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(54) **IMAGE DISPLAY APPARATUS**

BILDANZEIGEVORRICHTUNG

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Description

[0001] The present invention relates to image display apparatus and more specifically to improved apparatus for mounting an image for display purposes and also for preventing the copying of a displayed image.

[0002] It is commonplace to mark important events in the lives of friends and relatives by having a professional photographer record these events on film or digitally. This film is subsequently developed in a laboratory, or by the photographer, and appropriate prints are chosen for mounting in a framing arrangement in order that they may be put on display. Traditional framing methods of framing images have involved a frame which goes over the outer edge of the image and the image is framed by the inner edge of the frame, in some cases the frame is provided with additional elements such as a mounting sheet and glass. However such traditional frames require the image to be rear mounted which involves much skill in properly aligning the image and ensuring that the final product is dust free. Additionally, they can easily be disassembled and the image may be removed and illegally copied.

[0003] With the advent of frameless mount arrangement traditional materials such as thick cardboard and wood were initially used. As it was necessary for a thick mount card to be used for these arrangements in order to provide a suitable substantial surface on which a picture could be supported, the resulting dimensions of these frameless mounts were larger thus giving a "box" effect when hung on a wall.

[0004] Modern framing methods, such as that described in UK Patent GB 2424832B which discloses an image display apparatus which includes a frame and a support member having a raised portion upon which an image, such as a photograph, can be mounted. Securing means are provided for securing the frame to the support member such that the frame surrounds the raised portion. The area of the raised portion may be smaller than the inner area of the frame to provide a gap between the frame and the raised portion, to give the impression of the image floating in the frame. The image may be secured to the raised portion by an adhesive layer to prevent removal for copying. A method for front mounting an image in a frame is also disclosed.

[0005] This prior art image display apparatus has advantages over the traditional framing systems, providing a front loading picture frame for which it is easier to centre the image; creates a shadow gap between the frame and the image to make the image appear to be floating, and aids in preventing copying as the image is secured in the frame.

[0006] An alternative improved image display apparatus can be found in International PCT Patent Application No. PCT/GB2011/051466 which provides a front loading picture frame in which the picture being mounted can be easily centred, with the display apparatus creating a shadow gap to make the image appear floating whilst having the image enhancement of a traditional mounting

sheet.

[0007] However, the image display apparatus of GB2424832B and PCT/GB2011/051466 have a major disadvantage in that these prior art arrangements are constructed upon a single backing panel and are formed from modern materials, for example, plastics such as Perspex® and metals such as aluminium. As these materials are typically expensive the sheets of materials are generally made as thin as possible to save on cost. When these thin sheets are mounted together they provide an image display apparatus which can flex. As a result, many frameless picture mounts can be difficult to transport safely and difficult to mount upon the walls. In addition, any flexing of the arrangement could cause substantial and irreparable damage to the artwork mounted on the frameless mount.

[0008] However, if the traditional rigid cardboard "box" structure was used to provide rigidity with the modern plastic and metal mounting materials, the effect, although not flexible would be unsightly. In addition, the overhang of modern materials over the box leaves the corners of the frameless mount vulnerable to damage.

[0009] US 2 208 001 and DE 298 11 685 are prior art useful in understanding the invention.

[0010] It is therefore an object of the present invention to provide an image display apparatus which obviates or mitigates at least one of the foregoing problems.

[0011] According to a first aspect of the invention there is provided an image display apparatus, the apparatus comprising a backing panel; one or more first raised portions located on the backing panel, each first raised portion having an upper surface upon which is secured an image for display; a backing support panel upon which is mounted the said backing panel, the backing support panel comprising a transparent material and having a perimeter such that the perimeter of the backing support panel extends at least to a perimeter of the backing panel; and characterised in that one or more second raised portions are located on the backing panel.

[0012] In this way, the backing support panel can provide support to the backing panel and first raised portion thus providing an image display apparatus which is substantially rigid due to the laminated arrangement of backing support panel, backing panel and first raised portion. Thus the arrangement ensures the apparatus is robust and can be used without a frame. In addition, by providing a backing support panel this can give the impression of the backing panel being set apart from any surface on which the display apparatus is mounted. By providing a clear backing support panel, the effect of the backing support panel is to create a "floating" effect while extending the support of the backing panel to, or beyond, the perimeter of the backing panel. The arrangement of the backing panel on a transparent backing support panel will create an impression that the backing support is floating when the image support apparatus is mounted upon the wall. By extending at least to the perimeter of the backing panel, the backing support panel eliminates any

overhang of the backing panel over the backing support panel which can also prevent the edges and corner of the backing panel from sustaining damage such as chips, cracks and scratches. In addition, any chips, cracks and scratches sustained by the backing support panel will, when a transparent backing support panel is used will have their appearance minimised by the transparency of the material. As the image display apparatus front loaded, the image display apparatus also aids in preventing illegal copying.

[0013] Preferably the perimeter of the backing support panel will extend beyond the perimeter of the backing panel. By extending beyond the perimeter of the backing panel, the backing support panel will better prevent the edges and corner of the backing panel from sustaining damage such as snapping if a force is inadvertently applied and also better prevents chips, cracks and scratches. This arrangement will also enhance the appearance of the image display apparatus 'floating' off the wall on which it mounted.

[0014] Preferably, the backing support formed of a rigid durable material. In the case when the arrangement of the backing panel and first raised portion are particularly flexible, a sufficiently thick backing support panel of a rigid durable material can be used to give the image display apparatus a desired rigidity.

[0015] Preferably, said backing support panel may be formed from a sheet of plastic such as Perspex®. Suitable materials such as plastics and solid resin are easy to cut and handle while being rigid and their edges may be polished to provide an aesthetically pleasing, clean appearance.

[0016] Preferably, each second raised portion is provided with an upper surface upon which is secured content for display, each second raised portion further having at least one inner edge which is arranged adjacent to and spaced apart from an outer edge of a first raised portion to create a channel therebetween. Alternatively, a second raised portion may abut against an outer edge of a first raised portion.

[0017] In this way, the second raised portions can be arranged to enhance the appearance of the image displayed on the first raised portions. The arrangement of the second raised portion also ensures that content, such as maker information and image data is incorporated within the image display apparatus. An arrangement of said first and second raised platforms formed in this way means that the inclusion of the content within the image display apparatus aids in preventing passing off of the work as that of another artist or having the work wrongly attributed in future. This security feature and verification of ownership can help maintain the value of the work of art. As this content is arranged separate from the image being displayed, it does not detract from, or deface, the image. This helps maintain the value and appearance of the image being displayed. As the image display apparatus is front loaded, the image display apparatus also aids in preventing illegal copying. In addition, if a channel

is created between the first raised portion and second raised portion will create a shadow gap which will accentuate the image.

[0018] Alternatively, each second raised portion has at least one inner edge arranged to surround a perimeter of each first raised portion such that each first raised portion is located within, and spaced apart from said second raised portion to create a channel therebetween.

[0019] Preferably each second raised portion is formed of two or more component portions meaning multiple second raised portions can be obtained from a single sheet of suitable material. This minimises waste created during the construction of each image display apparatus. In addition, the channel created between the first raised portion and the assembled second raised portion will continue to create a shadow gap which means that the image provided on the first raised portion will appear to be floating thus accentuating the image. As the image display apparatus front loaded, the image display apparatus also aids in preventing illegal copying.

[0020] Preferably, said two or more component portions are abutted together to form at least one of said second raised portions. By abutting the component portions together any visible join lines created by the assembly of the component portions to form a second raised portion are minimised.

[0021] Preferably, each second raised portion has an upper surface to which a mounting panel is secured. The mounting panel secured to each second raised portion may be formed from one continuous piece of mounting panel material. By securing a mounting panel, formed of a single piece of mounting panel material, to a second raised portion formed on two or more component portions, any visible join lines created by the abutment of said two or more component portions may be hidden. Additionally, the mounting panel may be formed of a plurality of sections, the sections being in close spaced apart relation to give the impression of a single mounting panel. In this way, the mounting panel can be constructed of off-cuts of materials.

[0022] Each mounting panel may have at least one inner edge arranged to surround a perimeter of each first raised portion such that each image is located within and spaced apart from a mounting panel such that a channel is created therebetween.

[0023] Preferably each image is arranged to overhand the edge of the first raised portion. This increases the apparent floating effect.

[0024] Preferably, the image is located behind and secured to a sheet of Perspex® or other clear material. The sheet is sized to the image and protects the image without requiring a sheet of glass.

[0025] Preferably each mounting panel is arranged to overhang the second raised portion. This further increases the apparent floating effect created as well as further minimizing the visibility of any join lines created by the abutment of two or more component portions of the second raised portion.

[0026] Furthermore, the channel created removes the necessity for a mounting panel to be cut to a close level of tolerance to meet the outer edge of the frame thus further reducing costs and simplifying production.

[0027] The backing panel may be formed of a sheet of plastic such as Perspex, such materials are easy to cut and handle while being rigid. Optionally, the backing panel may be formed from a sheet of metal such as aluminium. Sheet metal is easy to cut and handle while being rigid. All of these materials are such that the edges can be polished to provide an aesthetic clean appearance.

[0028] Advantageously, the backing panel is formed of at least a partially reflective material. A reflective backing panel material further accentuates the floating effect of the image by increasing the apparent depth of the channel.

[0029] Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawing of which:

Figures 1(a) and 1(b) are illustrations of an image display apparatus outside the scope of the present invention with Figure 1(a) being a cross sectional view and Figure 1(b) being a perspective view;

Figure 1(c) is an cross sectional view of an image display apparatus outside the scope of the present invention;

Figures 2(a) and 2(b) are illustrations of an image display apparatus according to an embodiment of the present invention with Figure 2(a) being a cross sectional view and Figure 2(b) being a perspective view;

Figure 3 is an illustration of a plan view of an image display apparatus according to a further embodiment of the present invention;

Figure 4 is an illustration of a cross sectional view of an image display apparatus according to a yet further embodiment of the present invention; and

Figure 5 is a perspective view of a still further embodiment of the present.

[0030] Reference is initially made to Figures 1(a) and 1(b) of the drawings which illustrates an image display apparatus, generally indicated by the reference numeral 10 having a backing support panel 11, a backing panel 12, a first raised portion 14 and an image for display 18. Backing support panel 11 is located to the rear of the backing panel 12 thus providing rigidity to image display apparatus 10 as well as affording the perimeter edge 13 of backing panel 12 protection from bumps, scrapes and scratches.

[0031] Image 18 is a photograph or other work of art which requires to be displayed. The image 18 is located

upon platform 14. In this embodiment, the platform 14 has a length and breadth which matches that of the image 18. It is then simple to locate the image 18 upon the upper surface 22 of the platform 14. Typically there will be an adhesive layer on the surface 22 which is exposed before the surface is affixed thereupon. Once affixed the image 18 cannot be removed for copying purposes. Beneficially, the image 18 is effectively "front loaded" as the apparatus 10 faces the user to mount the image 18.

[0032] The image may be located behind and secured to a sheet of Perspex® or other clear material. The sheet is sized to the image and protects the image without requiring a sheet of glass. The technique of affixing an image to Perspex® is known to those skilled in the art. Having the image behind Perspex® accentuates the overall image display when other component parts are made of Perspex®.

[0033] The platform 14 is a raised section, which is substantially square, but it may be of any two dimensional shape, such as rectangular, circular or oval. The platform 14 is affixed to a backing substrate 12 which is a large flat panel, typically of similar shape to platform 14. The platform 14 is a box affixed to the substrate 12, or may be integral with the substrate 12, to provide an upper surface 22 which sits proud and away from the surface 23 of the substrate 12. Backing substrate 12 is affixed to a backing support substrate 11 which is also a large flat panel, typically of similar shape to substrate 12.

[0034] The substrate 12 is made of rigid durable material. This is distinct from the card and cardboard traditionally used, as these materials would degrade quickly as they are exposed in use and do not have the traditionally glass cover to protect them. The substrate 12 is, in this case, cut from a sheet of Perspex®. Perspex® is a rigid plastic material which in 2-3mm thickness provides a substantial ruggedness while still being able to be cut using simple cutting tools such as saws. Once cut, the Perspex® edges can be smoothed and polished. Alternatively the substrate 12 may be formed from a metal sheet such as aluminium. This also provides a highly rugged and durable backing to support the other components of the apparatus 10. The use of Perspex® allows the surface 23 of the substrate 12 to have a colour selected by the user. The surface 23 may also be polished to provide a partially reflective surface 23. Use of a polished metal gives a mirrored surface 23 which is highly reflective.

[0035] The backing support panel 11 is made of rigid durable material. This is also distinct from the card and cardboard traditionally used, as these materials would degrade quickly as they are exposed in use and do not have the traditionally glass cover to protect them. The backing substrate 11 is, in this case, cut from a sheet of Perspex®. Perspex® is a rigid plastic material which in 2-3mm thickness provides a substantial ruggedness while still being able to be cut using simple cutting tools such as saws. Once cut, the Perspex® edges can be smoothed and polished. The surface 23 may also be pol-

ished to provide a partially reflective surface 23.

[0036] The backing substrate 11 acts as a support panel to backing panel 12 which supports the further component parts of the apparatus 10. As the backing substrate 11 is rigid and durable, the apparatus 10 can be directly mounted upon a wall.

[0037] The backing support panel 11 is formed of clear Perspex® and extends beyond the perimeter edge 13 of the backing panel 12 thus affording better protection to the backing panel 12 from accidental damage. This arrangement also enhances the rigidity afforded to the image display apparatus by backing support panel 11. The use of clear Perspex® creates the effect that the backing panel 12 is floating on the wall thus enhancing the visual appearance of the image being displayed. In addition, clear Perspex® being used as the backing support panel 11 means that any bumps or scratches sustained at the corners and edges of the backing support panel 11 are somewhat less visible than if a coloured Perspex® or different material was used, thus ensuring the appearance of the image display apparatus 10 is optimised. By providing rigidity to the image display apparatus 10, backing support panel 11 minimises the risk of the image display apparatus 10 flexing and causing damage to the image 18 displayed. This can prevent damage being caused to the image 18 during the moving or the hanging of the image display apparatus 10.

[0038] However, as can be seen in Figure 1(c) which shows an image display apparatus 10 closely similar to that shown in Figures 1(a) and 1(b), the backing support panel 11 may extend only to the perimeter edge 13 of the backing panel 12. This arrangement will still afford the backing panel 13 protection from damage through knocks and scratches. This arrangement will also providing rigidity to the image display apparatus 10 thus preventing damage to the image 18 caused by flexing of the apparatus 10.

[0039] With reference to Figures 2(a) and 2(b) there is shown an embodiment of an image display apparatus according to the present invention which is closely similar to that shown in Figures 1(a) and 1(b). However, in this embodiment, located around the first platform 14, is a second platform 16. Platform 16 is substantially ring-shaped or annular to surround the first platform 14. It has an inner edge 24 and an outer edge 25. The second platform 16 is also of a box like construction to provide an upper surface 27 raised above the upper surface 23 of the substrate 12. The second platform 16 is affixed to substrate 12 however it will be appreciated that it may be formed integrally with substrate 12. The second platform 16 is made of rigid durable material, in this case, cut from a sheet of Perspex® which is a rigid plastic material which, when cut in thicknesses of more than 2mm, can provide substantial ruggedness while still being easy to cut with simple cutting tools such as a saw. Once cut, the Perspex® edges can be smoothed and polished to give an enhanced appearance.

[0040] The inner edge 19 of the second platform 16

follows the perimeter of the image 18 and the first platform 14 to entirely enclose the first platform 14. The shape of the inner edge 19 substantially matches the shape of an outer edge 26 of the image and the first platform 14. However, the edges 19, 26 do not meet and a space or gap 30 is left there between. Ideally, the gap 30 is of uniform width. A base 31 of the gap 30 exposes the surface 23 of the substrate 12.

[0041] In the embodiment shown, the upper surface of the image 18 and the upper surface 17 of the second platform 16, are arranged to project from the surface 23 of the substrate 12 by the same distance. This provides a uniform projected surface to the apparatus 10. The gap 30 gives the effect that the image 18 is floating. Additionally, the upper surface 17 of the second platform 16 will appear to float but also appear distinct from the image 18 so as to aesthetically enhance and frame the image 18. By choosing a colour, or a variety of colours for the second raised portion 16, and the backing panel 12 based on the colours in the image 18, the image 18 is further enhanced in the same fashion as would be provided by a mounting panel in a traditional picture frame.

[0042] The floating appearance of the second portion 16 is further enhanced by a spacing being provided between the outer edge 25 of the second portion 16 and the outer edge 31 of the substrate 12. By exposing a perimeter of substrate surface 23 around the second portion 16 this acts to frame the second portion 16 and, due to the difference in heights, the depth creates an impression that the second portion 16 is floating. The floating effect can be enhanced if the substrate surface 23 is reflective or mirrored. Furthermore, the substrate 12 will also appear to float in relation to the wall by virtue of backing support panel 11 thus further enhancing the framing of the image 18. The floating effect can be further enhanced if the backing support panel 11 extends beyond the perimeter 13 of the backing panel 12.

[0043] In Figure 3 there is shown a further embodiment of the present invention which is closely similar to the arrangement shown in Figure 3(a) and 3(b) however, in this case, the second platform 16 is formed of a plurality of component portions 16a-16d. The component portions 16a-16d are secured to the substrate 12 and arranged so that they abut against one another at joints 15 to create a single raised platform 16 of the desired shape. In this case, component portions 16a-16d are all equal sized rectangular shaped portions which, when arranged together create an annular square shape. The use of component portions 16a-16d means that the waste material created when manufacturing the second platform 16 is minimised as a plurality of the component portions 16a-16d can be cut from a single sheet of material therefore avoiding the waste created when a void is cut from a sheet of material to form a single, one piece, annular shape. In turn, the reduction in waste reduces the cost to manufacture of the image display apparatus.

[0044] The component portions 16a-16d are made of rigid durable material. The component portions 16a-16d

are, in this case, cut from a sheet of Perspex® which is a rigid plastic material which, when cut in thicknesses of more than 2mm, can provide substantial ruggedness while still being easy to cut with simple cutting tools such as a saw. Once cut, the Perspex® edges can be smoothed and polished before being abutted against one another therefore minimizing the appearance of joints 15.

[0045] As can be seen in Figure 4, to further enhance the appearance of the image display apparatus 10 as is illustrated in Figures 2(a), 2(b) and 3, a mounting panel 20 may be located on the upper surface 17 of the second platform 16.

[0046] The mounting panel 20 is made of rigid durable material. This is distinct from the paper and card traditionally used as these materials would degrade quickly as they are exposed in use and do not have the traditional glass cover to protect them. The mounting panel 20 is, in this case, cut from a sheet of Perspex®. Perspex® is a rigid plastic material which in 2-3mm thickness provides a substantial ruggedness while still being able to be cut using simple cutting tools such as saws. Once cut, the Perspex® edges can be smoothed and polished. Alternatively the mounting panel 20 may be formed from a metal sheet such as aluminium. The use of Perspex® allows the surface 29 of the mounting panel 20 to have a colour selected by the user. The surface 29 may also be polished to provide a partially reflective surface 29. Use of a polished metal gives a mirrored surface 29 which is highly reflective. The application of the mounting panel 20 to the upper surface 17 of the second platform 16 means that in the embodiment of Figure 3, any visible joints 15 caused by the arrangement of component platforms 16a-16d in forming second platform 16 are covered.

[0047] The inner edge 24 of the mounting panel 20 follows the perimeter of the image 18 and the first platform 14 to entirely enclose the first platform 14. The shape of the inner edge 24 substantially matches the shape of an outer edge 26 of the image and the first platform 14. However, the edges 24, 26 do not meet and a space or gap 30 is left there between. A base 31 of the gap 30 exposes the surface 23 of the substrate 12.

[0048] In the embodiment illustrated, the upper surface of the image 18 and the surface 29 of the mounting panel 20 are arranged to project from the surface 23 of the substrate 12 by the same distance. This provides a uniform projected surface to the apparatus 10. The gap 30 gives the effect that the image 18 is floating. Additionally, the upper surface 29 of the mounting panel 20 will appear to float but also appear distinct from the image 18 so as to aesthetically enhance and frame the image 18. By choosing a colour for the panel 20 based on the colours in the image 18, the image 18 is further enhanced in the same fashion as would be provided by a mounting panel in a traditional picture frame.

[0049] The floating appearance of the panel 20 is further enhanced using techniques which have been described with reference to the upper surface 17 of the sec-

ond platform 16 detailed above.

[0050] Whilst it will be appreciated that panel 20 may be cut to fit the upper surface 17 of second platform 16 exactly, as can be seen, in the illustrated embodiment, the raised portions 14, 16 do not extend to meet the edges of the image 180 and the mounting panel 20 respectively. Thus the outer edge 24 of the image 18 now overhangs the surface 44 of the platform 14. Similarly, the inner edge 26 and the outer edge 25 of the panel 20 overhang the upper surface 17 of the second raised portion 16. The overhang of the mounting panel 20 over second raised portion 16 further ensures that any visible joints 15 caused by the arrangement of component platforms 16a-16d in forming second platform 16 are obscured from general view. By making the panel 20 of a rigid, durable, material, the overhanging portions are less likely to be damaged. To provide similar rigidity to the image 18, a supporting panel (not shown) can be located between the image 18 and the first raised platform 14, the supporting panel being sized to match the area of the image 18 so that it is fully supported.

[0051] With reference to Figure 5, there is shown a further embodiment of an image display apparatus closely similar to that shown in Figures 1(a) or 1(b) however, in this embodiment, the backing panel is further provided with a second raised portion 16 and content 24 for display. In this embodiment, the second raised portion 16 is provided with an upper surface 20 on which content 24 relating to and associated with the image for display 18 is provided.

[0052] The platform 14 is a raised section, in this embodiment it is substantially square, but it may be of any two dimensional shape, such as rectangular, circular or oval. The platform 14 is affixed to a backing substrate 12 which is a large flat panel, typically of similar shape to platform 14. The platform 14 is a box affixed to the substrate 12, or may be integral with the substrate 12, to provide an upper surface 22 which sits proud and away from the surface 23 of the substrate 12.

[0053] Content 24 is verification data and information associated with the image 18. The verification data can include the signature or mark of the artist that created the image 18, details such as limited edition information and additional content such as technical information relating to the photograph, a title, description or concept data. The content 24 is located upon platform 16. In this embodiment, the platform 16 has a width and breadth which matches content 24. It is then simple to locate the content 24 upon the upper surface 20 of the platform 16. Typically there will be an adhesive layer on the surface 20 which is exposed before the surface is affixed thereupon. Once affixed the content 24 cannot be removed for copying purposes. Beneficially, the content 24, as with the image 18 is effectively "front loaded" as the apparatus 10 faces the user to mount the content 24 and image 18. As the content 24 is then secured to the image display apparatus 10, the content is then securely associated with image 18 thus cannot be removed for fraudulent

purposes.

