VARIABLE FOR DOC WIDTH
    DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)    'SIZE
5  WINDOW
    docheight = DocWindowHeight()'SET VARIABLE FOR DOC HEIGHT
    FileClose
End If

10  'VERTICAL SPLIT
    If DlgValue("split") = 0 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
15  ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))    'SIZE
        WINDOW
            If CommandValid("ToolsProtectDocument") Then docwidth =
            DocWindowWidth()
20  If DlgValue("leftright") = 0 Then DocMove 0, 0    Else
            DocMove(docwidth), 0        ' SET LEFT/RIGHT

        ' ACTIVE DOCUMENT
        WindowList yours
25  If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7))    'SIZE
30  WINDOW
        If DlgValue("leftright") = 0 Then DocMove(docwidth), 0
        Else DocMove 0, 0    'SET LEFT/RIGHT
    End If

35  'HORIZONTAL SPLIT
    If DlgValue("split") = 1 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
40  ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2)    'SIZE
        WINDOW
            If CommandValid("ToolsProtectDocument") Then docheight =
            DocWindowHeight()
45  If DlgValue("leftright") = 0 Then DocMove 0, 0    Else
            DocMove 0, (docheight)        ' SET TOP/BOTTOM

        ' ACTIVE DOCUMENT
        WindowList yours

```

```

        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
5      DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
        If DlgValue("leftright") = 0 Then DocMove 0, (docheight)
        Else DocMove 0, 0 'SET TOP/BOTTOM
End If
10  problem:
End Sub

'ARRANGE SAME WINDOWS
Sub SameWindows
15  On Error Goto problem

'MAXIMIZE WINDOW AND UNWRAP TEXT
If DlgValue("leftright") = 0 Then
    For count = 1 To CountWindows()
20      WindowList(count)
        ToolsOptionsView .WrapToWindow = 0
    Next
    WindowList yours
    DocMaximize 1
25  Goto problem
End If

'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
If CommandValid("ToolsProtectDocument") = 0 Then
30  FileNewDefault
    If DocMaximize() Or DocMinimize() Then DocRestore
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
    docwidth = DocWindowWidth() 'SET VARIABLE FOR DOC WIDTH
35  DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
WINDOW
    If CommandValid("ToolsProtectDocument") Then docheight =
DocWindowHeight()
    FileClose
40  End If

'DISPLAY ACTIVE WINDOW WITH NEW WINDOW OF ITSELF
'VERTICAL SPLIT
If DlgValue("leftright") = 1 And DlgValue("split") = 0 Then
45  If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
ViewZoom .ZoomPercent = "100"
    ToolsOptionsView .WrapToWindow = 1 'WRAP WINDOW
    DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'HALF SIZE

```

```

        If CommandValid("ToolsProtectDocument") Then docwidth =
DocWindowWidth()
        DocMove(docwidth), 0      'SET RIGHT

5   'CREATE AND SIZE NEW WINDOW
        old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
        WindowNewWindow
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
10  ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
        WINDOW
        DocMove 0, 0      ' SET LEFT
15  WindowList(old)      'ACTIVATE ORIGINAL WINDOW
        End If

        'HORIZONTAL SPLIT
        If DlgValue("leftright") = 1 And DlgValue("split") = 1 Then
20  If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
25  WINDOW
        If CommandValid("ToolsProtectDocument") Then docheight =
        DocWindowHeight()
        DocMove 0, (docheight)      ' SET BOTTOM

30  'CREATE AND SIZE NEW WINDOW
        old = Window() 'NOTE ORIGINAL WINDOW LIST NUMBER
        WindowNewWindow
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
35  ViewZoom .ZoomPercent = "100"
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
        WINDOW
        DocMove 0, 0      'SET TOP
        WindowList(old)      'ACTIVATE ORIGINAL WINDOW
40  End If
        problem:
        End Sub

        Sub halfcut
45  'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
        If CommandValid("ToolsProtectDocument") = 0 Then
        FileNewDefault
        If DocMaximize() Or DocMinimize() Then DocRestore

```

```

        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
WINDOW
        docwidth = DocWindowWidth()'SET VARIABLE FOR DOC WIDTH
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
5  WINDOW
        docheight = DocWindowHeight()'SET VARIABLE FOR DOC HEIGHT
        FileClose
    End If

10  'HORIZONTAL SPLIT
    If DlgValue("splitsplit") = 1 Or DlgValue("splitsplit") = 3 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
15  ToolsOptionsView .WrapToWindow = 0 'UNWRAP TEXT
        DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE
        WINDOW
            If CommandValid("ToolsProtectDocument") Then docheight =
            DocWindowHeight()
20  If DlgValue("splitsplit") = 1 Then DocMove 0, 0 Else
        DocMove 0, (docheight) ' SET TOP/BOTTOM
    End If

    'VERTICAL SPLIT
25  If DlgValue("splitsplit") = 0 Or DlgValue("splitsplit") = 2 Then
        If DocMaximize() Or DocMinimize() Then DocRestore
        If MacroNameFromWindow$() = "" Then ViewZoom100 Else
        ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
30  DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
        WINDOW
            If CommandValid("ToolsProtectDocument") Then docwidth =
            DocWindowWidth()
            If DlgValue("splitsplit") = 0 Then DocMove 0, 0 Else
35  DocMove(docwidth), 0 ' SET LEFT/RIGHT
    End If
    out:
    End Sub

