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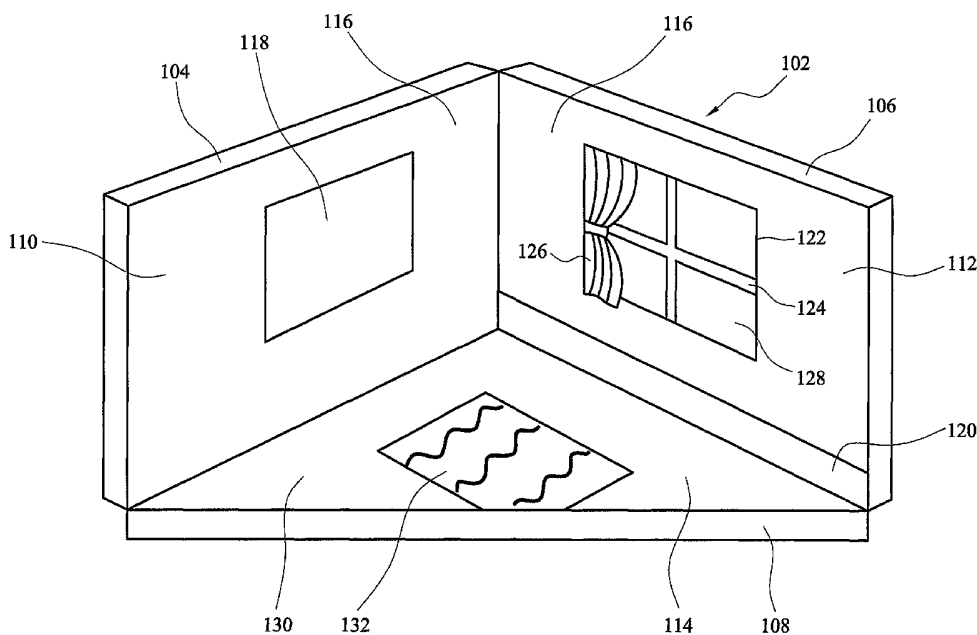
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(54) Title: DISPLAY SYSTEM



(57) Abstract: A display system (102) comprising at least two displays (104, 106, 108) extending at an angle to each other and image selection means arranged, in use, to cause a selected image (126, 132) or images to be displayed on at least part of the or each display. (126, 132)

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DISPLAY SYSTEM FEATURING INTERIOR DECORATION

The present invention relates to display systems, particularly to display systems for use in retail outlets.

5

When viewing an article in a retail outlet, it is often difficult to envisage what the article will look like in its intended environment. This is often the case when viewing home furnishings because the shape, colour or pattern of an article may be required to match an existing scheme of colours or patterns in a potential purchaser's home.

In an attempt to assist purchasers, retailers of home furnishings often provide sample cards which have a colour or pattern printed thereon, or perhaps small samples of a particular fabric. The samples may be taken to a purchaser's home and matched against existing furnishings. However, such samples are only of limited use because they are often small and don't easily allow a user to visualize large articles. Furthermore, such an activity can be time consuming and inconvenient to a purchaser because they are required to go to a retailer, choose the samples, take them home and try to match the samples with existing furnishings, then return to a retailer to make their order.

It is an object of aspects of the present invention to attempt to overcome at least one of the above or other problems.

According to one aspect of the present invention a display system comprises at least two displays extending at an

angle to each other and image selection means arranged, in use, to cause a selected image or images to be displayed on at least part of the or each display.

5 Preferably, the image selection means is arranged to allow the image to be changed. Preferably, the image selection means allows the image to be changed upon receiving an input from a user.

10 Preferably, at least two of the at least two displays extend away from each other at any angle between 1° and 179° , more preferably, any angle between 30° and 150° , more preferably, any angle between 60° and 120° , and most preferably about 90° .

15

Preferably, the system comprises at least three displays at an angle to each other.

20 Preferably, at least one of the at least two displays represents a wall. Preferably, at least two of the at least two displays represent walls. Preferably, at least one of the at least two displays represents a floor.

25 In a preferred embodiment, the system comprises three displays, two of which represent walls and a third of which represents a floor.

30 Preferably, the displays comprise at least part of a room, such as the inside of a room. Preferably, the displays comprise an internal corner of a room. Preferably, the displays comprise an internal corner of a cuboid. Preferably the displays represent a full scale replica of

an actual article. Preferably, the images displayed represent a full scale replica of an actual article.

Preferably, at least one of the at least two displays is
5 at least one metre in width, more preferably, at least 1.5 metres in width, more preferably, at least two metres in width. Preferably, at least two of the at least two displays is at least one metre in width, more preferably,
10 at least 1.5 metres in width, more preferably, at least two metres in width.

Preferably, at least one of the at least two displays is at least 1 metre in height, more preferably, at least 1.5 metres in height, more preferably, at least two metres in
15 height. Preferably, at least two of the at least two displays surface is at least one metre in height, more preferably, at least 1.5 metres in height, more preferably, at least two metres in height.

20 Preferably, at least one of the at least two displays is substantially planar. Preferably, at least two of the at least two displays are substantially planar.

Preferably, the system further comprises identification
25 means operable to identify an input from a user and output a signal to the image selection means corresponding to the user's input. Preferably, the identification means comprises processing means. Preferably, the processing means comprises a central processing unit. Preferably,
30 the identification means comprises a barcode reader or the like. Alternatively or additionally, the identification means may comprise a radio frequency identification reader.

Preferably, the identification means is operable to identify a plurality of inputs from a user and output a signal to the image selection means corresponding to the user's inputs such that the image selection means outputs a composite image of the user's inputs.

Preferably, the identification means is operable to recognise a repeated input from a user and output a signal to the image selection means to cancel the first input. Therefore, preferably, if an input is entered once, the identification means is operable to output a signal to the image selection means which signal causes the image selection means to display an image corresponding to the user's input. Preferably, if an input is entered twice by a user, the identification means is operable to output a signal to the image selection means which signal causes the image selection means to discontinue displaying an image corresponding to that input.

Therefore, preferably, each time the input is repeated by a user, the image is either in an 'on' state, i.e. displayed, or an 'off' state, i.e. not displayed. In the case that an image has been previously displayed i.e. in the 'on' state and then returns to the 'off' state, then the previous image or blank canvas will be redrawn. For example, if there were a red paint colour on a surface, and an input entered by a user that relates to a picture, then the picture would appear on the surface, covering the red paint area beneath it. So, in the case that the picture is undesirable and therefore rescanned/inputted then the red surface colour would come back to replace the area of the image where the undesirable picture once was.

Preferably, the system comprises image identification assigning means operable to assign a unique identification data to an image being viewed. Preferably, system
5 comprises storage means operable to store an image being viewed and, preferably the unique identification data. Preferably, the storage means is operable to store the input(s) of a user and the unique identification data together such that a user can retrieve the image being
10 viewed by inputting the unique identification data. Preferably, the storage means comprises electronic storage means.

Preferably, the system includes image projection means
15 arranged to cause the selected image or images to be displayed. Preferably, the image selection means comprises at least one image projector. By the term image projector, it is meant any apparatus which projects an image. Examples of which include, over head projectors,
20 electronic projectors, video projectors, digital projectors, projectors for rear projection screens etc.

Preferably, the at least two displays are each adapted allow an image to be displayed on substantially all
25 thereof.

Preferably, the image selection means are operable to cause an image to be displayed on substantially all of the
at least two displays.

30

Preferably, the system further comprises a display section which incorporates at least one of the at least two displays.

The or each display may comprise a display surface. The image may be arranged to be projected on to that surface. Alternatively or additionally the image may be arranged to
5 be projected through that surface.

The display system may be arranged to enable a user to visualise different decorations, such as surface decorations of an article.

10

According to a further aspect of the present invention, a display method comprises selecting at least one image and causing that image to be displayed on at least one of two displays, which displays are at an angle to each other.

15

The method may comprise projecting the image onto the or each display.

The method may comprise selecting at least two images and
20 displaying these images on at least one display.

The method may comprise selecting a background colour for at least one display and may further comprise superimposing a selected image of an article on that
25 display.

The method may comprise the selected images being displayed at the actual size of a corresponding article that this image represents.

