

[0051] Aspects of the present invention may extend to other standard functions on a spreadsheet program.

[0052] For example, spreadsheet programs often come with the ability to present the data graphically. Thus, for multi-relational data sheets, the present invention can also be used to produce 3-dimensional graphs showing the data on x, y and z axes as required.

BRIEF DESCRIPTION OF THE DRAWINGS

[0053] FIG. 1 shows a first screen display of a conventional spreadsheet software.

[0054] FIG. 2 shows a first screen display of a conventional spreadsheet software.

[0055] FIG. 3 shows an exemplary display of spreadsheet objects on a multi-component display in accordance with one embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0056] FIG. 1 is a screen display from a Microsoft Excel™ program. This illustrates a group of data on a spreadsheet generally indicated by arrow 1 on the screen. The associated tab (2) indicates that the data we are looking at relates to "FBT Calc-Lease".

[0057] The screen also shows that there is a second group of data (not shown) and positioned visually under the first group of data. The indicator that there is a second group of data is the tab (3) which reads "FBT Calc-Lease to Own".

[0058] To view the second group of data, it is necessary to select the tab (3). However, in doing so the first group of data is obscured by the second group of data. Thus, the effect of a change on one group of data is not immediately discernable as the user cannot see the other group of data.

[0059] It can also be seen that it can be difficult for the user to select a particular cell given that half of the data is obscured at any one time.

[0060] It should also be appreciated that spreadsheet programs of this type have the ability to have multiple tabs, not just the two shown.

[0061] FIG. 2 illustrates a screen display whereby two separate files have been imported into the one screen display and are positioned side by side.

[0062] This enables the user to change data on file and view its corresponding effect on the other file.

[0063] However, because the files are side by side, this is not intuitive with there being no real physical relationship between cells having the same common row and column.

[0064] Further, the screen size is still limited and only a certain amount of data can be fitted onto the screen.

[0065] The present invention provides for the separate groups of data (whether from separate files of merely separate spreadsheets to be displayed on separate physical screens aligned with each other.

[0066] FIG. 3 shows an example of a multi-level spreadsheet using only 2 layers.

[0067] Information can be stored on both layers. The layout of the cells can be used to enhance user information by positioning related cells close to or behind one another so as to improve the visual feedback to the user speeding up the development time and improving error detection. The positioning of the cells can also be used to increase the information available on a given cell as illustrated by the text and numbering chosen for FIG. 3. The front screen is ready to receive the monthly information such as income generated or

expenses incurred while the back screen provides the user with immediate information about the day on which the income was generated or expense total incurred, thus reducing the need to look away from the cell to gain this information.

[0068] A greater number of layers of course can be used.

[0069] The 3-dimensional spreadsheet enables the user to see far greater quantities of data in the one visual display than before.

[0070] It also enables the user to quickly select a desired cell. Further, the relational nature of the data to each other can be intuitively perceived.

[0071] Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope of the appended claims.

What is claimed is:

1. A method of assigning screen designation codes, said method comprising:

assigning a first screen designation code to a first spreadsheet object, wherein said first screen designation code is associated with a first display screen of a multi-component display;

assigning a second screen designation code to a second spreadsheet object, wherein said second screen designation code is associated with a second display screen of said multi-component display; and

simultaneously displaying said first spreadsheet object on said first display screen and said second spreadsheet object on said second display screen, wherein said simultaneously displaying further comprises simultaneously displaying said first and second spreadsheet objects using said first and second screen designation codes.

2. The method of claim 1, wherein said first and second spreadsheet objects are selected from a group consisting of a window, menu, a tab, an icon, a user-modifiable field, a cell, and a grouping of cells.

3. The method of claim 1, wherein said first and second spreadsheet objects are associated with a respective user-selectable tab.

4. The method of claim 1, wherein said first spreadsheet object comprises a formula, and wherein said second spreadsheet object is selected from a group consisting of data associated with said formula and a result of said formula.

5. The method of claim 1, wherein said first and second spreadsheet objects comprise adjoining data wrapped from said first display screen to said second display screen.

6. The method of claim 1, wherein said first spreadsheet object comprises a first color and said second spreadsheet object comprises a second color.

7. The method of claim 1, wherein said first spreadsheet object comprises a link to said second spreadsheet object.

8. The method of claim 1, wherein said second spreadsheet object is selected from a group consisting of: an error message related to said first spreadsheet object; and information about said first spreadsheet object.

9. The method of claim 1, wherein said simultaneously displaying further comprises displaying said first spreadsheet object at a first position on said first display screen, wherein said simultaneously displaying further comprises displaying said second spreadsheet object at a second position on said second display screen, and further comprising: