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(56) Documents Cited

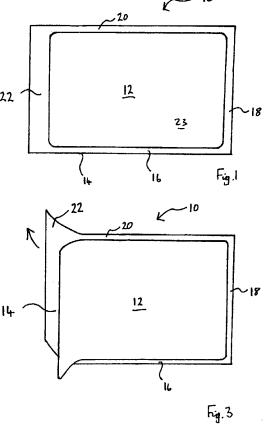
GB 2273079 A WO 1989/001216 A FR 002364518 A US 6150035 A US 5016373 A US 20010037594 A

(58) Field of Search

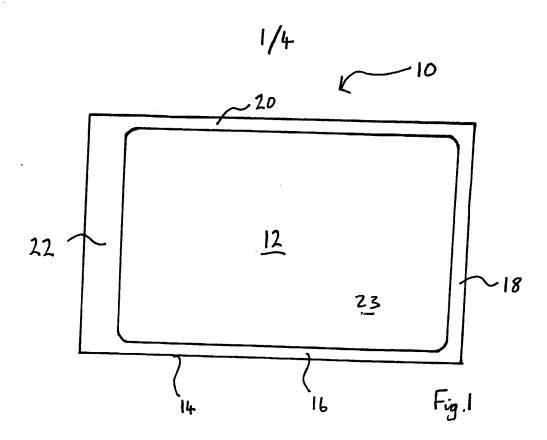
UK CL (Edition V) **B5N** INT CL⁷ **B32B**, **B42D**, **B42F**, **G09F** Other: **EPODOC**, **WPI**, **JAPIO**

(54) Abstract Title Improved display device

(57) A display device apparatus 10 comprising a combination of a self-adhesive display device 12 and a backing layer 14, wherein a first surface of the self-adhesive display 12 is provided with adhesive means and is removably adhered to a first surface of the backing layer 14, and wherein second surfaces of the self-adhesive display device 12 and the backing layer 14 which form outer surfaces of the display device apparatus 10 are each provided with laminate coatings 23, 25 whereby the laminate coatings 23, 25 provided on the second surfaces of the self-adhesive display device 12 and the backing layer 12 prevent or reduce any curling of the display device apparatus 10 and the individual parts thereof when separated. The present invention also relates to a calendar device 110 comprising; a body having a surface providing a plurality of stations corresponding to particular times within a particular time period; wherein at least part of one or more stations are coloured with a predetermined colour(s).



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy. The claims were filed later than the filing date but within the period prescribed by Rule 25(1) of the Patents Rules 1995. This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1995



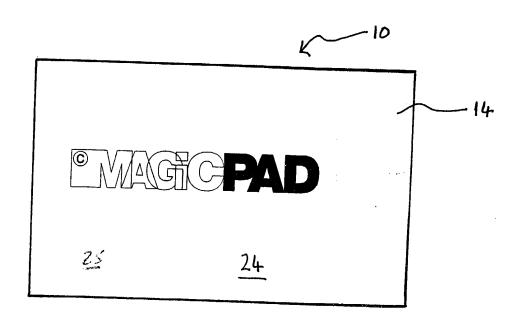


Fig. 2

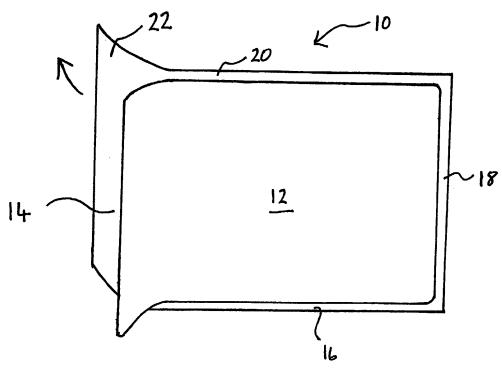
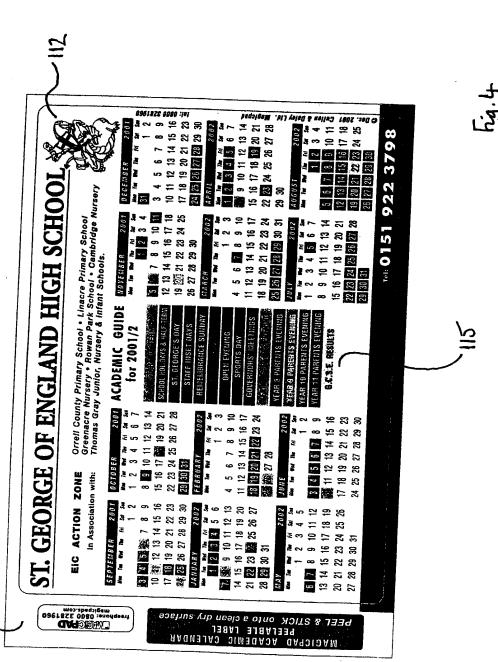
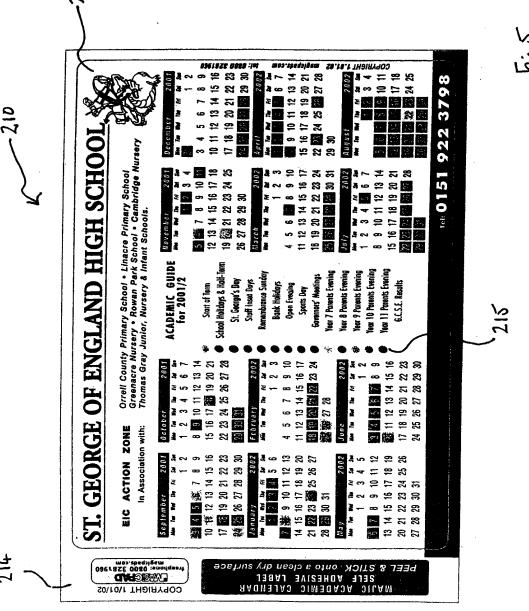