30

According to another aspect of the present invention, a method of home furnishing comprises representing at least part of a home at a location remote from an actual home

and selecting images relating to home furnishings and displaying these images on the representation of at least part of the home and subsequently choosing at least one article corresponding with at least one of the selected
5 images and using the article chosen to substantially recreate at least one of the images at the actual home.

The method may comprise selecting a covering such as a floor or a wall cover such as a paint or wallpaper and
10 applying that covering to the actual home. Alternatively, the method may comprise selecting and mounting an article at the actual home.

The present invention also includes a method of home
15 furnishing as herein referred to when using a display system or display method as herein referred to.

All of the features disclosed herein may be combined with any of the above aspects in any combination.

20

For a better understanding of the invention, and to show how embodiments of the same may be carried into effect, reference will now be made, by way of example, to the accompanying diagrammatic drawings in which:

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Figure 1 shows a schematic perspective view of the second embodiment of a display system;

Figure 2 shows a plan view of a second embodiment of a
30 display system; and

Figure 3 shows a schematic perspective view of the second embodiment of a display system.

Referring to figure 1 there is shown a first embodiment of a display system 102 having three display sections 104, 106, 108. The first display section 104 is a rectangular wall having a generally planar front surface 110. The second display section 106 extends generally perpendicularly away from a side edge of the first display section 104 and is a rectangular wall having a generally planar front surface 112. In this arrangement, the surfaces 110, 112 form an internal right angled corner. The third display section 108 is a floor section in the shape of a right angled triangle having a generally planar upper surface 114. The first and second sections 104, 106 extend upwardly from the two shorter edges of the third section 108. In this arrangement, the three surfaces 110, 112, 114 form an internal corner of a cuboid.

In a preferred embodiment, the sections 104, 106 each measure approximately two metres in height and three metres in width while the surface 108 measures approximately three metres along its shorter two sides and, therefore, approximately 4.25 metres along its hypotenuse. These sizes are examples of appropriate sizes for a display system for displaying home furnishings because such sizes can represent an internal corner of a room in a house. However, it will be understood by one skilled in the art that sizes may be varied for a number of reasons such as available space and different uses.

In the present embodiment, the surfaces 110, 112, 114 are made of a non reflective white material which allows images to be projected thereon. Alternatively, the surfaces 110, 112, 114 may be capable of receiving images

which are back projected (see figures 2 and 3) or the surfaces 110, 112, 114 may incorporate or comprise electronic display screens, such as plasma display screens.

5

On the surface 110 of the first display member 104 there is projected an image by a projector (not shown). The projector employed may be any projector which projects an image onto a surface. Examples of suitable projectors include, for example, an over head projector, an electronic projector such a video projector etc. The projected image comprises a number of elements such as a background colour and pattern 116 of the wall 110 and a roughly centrally disposed picture 118 which may be framed. By background colour and pattern 116 it is meant an image which may be a solid colour or may incorporate a pattern which is projected onto substantially the entire display surface where other features (such as the picture 118) do not appear. The picture 118 may be any picture wishing to be viewed, for example a landscape scene etc.

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Similarly, on the surface 112 of the second display member 106 an image is projected by a projector (not shown). The image in this instance comprises a background wall colour and pattern 116, a skirting board 120 along a lower edge of the surface 112 and an approximately centrally disposed window 122 having a frame 124 and a curtain 126 and an image to represent outdoors 128. On the surface 114 of the display section 108 is projected an image by a projector (not shown) which comprises a colour and pattern of a floor covering 130, such as a carpet or wood panel floor, and a portion of a rectangular rug 132.

25
30

As can be appreciated with reference to figure 1, the images projected onto the surfaces 110, 112, 114 represent the inside corner of a room in a house.

5 In use, a user, perhaps wanting to visualize the look of a new window curtain 126, and how such a curtain would match for example a chosen floor rug 132, would access the projectors (not shown) and project an image of the chosen curtain 126 onto the desired surface, and project an image
10 of the chosen floor rug 132 onto the floor. In this manner, a user can visualize the two items in their entirety, in life size, without having to put the actual curtain and rug in a room. Also, in order to help create an environment akin to the chosen room into which the
15 visualized articles will be, other details, such as floor and wall coverings may be projected onto the surfaces 110, 112, 114.

Of course the room could be viewed from the outside in
20 order that a prospective purchaser can visualise the windows and curtains, from the outside of the house.

