new destination display layer and this results in an overlap of display elements, the above described system of automatically adjusting the visual properties of the first and/or second display elements may be implemented.

[0157] Of course, the above described first (automatic allocation/alteration) and second (user controlled allocation) embodiments could be combined so that some display elements within a multi-layer display system are always automatically assigned while user input is used to assign other display elements.

[0158] FIG. **3**A is a schematic diagram showing an example of how the user interface according to the present invention may look in practice. A multi-layer display system **6** includes for example two overlapped display layers, one directly in front of the other. A user interface **13** includes graphical representations of first (or front) **14** and second (or back) **15** display layers of the MLD system. Symbols **16**A and **17**A within the user interface represent display elements **16**B and **17**B in the first display layer **14** while symbol **18**A represents display element **18**B in the second display layer **15**. Display elements **16**B and **17**B may, for example, be GUI windows. Display elements **16**B, **17**B and **18**B may be easily and conveniently manipulated (moved within their layers, moved to different layers, made active/inactive or have their visual properties such as colour, brightness, transparency or saturation) by a user interacting with the representative symbols within user interface **13**.

[0159] User interface **13** may be adjustable in size and may be moved to a different display layer. However, it may be advantageous if the user interface were to automatically switch to the display layer in which the user is currently working (that is, in which a selection element such as a mouse pointer is currently positioned). Alternatively, within the user interface portion of the display apparatus, operation of a mouse pointer within any display layer could manipulate the symbols within the user interface, even if the interface is positioned on a different layer than the layer in which the mouse pointer is currently positioned.

[0160] FIG. **3**B is very similar to the schematic diagram of FIG. **3**A but shows the display system of FIG. **3**A subsequent to a user selecting and moving (by dragging and dropping for example) symbol **16**A to display layer **15**. It can be seen that while within display layer **15** there is no overlap of display elements, display elements **16**B and **17**B are in fact overlapped and share a common overlapped portion **19**. It will be appreciated that the present invention alms to improve the ease with which a viewer may discern information from or observe information within the overlapped portion **19** by either altering visual properties of the display elements or adjusting their position(s).

[0161] FIG. **4** is a block diagram of a preferred embodiment of hardware for carrying out the present invention. A display device **6** which may comprise multiple interconnected multi- or single-layer devices is connected to a control means **7** which controls the illumination of the various display layers of the display device. A user input device **8** provides user input to the control means and a memory device **9** provides storage for digital data files and executable software programs which, when executed, may control the operation of the control means **7**.

[0162] Control means or controller **7** may comprise or include a microprocessor and also includes a position detector **10** for detecting or receiving the position of a display element to be displayed on (all already being displayed on) the display device and determining whether overlap will occur between different display elements. The control means **7** also includes an adjustment means **11** for automatically adjusting either the position of a first and/or second overlapped display element or for automatically adjusting at least one visual property of at least the overlapping portion of the first and/or second display element. The adjustment means may also determine whether the display element has an associated pre-set display layer preference and may makes its adjustment based upon detected visual properties (such as colour, brightness or contrast) of the overlapping display elements or upon a preset display layer preference or upon a determination that one or both layers contain text matter. A display driver **12** is also provided within the controller **7** for generating appropriate electronic signals to the MLD system to cause the adjusted display elements to be rendered on their respective display layers of the display device **6**.

[0163] It should be noted that the means **10**, **11** and **12** could be provided by physical hardware such as electronic circuits or could be provided by software routines executed by the control means **7**.

[0164] 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 thereof.

1. A display control method for a multi-layer display system including at least two overlapping display layers, the display control method comprising the steps of:

i) detecting that the position of a first display element to be displayed on a first display layer overlaps or will potentially overlap with the position of a second display element on a different display layer;

ii) adjusting either the position of the first and/or second display element and/or at least one visual property of at least the overlapping or potentially overlapping portion of the first and/or second display element; and

iii) displaying the first and second display elements on their respective display layers in their adjusted position or positions or with their adjusted visual property or properties in order to improve the ability of a user of the display apparatus to view the overlapping or potentially overlapping portion of the first and/or second display element.

2. A display control method as claimed in claim 1, wherein the step of adjusting is carried out manually by a user of the multi-layer display system.

3. A display control method as claimed in claim 1, wherein the step of adjusting is carried out automatically.

4. A display control method as claimed in claim 3, wherein the step of automatically adjusting the position of a first and/or second display element comprises:

determining a level of interference as experienced by a user between the first and second display elements, and

moving the first and/or second display element within their respective display layers, to a new position or positions which reduces the determined level, and/or

changing at least one visual characteristic of the first and/or second display element.