Fig. 3





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IMPROVED DISPLAY DEVICE

TECHNICAL FIELD OF INVENTION

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This invention relates to a display device apparatus comprising a combination of a display device, such as a self-adhesive label, and a backing layer wherein both the display device and the backing layer are provided with laminate coatings which prevents or reduces curling thereof. Furthermore, the invention also relates to a display device such as a self-adhesive calendar which utilises colour-coding to indicate particular activities and/or events for a specific day and/or time during a time period, e.g. a calendar year.

BACKGROUND TO INVENTION

In the production of display device apparatus comprising a self-adhesive label and a backing layer it has been found that the display device apparatus has a tendency to curl. This curling diminishes the perceived quality of the display device apparatus to a consumer or user, and also makes it more difficult to handle the display device apparatus and separate the display device from the backing layer.

Moreover, the traditional method of identifying on a calendar a variety of activities and/or events is, for example, to use a coloured pen to circle a date or to

colour in a box area around a date. This leads to an unprofessional presentation and may render it unclear to read activities and/or events off a calendar. It is also a time consuming activity and open to error.

It is an object of at least one aspect of the present invention to obviate or at least mitigate one or more of the aforementioned problems.

It is a further object of at least one aspect of the present invention to provide a self-adhesive label with a backing layer which prevents or reduces curling of the combination of label and layer.

It is a yet further object of the present invention to provide a calendar device which clearly represents activities and/or events to be performed on a variety of different days and/or times during a predetermined period, e.g. a calendar year.

SUMMARY OF THE INVENTION

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According to a first aspect of the present invention there is provided a display device apparatus comprising a combination of a self-adhesive display device and a backing layer, wherein a first surface of the self-adhesive display device is provided with adhesive means and is removably adhered to a first surface of the backing layer, and wherein second surfaces of the self-adhesive display device and the backing layer which form outer surfaces of the

display device apparatus are each provided with a laminate coating.

It has been found that the laminate coatings provided on the second surfaces of the self-adhesive display device (or label) and the backing layer prevent or reduce any curling of the display device apparatus and indeed the individual parts thereof when separated.

Preferably, the laminate coating is dry wipeable.

Preferably, the laminate coating is waterproof and may be wipeable with a wet cloth.

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Preferably, the laminate coating is formed from a flexible plastics material.

Preferably, the laminate coating comprises polyvinylchloride (PVC).

Preferably, the laminate coating is in the form of a film. The film may be wound in a roll.

Preferably, the laminate coating may be applied using an adhesive coated onto a surface of the laminate.

Alternatively, the laminate coating is applied in a liquid form.

Preferably, on the second surface of the self-adhesive label there is provided printed matter e.g. a representation of a calendar.

Preferably, the calendar has a plurality of stations

which are separated into 12 separate groups corresponding

to 12 months in a given year, each station corresponding to

a day and/or time in a particular month.

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Preferably, each station is numbered according to the day and/or time of the month to which the station corresponds. The numbers in each group may be arranged in rows and columns. Each column may correspond to a particular day and/or time.

The calendar may be adapted for representing activities and/or events in, for example, an academic year (e.g. school, university, college), fiscal year, organisation year (e.g. church, club) or the like.

Alternatively or additionally, on the second surface of the self-adhesive label there may be printed any of the following: advertising material; publicity material; the price and/or description of goods and/or services; stationary applications; safety and/or hazard notices; or the like.

Preferably, on removal of the self-adhesive label from the backing layer the self-adhesive label may be attached to another surface such as a wall, a door, a filing cabinet, a notice board, or the like. It has been found that the laminate coatings on each of the second surfaces tend to prevent the display device and backing layer from curling when separated.