Referring now to figures 2 and 3, there is shown a second embodiment of a display system 202 having first, second
25 and third display sections 204, 206, 208 which are dimensionally similar to and spatially arranged in a similar manner as the first, second and third display sections 104, 106, 108 of figure 1 as described above. However, the third display section 208 although retaining
30 its general size and shape, comprises a semicircular cut away portion 234 mid way along its hypotenuse. Also, a product barcode reader 236 in the form of a box 238

situated on a plinth 240 is situated to one side of the cut away portion 234.

In this second embodiment, the images that are projected
5 by projectors (not shown) are controlled by a computer (not shown). A projector (not shown) is situated beneath each of the first 204 and second 206 display sections. In use the projectors project an image upward, parallel to the plane of display surfaces 210, 212 of the display
10 sections 204, 206, into a cavity within the display section. Within this cavity are located mirrors (not shown) which reflect the projected image onto a rear surface of the display surfaces. The display surfaces 210, 212 are manufactured from a material suitable for
15 receiving such projected images and, in this manner, the images displayed on the display surfaces 210, 212 are so called in wall rear projection images. The image projected onto the third display surface 214 may be achieved in the same manner, but in this second
20 embodiment, it is projected via a digital projector (not shown) situated vertically above the third display section 208.

It will be appreciated by one skilled in the art that the
25 images may be projected onto any of the display surfaces 210, 212, 214 by any method. For example, the display surface 214 may receive an in wall rear projection image while the display surfaces 210, 212 may receive a front projected image etc.

30

It is envisaged that the display unit 102 or 202 may be utilised in a retail environment to help shoppers choose their home furnishings. Therefore, in use, a user 242

chooses an item of home furnishing he wishes to view, for example, a new carpet or wall colouring etc. This may be chosen in the usual manner such as by viewing a picture in a catalogue, or by looking on the front of a tin of paint etc. The user 242 then takes a card 244 with a barcode printed thereon which is specific to the product or colour to be viewed. The user 242 then stands in the semicircular cut away portion 234. In this manner, the user 242 is stood forward of the lateral extent of the display surfaces 210, 212 and therefore, when facing forward, the user 242 can only laterally see the surfaces 210, 212, in his peripheral vision. The user 242 then scans the barcode printed on the card 244 using the barcode reader 236. The barcode reader then relays the scanned information to the controlling computer (not shown) which references the scanned barcode information against a stored database of products and outputs an electronic signal to the projector (not shown). The projector converts the electronic signal to an image which it projects on the requisite surface 210, 212, 214. In this manner, a user may take a number of product identification cards 244 and create a virtual room quickly and easily by scanning a number of cards 244. For example, a card 244 for a particular wall colouring, a card 244 for a particular floor covering, a card for a particular colour and frame details for a picture, a selected picture to go within the frame etc. A user may remove any one of the selected images by rescanning the card 144 relating to that item. For example, if an image of a floor rug is chosen by scanning a card 144, then the image of the floor rug may be removed by scanning the same card for a second time.

The system of the second embodiment may further comprise a number of function cards (not shown) which may be similar in size and appearance to the identification cards 144. The function cards, when scanned by the barcode reader 236
5 may cause a number of functions to occur. For example, a "print" card may, when scanned by the barcode reader 236, cause an image of the viewed room to be printed on a printer (not shown). Alternatively, a "clear room" card
10 the projected images to be removed thus returning to a blank room.

A "co-ordinate card" may, when scanned by a user, cause a number of other images to be displayed which co-ordinate
15 with the already viewed image. For example, if a user chooses a wall and floor covering by scanning cards 144 relating thereto, then, by scanning the "co-ordinate card", a signal is sent to the controlling computer (not shown) which accesses a database of items which co-
20 ordinate with the selected wall and floor covering (for example, by having a complimentary colour or pattern). The computer may then cause the projector to output an image or images of items which co-ordinate with the selected wall and floor covering, for example, a pair of
25 curtains, a floor rug and or a wall picture in an appropriate frame.

Other function cards include a "saving card" which, when scanned, causes the viewed image to be saved and an
30 "emailing card" which, when scanned, causes the viewed image, or an identification tag assigned to the viewed image to be emailed to a user.