[0054] In a preferred embodiment, the upper surface of the image 18 and the upper surface of the content 24 are arranged to project from the surface 23 of the substrate 12 by the same distance. This provides a uniform projected surface to the apparatus 10. The aesthetic appearance of the image 18 and the content 24 are further enhanced.

[0055] The principal advantages of the present invention are that it provides an image display apparatus which is rigid and durable, which can be front loaded. The arrangement prevents the image being copied and removed and prevents damage being caused to the image during moving or handling by eliminating flex from the image display apparatus, provides the illusion of the image and the image display apparatus appearing to float, may enhance the image by way of a coloured surround or mounting panel which may also appear to float and wherein the surround, or second raised portion and if desired the mount may be manufactured in a way which minimises waste and reduces production costs.

[0056] A further advantage of at least one embodiment of the present invention is that it provides an image display apparatus which does not require a frame for presentation by a frame may be used if so desired.

[0057] Yet a further advantage of the present invention is that it provides an image display apparatus which uses new materials in the form of plastics and metals in a way in which production costs can be minimised and waste produced can also be minimised yet while benefiting from the use of rugged materials that mean there is no requirement for a glass cover to protect the image and display apparatus arrangement.

[0058] It will be appreciated to those skilled in the art that various modifications may be made to the invention herein described without departing from the scope thereof. For example, the use of Perspex® allows the backing substrate 11 to have a colour selected by the user, whilst a transparent Perspex® is a preferred material, it will be appreciated that a coloured transparent material may also be used and can act to enhance the appearance of the image if the colour is chosen from one found in the image. In addition, various numbers of images 18 can be used upon a backing panel 12 and provided with associated content. The various numbers of image and content arrangements can be surrounded with various numbers of third raised portions 16 or mounting panels 20. The third raised portions or mounting panels can be formed of a plurality of component portions which are arranged to abut together to give the appearance of discreet third raised portions or mounting panels. Also, the shapes of the edges of the image, content and the third raised portion and mounting panel need not be square, rectangular, oval or circular but may equally be of a free form or alternative geometric shapes so long as a shadow gap is left between the image and content and the third raised platform or mounting panel.

Claims

1. An image display apparatus (10) comprising:

- 5 a backing panel (12);
- one or more first raised portions (14) located on the backing panel, each first raised portion having an upper surface (22) upon which is secured an image (18) for display;
- 10 a backing support panel (11) upon which is mounted the said backing panel,

the backing support panel (11) comprising a transparent material and having a perimeter such that the perimeter of the backing support panel extends at least to a perimeter (13) of the backing panel; and **characterised in that:** one or more second raised portions (16) are located on the backing panel.

2. An image display apparatus (10) as claimed in claim 1 wherein the perimeter of the backing support panel (11) extends beyond the perimeter (13) of the backing panel (12).

3. An image display apparatus (10) as claimed in claim 1 or claim 2 wherein the backing support panel (11) is formed of a rigid durable material.

4. An image display apparatus (10) as claimed in any preceding claim wherein the backing support panel (11) is formed from a sheet of plastic material.

5. An image display apparatus (10) as claimed in any preceding claim wherein each second raised portion (16) is provided with an upper surface (17) upon which is secured content (24) for display, each second raised portion further having at least one inner edge (19) which is arranged adjacent to and spaced apart from an outer edge of a first raised portion (14) to create a channel (30) therebetween.

6. An image display apparatus (10) as claimed in claim 1 wherein each second raised portion (16) is provided with an upper surface (17) upon which is secured content (24) for display, each second raised portion further having at least one inner edge (19) which is arranged to abut against an outer edge of a first raised portion (14).

7. An image display apparatus (10) as claimed in claim 1 wherein each second raised portion (16) has at least one inner edge (19) arranged to surround a perimeter of each first raised portion (14) such that each first raised portion is located within, and spaced apart from said second raised portion to create a channel (30) therebetween.

8. An image display apparatus (10) as claimed in claim 1 wherein each second raised portion (16) is formed of two or more component portions (16a-16d).
9. An image display apparatus (10) as claimed in claim 8 wherein said two or more component portions (16a-16d) are abutted together to form at least one of said second raised portions (16).
10. An image display apparatus (10) as claimed in any one of claim 7 to claim 9 wherein each second raised portion has an upper surface (17) to which a mounting panel (20) is secured.
11. An image display apparatus (10) as claimed in any preceding claim wherein the backing panel (12) is formed of a sheet of plastic.
12. An image display apparatus (10) as claimed in any one of claims 1 to 10 wherein the backing panel (12) is formed from a sheet of metal.

Patentansprüche

1. Bildanzeigevorrichtung (10), umfassend: eine Trägerplatte (12);
einen oder mehrere erste erhöhte Abschnitte (14), die sich auf der Trägerplatte befinden, wobei jeder erste erhöhte Abschnitt eine obere Fläche (22) aufweist, auf der er an einem Bild (18) zur Anzeige befestigt ist;
eine Trägerstützplatte (11), auf der die Trägerplatte angebracht ist,
wobei die Trägerstützplatte (11) ein transparentes Material umfasst und einen derartigen Umfang aufweist, dass sich der Umfang der Trägerstützplatte zumindest zu einem Umfang (13) der Trägerplatte erstreckt; und **dadurch gekennzeichnet, dass:**
sich ein oder mehrere erhöhte Abschnitte (16) auf der Trägerplatte befinden.
2. Bildanzeigevorrichtung (10) nach Anspruch 1, wobei sich der Umfang der Trägerstützplatte (11) über den Umfang (13) der Trägerplatte (12) hinaus erstreckt.
3. Bildanzeigevorrichtung (10) nach Anspruch 1 oder Anspruch 2, wobei die Trägerstützplatte (11) aus einem starren, widerstandsfähigen Material gebildet ist.
4. Bildanzeigevorrichtung (10) nach einem der vorhergehenden Ansprüche, wobei die Trägerstützplatte (11) aus einer Bahn eines Kunststoffmaterials gebildet ist.
5. Bildanzeigevorrichtung (10) nach einem der vorhergehenden Ansprüche, wobei jeder zweite erhöhte

Abschnitt (16) mit einer oberen Fläche (17) bereitgestellt ist, auf der ein Inhalt (24) zur Anzeige befestigt ist, wobei jeder zweite erhöhte Abschnitt ferner zumindest eine Innenkante (19) aufweist, die benachbart zu einer Außenkante eines ersten erhöhten Abschnitts (14) und davon beabstandet angeordnet ist, um einen Kanal (30) dazwischen zu erzeugen.