Preferably, the adhesive means is a high tack adhesive which may become permanent after being applied to another surface.

Alternatively, the adhesive means may allow the self-adhesive display device to be removed after being applied to another surface.

In a further alternative, the adhesive means may be adapted to allow the self-adhesive display device to be repeatedly removably fixed to another surface.

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Preferably, the adhesive means is provided by any suitable adhesive.

Optionally, on the second surface of the backing layer there may be provided further printed matter, e.g. advertising or promotional material.

According to a second aspect of the present invention there is provided a calendar device comprising:

a body having a surface providing a plurality of stations corresponding to particular times within a particular time period;

wherein at least part of one or more stations are coloured with a predetermined colour(s).

The/each predetermined colour may represent a particular activity and/or event. The predetermined colour coding may be indicated on the calendar device.

Preferably, the colouring is formed during the printing of the calendar device.

Preferably, the/each predetermined colour(s)
represents a specific activity and/or event such as any of:
Start of Term; School Holidays and Half-Term; St.

George's Day; Staff Inset Days; Remembrance Sunday; Bank Holiday; Open Evenings; Sports Day; Governor's Meetings; Parents' Evenings and Examination Results.

Preferably, the calendar device is in the form of a self-adhesive label removably adhered to a backing layer.

It is further preferred that the self-adhesive label and backing layer each are provided with a laminate coating.

BRIEF DESCRIPTION OF DRAWINGS

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Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a front view of a display device apparatus according to a first embodiment of the present invention;

Figure 2 is a rear view of the apparatus of Figure 1;

Figure 3 is a representation of the apparatus of

Figures 1 and 2 with a self-adhesive display device or

label being removed from a backing layer;

Figure 4 is a front view of a self-adhesive calendar device apparatus according to a second embodiment of the present invention; and

Figure 5 is a front view of a self-adhesive calendar device apparatus according to a third embodiment of the present invention.

DETAILED DESCRIPTION OF INVENTION

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Referring initially to Figure 1 there is shown a display device apparatus, generally designated 10 according to a first embodiment of the present invention. The display device apparatus 10 includes a substantially rectangular self-adhesive display device or label 12 removably adhered to a backing layer 14. As shown in Figure 1, a border 16, 18, 20, 22 formed from a same layer as the label 12 extends around the perimeter of the self-adhesive label 12. The border 16, 18, 20, 22 may aid the removal of the self-adhesive label 12 from the backing layer 14.

The adhesive on the self-adhesive label 12 is formed from any suitable adhesive. Depending on the type of adhesive used the self-adhesive label 12 may be permanently attached to another surface or removable after a certain period of time or repeatedly removable from a surface to which it is applied.

Figure 2 shows a rear view of the display device apparatus 10 and shows that advertising material or the like may be printed on a rear side 24 of the labelling device 10. In this embodiment on the rear side 24 the term "MAGICPAD" (Trade Mark) is printed.

The front surface of the apparatus 10 which comprises the front surface of the self-adhesive label 12 and the border 16, 18, 20, 22 are coated with a transparent PVC

laminate 23. The laminate 23 is a film wound in a roll. The technique used to provide the laminate coating 23 is applying adhesive to a surface of the laminate 23 with a blade, the laminate then being adhered to the front surface of the self-adhesive label 12. A thickness of 12 to 15µm of laminate is obtained. A similar process is also used to provide a laminate coating 25 on the rear side 24 of the backing layer 14.

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The laminate coatings prevent or at least helps to reduce any curling of the display device apparatus 10 so that the apparatus 10 is substantially flat. This improves the perceived quality of the apparatus 10 and also makes it easier to handle and separate the self-adhesive label 12 from the backing layer 14.

15 Figure 3 shows a representation of the self-adhesive label 12 being removed from the backing layer 14. To remove the self-adhesive label 12 from the backing layer 14, the apparatus 10 is slightly bent back at border 22 so that the self-adhesive label 12 comes away from the backing layer 14. The self-adhesive label 12 is then completely pulled off the backing layer 14.

On the front surface of the self-adhesive label 12 any type of printing may be preformed such as any of the following: calendar information; advertising material; publicity material; the price and/or description of goods and services; stationary applications; safety and/or

hazard notices; or the like or any combination thereof.

Figure 4 shows a representation of a display device apparatus, generally designated 110, according to a second embodiment of the present invention. The labelling device 110 includes a self-adhesive label 112 and a backing layer 114 and is similar to the embodiment shown in Figures 1 to 3 apart from the fact that a calendar is printed on the second surface of the self-adhesive label 112.