A further use for the display system 202 would be that the user 242 is able to choose cards 244 to recreate the furnishings he already has in an existing room at his home. Then, the user 242 may superimpose onto his existing
5 room a new pair of curtains for example. Alternatively, a user 242 could recreate his existing furnishings then use the "co-ordinate" function card as discussed above to access items which will co-ordinate with his existing furnishings. In this manner, a user does not have take
10 samples back to his home in order to visualize against existing furnishings.

The user 242, having chosen a combination of items (which may be representative of his house but with a few new
15 furnishings or indeed may be an entire new decoration plan) is given a unique identification code which is linked to that particular selection and the information stored electronically. This identification code may then be used by the user 242 to access the information at a
20 later date without the need to reselect all of the items. Also, this unique identification code may be relayed to a further user at a different location such as a domestic computer screen or television, for example via the internet, or alternatively a different retail outlet. The
25 further user may use that information to recreate the virtual room at a different outlet of the retailer.

The images which are projected utilise 3D rendering technology and therefore, although being a 2D image, allow
30 a user to visualize the articles in 3D.

Although the above mentioned embodiments relate to a system for use with home furnishings, it should be

appreciated that the system may be used to visualize a wide number of articles. For example, the system could be used to visualize the external features of a house, new wheels or colours of an automobile etc.

5

It is envisaged that the display system may comprise two walls which cross at their mid point and are substantially perpendicular to each other, thus forming a cross shape when viewed from above. Such an embodiment would allow
10 both the front and rear surfaces of the walls to be used simultaneously as display surfaces to thereby create four "booths" that could each be simultaneously viewed by a different user.

15 Although the above described embodiments relate to a three surface system, it should be appreciated that for example, two, four, five, six or more surfaces could be used. It is not outside the scope of the invention, for example, to provide a closed space to represent an entire room having
20 four walls, a floor and a ceiling each adapted to display an image.

A display system in accordance with the present invention thereby provides a user a quick and easy way of
25 visualizing an article in life size without the need to place the actual article in situ. Further, the whole visualization process can take place in a retail environment thus alleviating the need to take small samples to try and visualize an article in its intended
30 environment. Further, on the part of the retailer, it is no longer required to have a number of large articles in the retail outlet: only catalogues, which may be electronic catalogues, and perhaps small samples may be

needed. In this manner, a user can dramatically decrease the size of the shop and increase the available options.

5 Attention is directed to all papers and documents which are filed concurrently with or previous to this specification in connection with this application and which are open to public inspection with this specification, and the contents of all such papers and documents are incorporated herein by reference.

10

All of the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, 15 except combinations where at least some of such features and/or steps are mutually exclusive.

Each feature disclosed in this specification (including any accompanying claims, abstract and drawings) may be 20 replaced by alternative features serving the same, equivalent or similar purpose, unless expressly stated otherwise. Thus, unless expressly stated otherwise, each feature disclosed is one example only of a generic series of equivalent or similar features.

25

The invention is not restricted to the details of the foregoing embodiment(s). The invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any 30 accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

CLAIMS

1. A display system comprises at least two displays extending at an angle to each other and image selection means arranged, in use, to cause a selected image or images to be displayed on at least part of the or each display.
2. A display system according to claim 1, wherein the image selection means is arranged to allow the image to be changed.
3. A display system according to claim 1 or 2, wherein the image selection means allows the image to be changed upon receiving an input from a user.
4. A display system according to any preceding claim, wherein at least two of the at least two displays extend away from each other at any angle between 1° and 179° .
5. A display system according to any preceding claim, wherein the system comprises at least three displays at an angle to each other.
6. A display system according to any preceding claim, wherein at least one of the at least two displays represents a wall.
7. A display system according to any preceding claim, wherein at least one of the at least two displays represents a floor.

8. A display system according to any preceding claim, wherein the displays comprise an internal corner of a room.

5 9. A display system according to any preceding claim, wherein the displays represent a full scale replica of an actual article.

10 10. A display system according to any preceding claim, wherein the images displayed represent a full scale replica of an actual article.

15 11. A display system according to any preceding claim, wherein at least one of the at least two displays is substantially planar.

20 12. A display system according to any preceding claim, wherein the system further comprises identification means operable to identify an input from a user and output a signal to the image selection means corresponding to the user's input.