6. Bildanzeigevorrichtung (10) nach Anspruch 1, wobei jeder zweite erhöhte Abschnitt (16) mit einer oberen Fläche (17) bereitgestellt ist, auf der ein Inhalt (24) zur Anzeige befestigt ist, wobei jeder zweite erhöhte Abschnitt ferner zumindest eine Innenkante (19) aufweist, die angeordnet ist, um an einer Außenkante eines ersten erhöhten Abschnitts (14) anzugrenzen.
7. Bildanzeigevorrichtung (10) nach Anspruch 1, wobei jeder zweite erhöhte Abschnitt (16) zumindest eine Innenkante (19) aufweist, die angeordnet ist, um einen Umfang von jedem ersten erhöhten Abschnitt (14) derart zu umgeben, dass sich jeder erste erhöhte Abschnitt darin befindet, und von dem zweiten erhöhten Abschnitt beabstandet ist, um einen Kanal (30) dazwischen zu erzeugen.
8. Bildanzeigevorrichtung (10) nach Anspruch 1, wobei jeder zweite erhöhte Abschnitt (16) aus zwei oder mehr Komponentenabschnitten (16a-16d) gebildet ist.
9. Bildanzeigevorrichtung (10) nach Anspruch 8, wobei die zwei oder mehr Komponentenabschnitte (16a-16d) aneinander angrenzen, um zumindest einen der zweiten erhöhten Abschnitte (16) zu bilden.
10. Bildanzeigevorrichtung (10) nach Anspruch 7 bis Anspruch 9, wobei jeder zweite erhöhte Abschnitt eine obere Fläche (17) aufweist, an der eine Montageplatte (20) befestigt ist.
11. Bildanzeigevorrichtung (10) nach einem der vorhergehenden Ansprüche, wobei die Trägerplatte (12) aus einer Kunststoffbahn gebildet ist.
12. Bildanzeigevorrichtung (10) nach einem der Ansprüche 1 bis 10, wobei die Trägerplatte (12) aus einer Metallbahn gebildet ist.

Revendications

1. Appareil d'affichage d'image (10) comprenant : un panneau arrière (12) ;
une ou plusieurs premières parties surélevées (14) situées sur le panneau arrière, chaque première partie surélevée possédant une surface supérieure (22) sur laquelle est fixée une image (18) à afficher ;
un panneau de support arrière (11) sur lequel est

- monté ledit panneau arrière,
 ledit panneau de support arrière (11) comprenant un
 matériau transparent et possédant un périmètre de
 sorte que le périmètre du panneau de support arrière
 s'étende au moins jusqu'à un périmètre (13) du pan- 5
 neau arrière ; et **caractérisé en ce que** :
 une ou plusieurs secondes parties surélevées (16)
 sont situées sur le panneau arrière.
2. Appareil d'affichage d'image (10) selon la revendi- 10
 cation 1, ledit périmètre du panneau de support ar-
 rière (11) s'étendant au-delà du périmètre (13) du
 panneau arrière (12).
3. Appareil d'affichage d'image (10) selon la revendi- 15
 cation 1 ou 2, ledit panneau de support arrière (11)
 étant constitué d'un matériau rigide durable.
4. Appareil d'affichage d'image (10) selon l'une quel- 20
 conque des revendications précédentes, ledit pan-
 neau de support arrière (11) étant formé à partir
 d'une feuille de matériau plastique.
5. Appareil d'affichage d'image (10) selon l'une quel- 25
 conque des revendications précédentes, chaque se-
 conde partie surélevée (16) étant dotée d'une sur-
 face supérieure (17) sur laquelle est fixé un contenu
 (24) à afficher, chaque seconde partie surélevée
 possédant en outre au moins un bord intérieur (19) 30
 qui est agencé à proximité et espacé d'un bord ex-
 térieur d'une première partie surélevée (14) pour
 créer un canal (30) entre eux.
6. Appareil d'affichage d'image (10) selon la revendi- 35
 cation 1, chaque seconde partie surélevée (16) étant
 dotée d'une surface supérieure (17) sur laquelle est
 fixé un contenu (24) à afficher, chaque seconde par-
 tie surélevée possédant en outre au moins un bord
 intérieur (19) agencé pour venir en butée contre un
 bord extérieur d'une première partie surélevée (14). 40
7. Appareil d'affichage d'image (10) selon la revendi- 45
 cation 1, chaque seconde partie surélevée (16) pos-
 sédant au moins un bord intérieur (19) agencé pour
 entourer un périmètre de chaque première partie sur-
 élevée (14) de sorte que chaque première partie
 surélevée soit située à l'intérieur et espacée de ladite
 seconde partie surélevée pour créer un canal (30)
 entre eux. 50
8. Appareil d'affichage d'image (10) selon la revendi- 55
 cation 1, chaque seconde partie surélevée (16) étant
 formée de deux parties de composant (16a - 16d)
 ou plus.
9. Appareil d'affichage d'image (10) selon la revendi-
 cation 8, lesdits deux parties de composant (16a -
 16d) ou plus étant mises bout à bout ensemble pour
- former au moins une desdites secondes parties su-
 rélevées (16).
10. Appareil d'affichage d'image (10) selon l'une quel-
 conque des revendications 7 à 9, chaque seconde
 partie surélevée possédant une surface supérieure
 (17) à laquelle est fixé un panneau de montage (20).
11. Appareil d'affichage d'image (10) selon l'une quel-
 conque des revendications précédentes, ledit pan-
 neau arrière (12) étant formé d'une feuille de plasti-
 que.
12. Appareil d'affichage d'image (10) selon l'une quel-
 conque des revendications 1 à 10, ledit panneau ar-
 rière (12) étant formé d'une feuille de métal.