40  Sub quartercut

    'GET SIZING VARIABLES FOR PROTECTED DOCUMENTS
    If CommandValid("ToolsProtectDocument") = 0 Then
        FileNewDefault
45  If DocMaximize() Or DocMinimize() Then DocRestore
        DocSize(Val(AppInfo$(6)) / 2), Val(AppInfo$(7)) 'SIZE
        WINDOW
            docwidth = DocWindowWidth()'SET VARIABLE FOR DOC WIDTH
            DocSize(Val(AppInfo$(6)), Val(AppInfo$(7)) / 2) 'SIZE

```

```

WINDOW
    docheight = DocWindowHeight() 'SET VARIABLE FOR DOC HEIGHT
    FileClose
End If

5
'TOP SPLIT
If DlgValue("splitsplit") = 1 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
    If MacroNameFromWindow$() = "" Then ViewZoom100 Else
10 ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
        DocMove 0, 0
        If CommandValid("ToolsProtectDocument") Then docwidth =
15 DocWindowWidth()
        If CommandValid("ToolsProtectDocument") Then docheight =
        DocWindowHeight()
        If DlgValue("leftrightsplit") = 0 Then DocMove 0, 0 Else
        DocMove(docwidth), 0 'SET LEFT/RIGHT
20 End If

'BOTTOM SPLIT
If DlgValue("splitsplit") = 3 Then
    If DocMaximize() Or DocMinimize() Then DocRestore
25 If MacroNameFromWindow$() = "" Then ViewZoom100 Else
    ViewZoom .ZoomPercent = "100"
        ToolsOptionsView .WrapToWindow = 1 'WRAP TEXT
        DocSize(Val(AppInfo$(6)) / 2, Val(AppInfo$(7)) / 2)
        DocMove 0, 0
30 If CommandValid("ToolsProtectDocument") Then docwidth =
        DocWindowWidth()
        If CommandValid("ToolsProtectDocument") Then docheight =
        DocWindowHeight()
        If DlgValue("leftrightsplit") = 0 Then DocMove 0, (docheight)
35 Else DocMove(docwidth), (docheight) 'SET LEFT/RIGHT
    End If
    off:
End Sub

40 'CALL ARRANGE APP WINDOW MACRO
Sub ArrangeApps

    If DlgEnable("split") = - 1 Then
    If DlgValue("split") = 0 Then
45 If DlgValue("leftright") = 0 Then
        vert$ = "right"
    ElseIf DlgValue("leftright") = 1 Then
        vert$ = "left"
    End If

```

```

        timeout$ = Time$()
        OnTime timeout$, "View2PlusExtra32", 0
        If MacroNameFromWindow$() <> "" Then
            FileNewDefault
5            fix$ = "kill"
            SetDocumentVar "macrowin", fix$
        End If
        SetDocumentVar "appos", vert$
        SetDocumentVar "appname", newapp$
10    End If

    If DlgValue("split") = 1 Then
        If DlgValue("leftright") = 0 Then
            hoz$ = "top"
15        ElseIf DlgValue("leftright") = 1 Then
            hoz$ = "bottom"
        End If
        timeout$ = Time$()
        OnTime timeout$, "View2PlusExtra32", 0
20        If MacroNameFromWindow$() <> "" Then
            FileNewDefault
            fix$ = "kill"
            SetDocumentVar "macrowin", fix$
        End If
25        SetDocumentVar "appos", hoz$
        SetDocumentVar "appname", newapp$
    End If
    End If

30    If DlgEnable("split") = 0 Then
        max$ = "yes"
        timeout$ = Time$()
        OnTime timeout$, "View2PlusExtra32", 0
        If MacroNameFromWindow$() <> "" Then
35            FileNewDefault
            fix$ = "kill"
            SetDocumentVar "macrowin", fix$
        End If
        SetDocumentVar "appos", max$
40        yourdoc$ = Str$(yours) 'CONVERT ACTIVE DOC # TO STRING FOR
        DOC VAR
        SetDocumentVar "actdoc", yourdoc$
    End If
    End Sub

```

E. SUPPLEMENTAL MACRO OF THE SECOND EMBODIMENT
FOR WORD 7 (WITH 32-BIT API DECLARATIONS).

```
[IT CONTAINS THE CODE FOR SIZING AND POSITIONING APPLICATION
5  WINDOWS. IT IS ACTIVATED FROM THE MAIN MACRO USING A TIMER
   MECHANISM BECAUSE THE MODAL DIALOG BOX IN THE MAIN MACRO HAS TO
   BE CLOSED BEFORE THE WORD WINDOW CAN BE RESIZED.]