25 13. A display system according to claim 12, wherein the identification means comprises a barcode reader or the like.

30 14. A display system according to claim 12, wherein the identification means comprises a radio frequency identification reader.

15. A display system according to any of claims 12 to 14, wherein the identification means is operable to identify a plurality of inputs from a user and output a signal to the

image selection means corresponding to the user's inputs such that the image selection means outputs a composite image of the user's inputs.

5 16. A display system according to any preceding claim, wherein the system comprises image identification assigning means operable to assign a unique identification data to an image being viewed.

10 17. A display system according to claim 16, wherein the system comprises storage means operable to store an image being viewed and the unique identification data.

15 18. A display system according to claim 17, wherein the storage means is operable to store the input(s) of a user and the unique identification data together such that a user can retrieve the image being viewed by inputting the unique identification data.

20 19. A display system according to any preceding claim, wherein the image selection means comprises at least one image projector.

25 20. A display system according to any preceding claim, wherein the display system is arranged to enable a user to visualise different decorations, such as surface decorations of an article.

30 21. A display method comprises selecting at least one image and causing that image to be displayed on at least one of two displays, which displays are at an angle to each other.

22. A method according to claim 21 which further comprises projecting the image onto the or each display.

23. A method according to either of claims 21 or 22 which
5 further comprises selecting a background colour for at least one display and superimposing a selected image of an article on that display.

24. A method according to any of claims 21 to 23 which
10 further comprises the selected images being displayed at the actual size of a corresponding article that the image represents.

25. A method of home furnishing comprises representing at
15 least part of a home at a location remote from an actual home and selecting images relating to home furnishings and displaying these images on the representation of at least part of the home and subsequently choosing at least one article corresponding with at least one of the selected
20 images and using the article chosen to substantially recreate at least one of the images at the actual home.

26. A method according to claim 25 which further comprises selecting a covering such as a floor or a wall cover such
25 as a paint or wallpaper and applying that covering to the actual house.