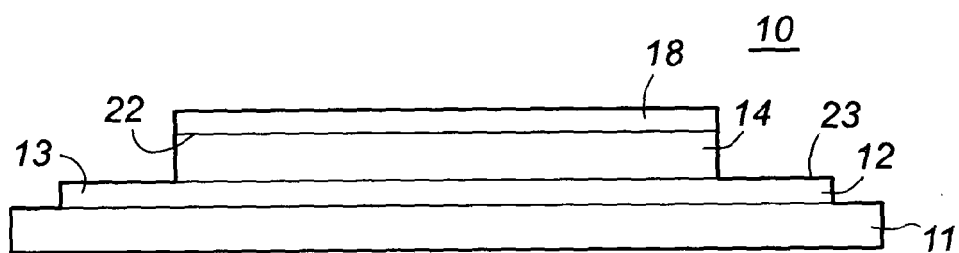


Fig. 1(a)

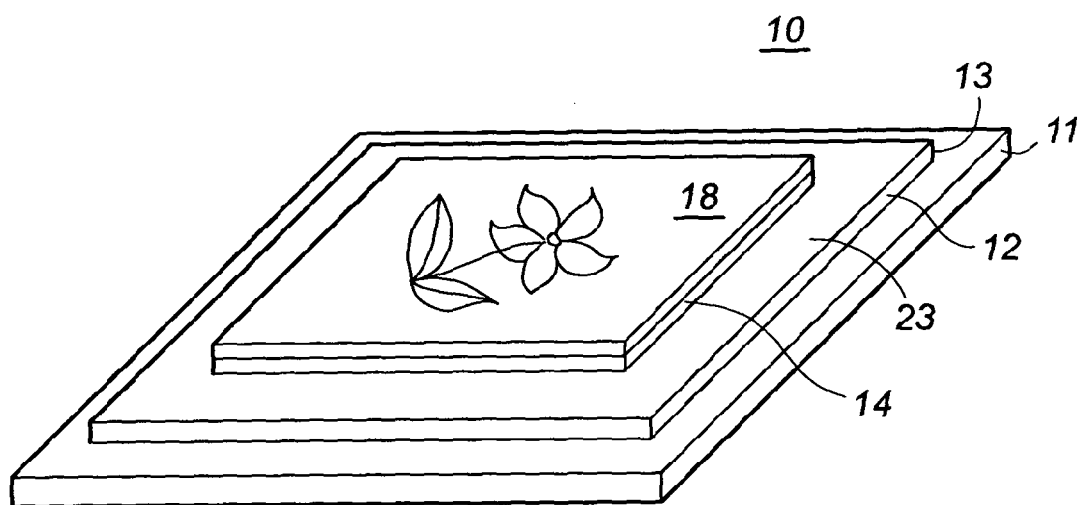


Fig. 1(b)

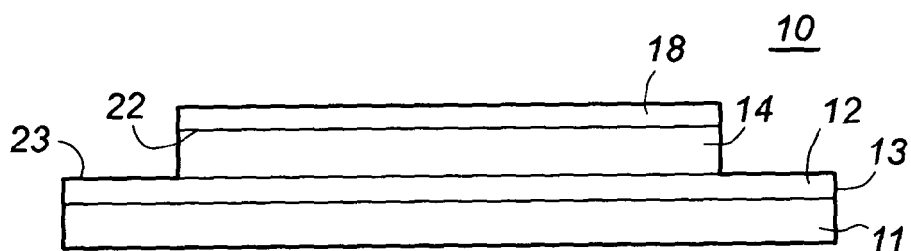


Fig. 1(c)

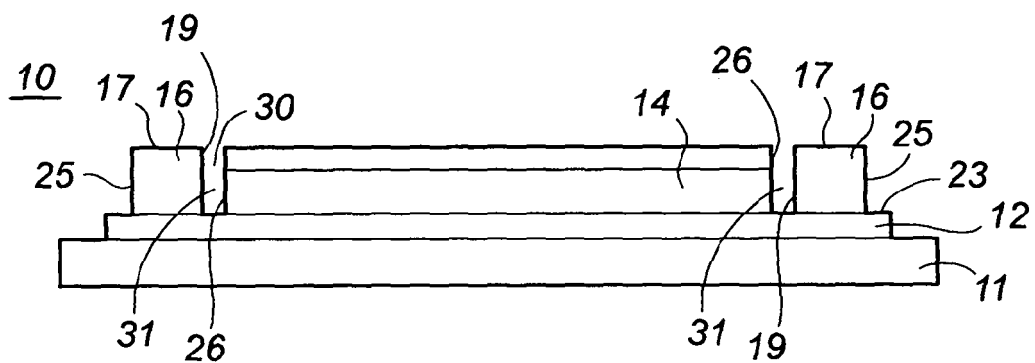


Fig. 2(a)

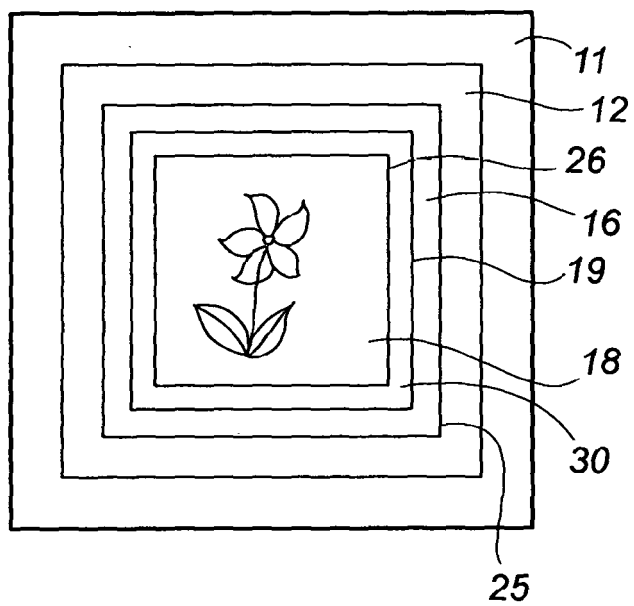


Fig. 2(b)