   'PREVENT SCREEN REFRESH API DECLARATIONS
10  Declare Function GetDesktopWindow Lib "user32"() As Integer
   Declare Sub LockWindowUpdate Lib "user32"(hWnd As Integer)

   Sub MAIN

15  For x = 1 To 49
     Print "View2 Plus:" + Str$(x) + "%"
     Next x
     Print "View2 Plus: 50%... please wait..."

20  On Error Goto ErrorRecovery
     hWnd = GetDesktopWindow
     LockWindowUpdate(hWnd)

     'SET VARIABLES
25  fix$ = GetDocumentVar$("macrowin")
     vert$ = GetDocumentVar$("appos")
     hoz$ = GetDocumentVar$("appos")
     max$ = GetDocumentVar$("appos")
     newapp$ = GetDocumentVar$("appname")
30  yourdoc$ = GetDocumentVar$("actdoc")

     'CLEAR DOC VARIABLES
     SetDocumentVar "appos", ""
     SetDocumentVar "appname", ""
35  SetDocumentVar "macrowin", ""
     SetDocumentVar "docact", ""

     If max$ <> "yes" Then
       AppMaximize 1
40  appwidth = AppWindowWidth()      'SET VARIABLE FOR DOC WIDTH
     appheight = AppWindowHeight() 'SET VARIABLE FOR DOC WIDTH
     AppRestore

     'SELECTED APP ON RIGHT
```

```

If vert$ = "left" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth / 2, appheight
5    AppMove newapp$, (appwidth / 2), 0 ' SET LEFT/RIGHT
    AppSize appwidth / 2, appheight
    AppMove 0, 0 ' SET LEFT/RIGHT
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
10    ToolsOptionsView .WrapToWindow = 1
End If

'SELECTED APP ON LEFT
If vert$ = "right" Then
15    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth / 2, appheight
    AppMove newapp$, 0, 0 ' SET LEFT/RIGHT
    AppSize appwidth / 2, appheight
20    AppMove(appwidth / 2), 0 ' SET LEFT/RIGHT
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 1
End If

25 'SELECTED APP ON BOTTOM
If hoz$ = "bottom" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
30    AppSize newapp$, appwidth, appheight / 2
    AppMove newapp$, 0, (appheight / 2) ' SET BOTTOM
    AppSize appwidth, appheight / 2
    AppMove 0, 0 ' SET TOP
    DocMaximize 1
35    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 0
End If

'SELECTED APP ON TOP
40 If hoz$ = "top" Then
    AppRestore newapp$
    AppRestore newapp$ 'bug fix
    AppSize newapp$, appwidth, appheight / 2
    AppMove newapp$, 0, 0 ' SET TOP
45    AppSize appwidth, appheight / 2
    AppMove 0, (appheight / 2) ' SET BOTTOM
    DocMaximize 1
    If MacroNameFromWindow$() = "" Then ViewNormal
    ToolsOptionsView .WrapToWindow = 0

```

```
End If
End If

'MAXIMIZE WORD
5  If max$ = "yes" Then
    AppMaximize 1
    For count = 1 To CountWindows()
        WindowList(count)
        ToolsOptionsView.WrapToWindow = 0
10  Next
    yours = Val(yourdoc$)'CONVERT ACTIVE DOC STRING TO #
    WindowList yours
    DocMaximize 1
End If
15
'CLOSE TEMP DOC FOR MACRO WINDOWS
If fix$ = "kill" Then FileClose 2

ErrorRecovery:
20 LockWindowUpdate(0)

For x = 51 To 100
Print "View2 Plus:" + Str$(x) + "%"
Next x
25 Print "View2 Plus: 100%... complete."

End Sub

30
```

What is claimed is:

1. A method for the simultaneous display on a computer screen of selected document windows in a multiple document interface computer system by means of a dialog box interface, the method comprising the steps of:

(a) opening the dialog box interface;

(b) selecting from within the dialog box interface document windows to be displayed and their screen display positions;

(c) closing the dialog box interface;

(d) displaying the selected document windows simultaneously on the computer screen at the selected screen positions.

2. A method according to claim 1 wherein an active document window is a first selected document window and wherein a user selects a second document window.

3. A method according to claim 2 wherein the first and second windows are tiled when displayed.

4. A method according to claim 3 wherein the first and second windows are tiled horizontally.

5. A method according to claim 3 wherein the first and second windows are tiled vertically.

6. A method according to claim 1 wherein the multiple document interface is for a word processing application.

7. A method according to claim 1 wherein the multiple document interface is for a desktop publishing application.

8. A multiple document interface computer system with a dialog box interface for the simultaneous display on a computer screen of selected document windows, comprising:

(a) means for opening the dialog box interface;

(b) means for selecting in the dialog box interface document windows to be displayed;

(c) means for selecting in the dialog box interface screen display positions of selected document windows;

(d) means for closing the dialog box interface;

(e) means for simultaneously displaying the selected document windows at the selected screen positions on the computer screen.

9. A computer system according to claim 8 wherein said means function in accordance with the source code set forth in section III. of the Source Code Appendix entitled A FIRST PREFERRED EMBODIMENT—VIEW2™.

10. A computer system according to claim 8 wherein said means function in accordance with the source code set forth in section III. of the Source Code Appendix entitled A SECOND PREFERRED EMBODIMENT—VIEW2™ PLUS.

* * * * *