27. A method of home furnishing using a display system or display method according to any preceding claim.
30

28. A display system as hereinbefore described and with reference to the accompanying drawings.

29. A display method as hereinbefore described and with reference to the accompanying drawings.

30. A method of home furnishing as hereinbefore described
5 and with reference to the accompanying drawings.

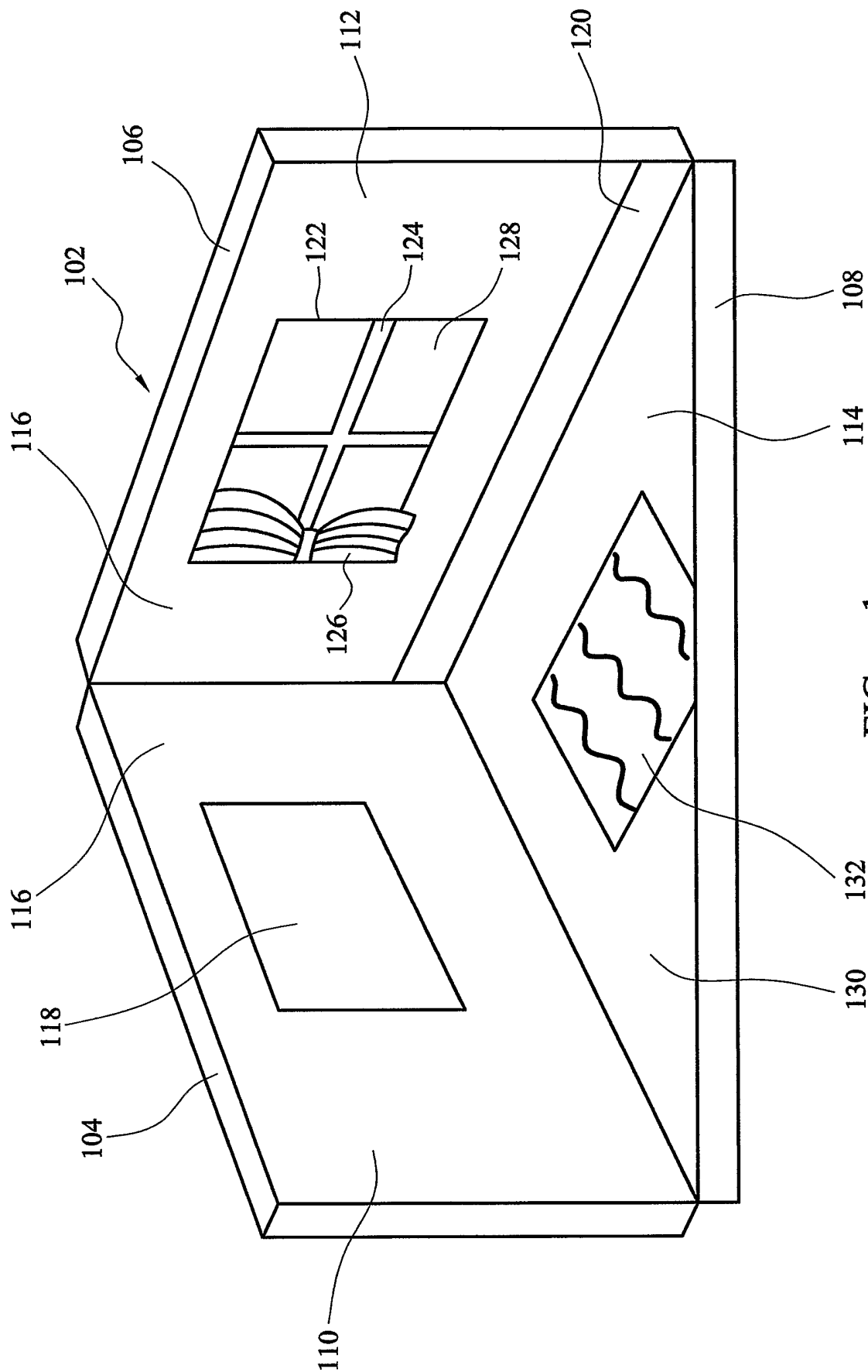


FIG. 1

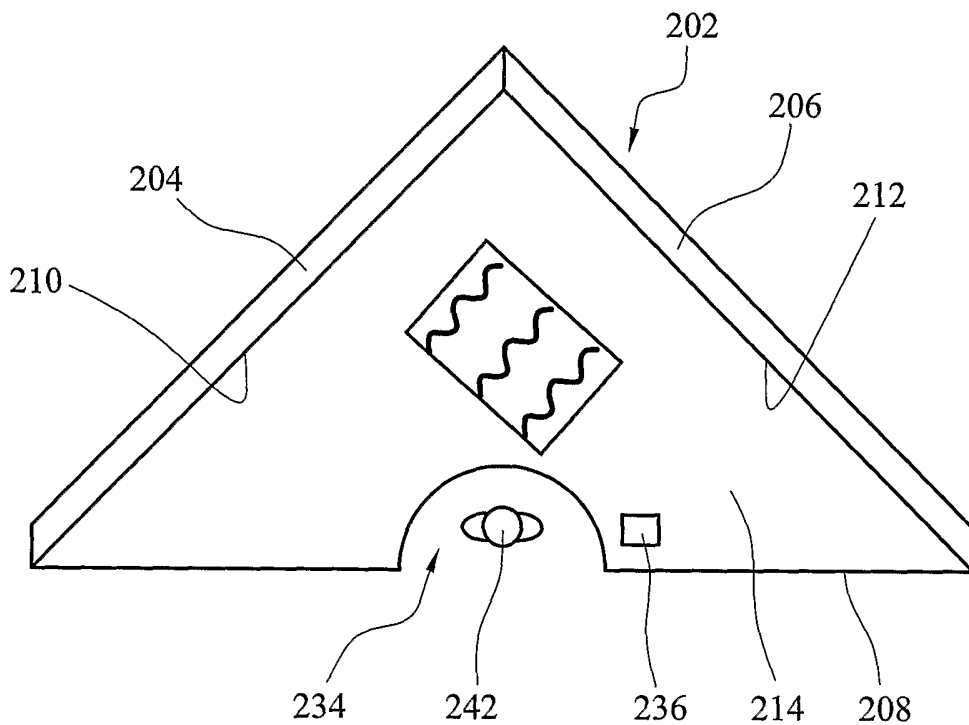


FIG. 2

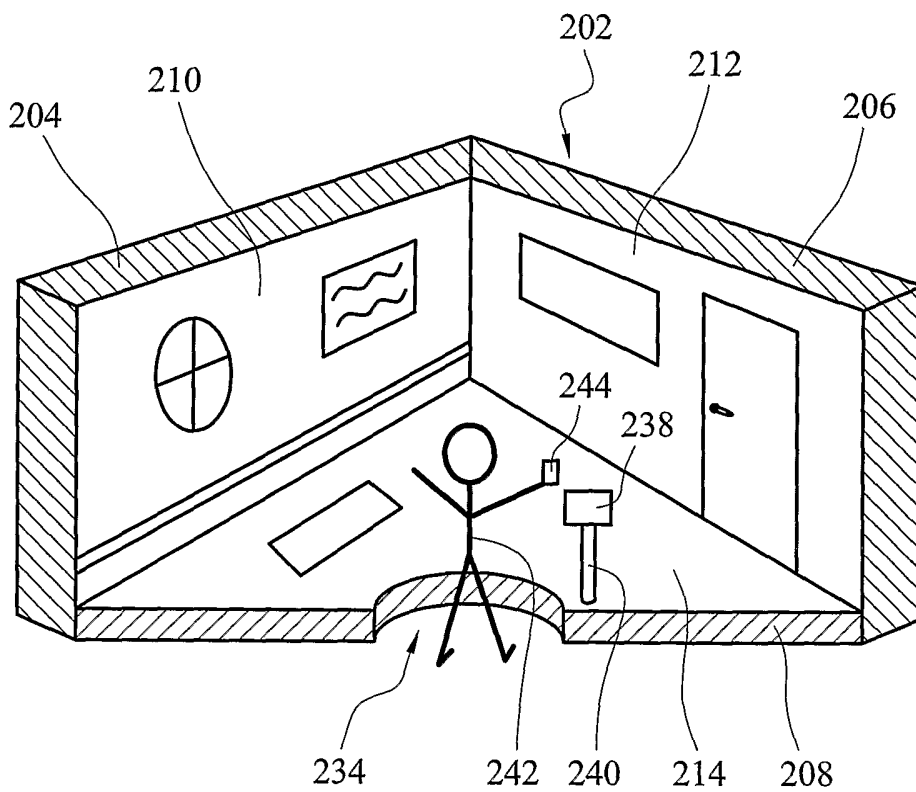


FIG. 3

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2006/001185

A. CLASSIFICATION OF SUBJECT MATTER INV. H04N5/74		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) H04N G03B G06F		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 499 119 A (SONY CORPORATION) 19 January 2005 (2005-01-19) abstract; claim 1; figure 1 -----	1
A	US 6 550 921 B1 (MONSON ROBERT JAMES) 22 April 2003 (2003-04-22) abstract; figure 4 -----	1-27
A	WO 00/70874 A (REDIFUN STIMULATION, INC) 23 November 2000 (2000-11-23) figure 5 -----	1-27
A	US 2003/098957 A1 (HALDIMAN ROBERT C) 29 May 2003 (2003-05-29) figures 5,6 -----	1-27
-/--		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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27 June 2006	10/07/2006	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer: Brod, R	

INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PATENT ABSTRACTS OF JAPAN vol. 018, no. 515 (E-1611), 28 September 1994 (1994-09-28) & JP 06 178327 A (MATSUSHITA ELECTRIC IND CO LTD), 24 June 1994 (1994-06-24) abstract</p> <p style="text-align: center;">-----</p>	1-27
A	<p>US 6 822 662 B1 (COOK THOMAS E ET AL) 23 November 2004 (2004-11-23) figure 4</p> <p style="text-align: center;">-----</p>	1-27

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2006/001185

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims 28 to 30 relate to the description and the drawings

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/GB2006/001185

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
EP 1499119	A	19-01-2005	WO 03092276 A1 US 2005041156 A1	06-11-2003 24-02-2005
US 6550921	B1	22-04-2003	NONE	
WO 0070874	A	23-11-2000	EP 1210820 A2	05-06-2002
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JP 06178327	A	24-06-1994	JP 3534785 B2	07-06-2004
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