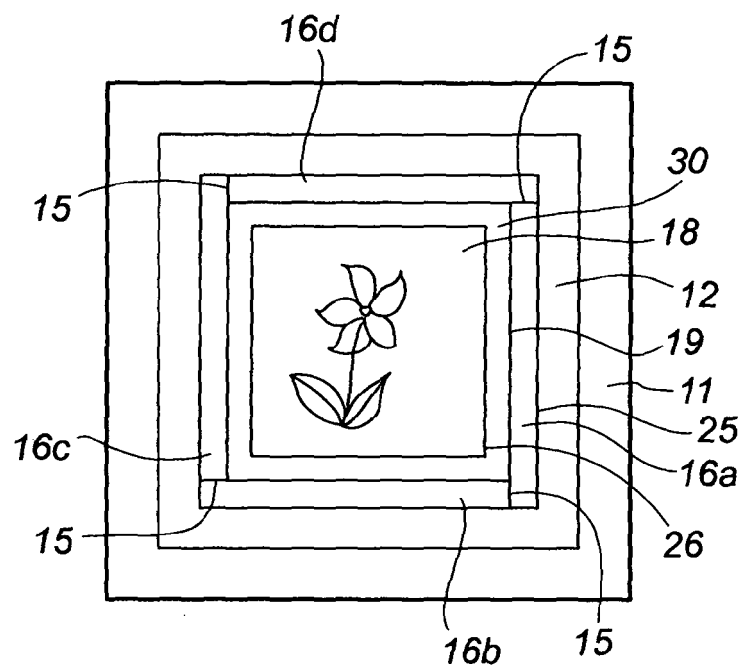


Fig. 3

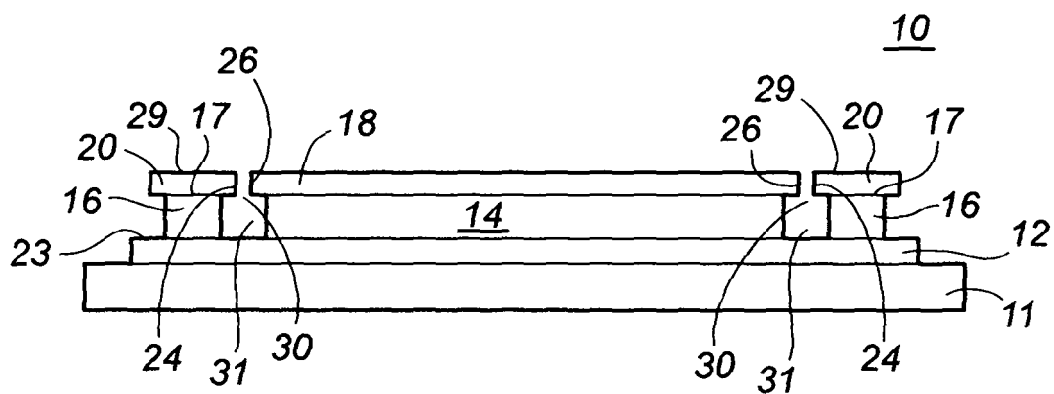


Fig. 4

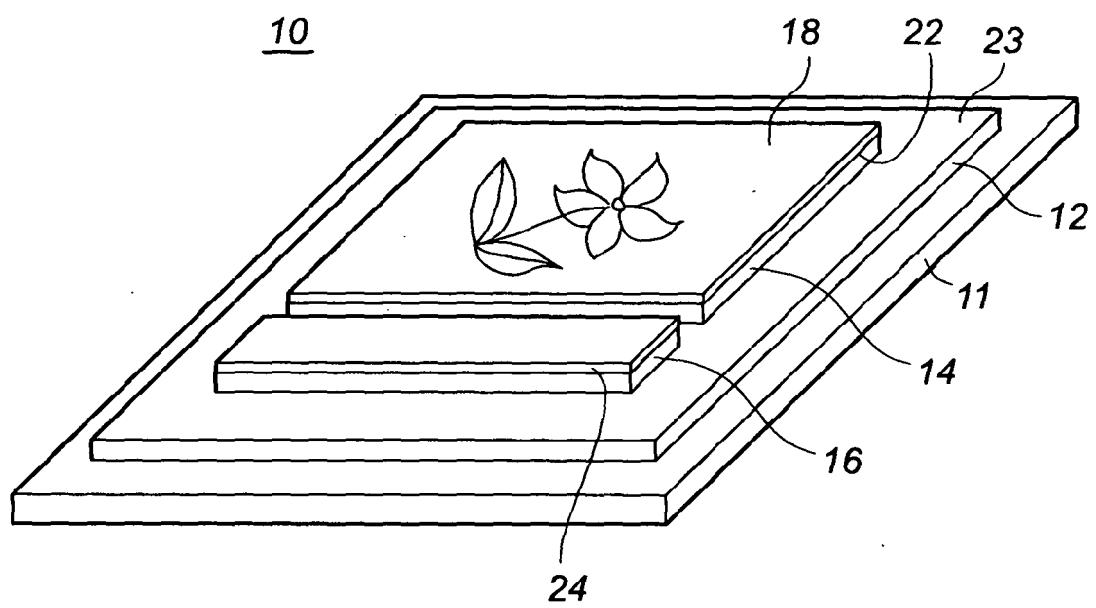


Fig. 5

REFERENCES CITED IN THE DESCRIPTION

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