**[0023]** This arrangement of layering multiple screens allows images to be presented at multiple levels giving the viewer true depth without use of glass or lens.

**[0024]** The present invention will now refer to use with a multi-level screen as described above although this should not be seen as limiting.

**[0025]** The group of data is in preferred embodiments a spreadsheet such as that normally viewed in a spreadsheet program, however this should not be seen as limiting.

**[0026]** It should be appreciated that although reference shall be made throughout this specification now to only background and foreground screens, other aspects of the present invention may utilize more than two screens. For example, various spreadsheets may be on the multiple screens behind the foreground screen.

**[0027]** A group of data may be that information displayed when a particular tab is selected on the screen. Therefore, that group of data or spreadsheet is displayed on one of the physical screens.

**[0028]** The group of data or spreadsheet that can be viewed by selecting another tab may be displayed on another physical screen. Alternatively, if there are two separate spreadsheet programs, these can be imported to an embodiment of the present invention and have separate spreadsheets from the separate files shown on the separate screens with one spreadsheet overlaying another, but with the ability to see both.

**[0029]** One embodiment of the present invention will be an interface that identifies the coding on existing software with these identifiers and assign various data groups to the appropriate foreground or background screen.

**[0030]** The "always on top" functions can be made fully or partially transparent by the present invention.

**[0031]** In one embodiment of the present invention, one screen may have a highlight for a particular cell or group of cells positioned either in front of or behind that highlight. In a variation of this embodiment, the highlights of a number of cells may be color coded with the codes corresponding to a particular relationship to cells of a certain type.

**[0032]** In another embodiment of the present invention, one group of data on one screen may be the actual values within the cells and the other group or groups of data on the other screens may be the coding or formulas or relational information that actually creates the value shown on the other screen.

**[0033]** In some embodiments, the groups of data may all belong to the same large spreadsheet and the second and consequent screens may merely show the wrap-around of that spreadsheet.

**[0034]** In other embodiments, it may be provided in cells a hyperlink that can take the user of the spreadsheet to other cells or other screens.

**[0035]** Sometimes, the present invention may be useful in error tracking. For example, a mistake in the relational formula between the cells or the data entered may lead to an error. The ability to see a number of cells at once can assist in tracking down where the error occurred or what cells are affected by the error.

**[0036]** In one aspect of the present invention there may be provided the ability to scroll through values on one cell or set of cells on a screen while still being able to view another set of cells on another screen. This is particularly useful where it is desired to be able to search for information or data on various areas of the spreadsheet or database while not disturbing the actual region of the spreadsheet or database that the user is working on.

**[0037]** The scrolling or rotation of data on various cells may be achieved in some instances by the use of a track ball or some other user interface.

**[0038]** In yet another embodiment one of the screens may display tips or hints associated with the cells being displayed on the other screen.

**[0039]** The interface may be a patch for existing software, a library file or a new front end for multiple existing software packages or a completely new operating system.

**[0040]** With existing software that does not have such coding, it may be necessary to implement the present invention by having customized software in which the software developer specifies the software routines which cause the appropriate components and images to go on the appropriate screens.

**[0041]** A further aspect of the present invention is the provision of media on to which instructions in accordance with the present invention have been recorded. For example, this media may be a graphics card, CD, hard drive, floppy disk and so forth.

**[0042]** The advantages of the present invention can now be readily seen.

**[0043]** Because of the physical separation between the screens, the viewer can easily see data On the front screen and oh the rear screen as required. Thus, the user can see significantly more data than previously viewable with standard software or standard screens. Indeed the amount of data that the user can see is a multiple proportional to the number of screens in the multi-level screen display.

**[0044]** The viewer can instantly see on which screen holds the cell or data that is relevant to it and select this.

**[0045]** The user can also see at a glance the relational nature of the data on the screens. For example, a change on one screen may cause corresponding change on the other screen overlaying it. This gives an instant appreciation of the effect of a change.

**[0046]** In some embodiments of the present invention the cells which change as a consequence of altering data may be color coded. This allows the user to more quickly identify where that change has occurred on multiple screens.

**[0047]** Some embodiments may have different shading to make it clear as to which screen the group of data is on, or to indicate which data is grouped together. The overall screens may also be shaded/colored to give visual clarity.

**[0048]** The present invention also allows the user to easily access a desired cell. Not only is this more desirable for the user in terms of mental satisfaction, but this also is significant in terms of physical relief. A problem that frequent computer users have is occupational overuse syndrome (oos) which is the repeated use of muscles, particularly when typing or using a mouse. Easier access means that the mouse is used less in order to find a particular cell and thus a potentially unpleasant medical condition is avoided.

**[0049]** In some embodiments of the present invention some cells are presented as 3-dimensional blocks which can be selected, moved or removed like blocks in a wall to reveal data on other screens.

**[0050]** It can be appreciated that the present invention overall literally provides an added dimension to the ability of a user to work with data manipulation programs such as spreadsheets and databases. There is considerably more flexibility and also a reduction in the time and effort required by the user to see the relationship between groups of data to each other.