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In a central portion of the self-adhesive label 112 there is a column 115 of activities and events occurring during a school calendar year. The activities and events are, e.g.: Start of Term; School Holidays and Half-Term; St. George's Day; Staff Inset Days; Remembrance Sunday; Holiday; Open Evenings; Sports Day; Governor's Bank Meetings; Year 7 Parents Evenings; Year 8 Parents Evenings; Year 9 Parents Evenings; Year 10 Parents Evenings; Year 11 Parents Evenings and GCSE Results. Each event and activity is accorded a given colour in column 115 by colouring a rectangular box around the text for each specific activity and event. The following colour-coding is used in this example: Start of Term is light blue; School Holidays and Half-Term is orange; St George's Day is purple; Staff Inset Days are dark blue; Remembrance Sunday is red; Bank Holidays are green; Open Evening is brown; Sports Day is pink; Governor's Meeting is black; Year 7 Parents Evening is grey; Year 8 Parents Evening is bright blue; Year 9

Parents Evening is light green; Year 10 Parents Evening is pale pink; Year 11 Parents Evening is silver and GCSE Results is yellow.

In accordance with this colour coding as, for example, the Start of Term occurs on 6 September, 6 November, 8 January, 8 April, and 10 June these dates are coloured light blue. The calendar is therefore colour coded according to the coloured central column 115.

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Figure 5 represents a labelling device, generally designated 210 comprising a self-adhesive label 212 and a backing layer 214 which also has a calendar printed on the self-adhesive layer 212. This calendar has a minor difference over the calendar shown in Figure 4 in that a column of coloured dots 215 is used to colour code dates in the calendar for activities and events.

CLAIMS

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- 1. A display device apparatus comprising a combination

 Of a self-adhesive display device and a backing layer,

 wherein a first surface of the self-adhesive display

 device is provided with adhesive means and is removably

 adhered to a first surface of the backing layer, and

 wherein second surfaces of the self-adhesive display

 device and the backing layer which form outer surfaces of

 the display device apparatus are provided with respective

 first and second laminate coatings.
- A display device apparatus according to claim 1, wherein the first/second laminate coating is dry
 wipeable.
 - 3. A display device according to any of claims 1 or 2, wherein the first/second laminate coating is waterproof and is wipeable with a wet cloth.

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4. A display device according to any preceding claim, wherein the first/second laminate coating is formed from a flexible plastics material.

- 5. A display device according to any preceding claim, wherein the first/second laminate coating comprises polyvinylchloride (PVC).
- 6. A display device according to any preceding claim, wherein the first/second laminate coating is in the form of a film.
- 7. A display device according to claim 6, wherein the film is wound in a roll.
 - 8. A display device according to any preceding claim, wherein the first/second laminate coating is applied using an adhesive coated onto a surface of the self-adhesive display device or coating.
 - 9. A display device according to any of claims 1 to 7, wherein the first/second laminate coating is applied in a liquid form.

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10. A display device according to any preceding claim, wherein on the second surface of the self-adhesive label there is provided printed matter.

- 11. A display device according to claim 10, wherein the printed matter is a representation of a calendar.
- 12. A display device according to claim 11, wherein the calendar has a plurality of stations which are separated into 12 separate groups corresponding to 12 months in a given year, each station corresponding to a day and/or time in a particular month.

- 13. A display device according to claim 12, wherein each station is numbered according to a day and/or time of a month to which the station corresponds.
- 15 14. A display device according to claim 13, wherein numbers in each group are arranged in rows and columns.
 - 15. A display device according to claim 14, wherein each column corresponds to a particular day and/or time.

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16. A display device according to any of claims 11 to 15, wherein the calendar is adapted for representing activities and/or events in.

- 17. A display device according to claim 16, wherein the activities and/or events are selected from any of the following: an academic year such as school, university or college year; a fiscal year; and an organisation year such as a church or club year.
- 18. A display device according to any preceding claim, wherein on the second surface of the self-adhesive label there is printed any of the following: advertising material; publicity material; the price and/or description of goods and/or services; stationary applications; safety and/or hazard notices.
- 19. A display device according to any preceding claim, wherein on removal of the self-adhesive label from the backing layer the self-adhesive label is attachable to another surface such as a wall, a door, a filing cabinet or a notice board.

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20. A display deice according to any preceding claim, wherein the adhesive means is a high tack adhesive which becomes permanent after being applied to another surface.

21. A display device according to any of claims 1 to 19, wherein the adhesive means allows the self-adhesive display device to be removed after being applied to another surface.

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22. A display device according to any of claims 1 to 19, wherein the adhesive means is adapted to allow the self-adhesive display device to be repeatedly removably fixed to another surface.

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- 23. A display device according to any preceding claim, wherein on the second surface of the backing layer there is provided further printed matter.
- 15 24. A display device according to claim 23, wherein the further printed matter is advertising or promotional material.
 - 25. A calendar device comprising:
- a body having a surface providing a plurality of stations corresponding to particular times within a particular time period;

wherein at least part of one or more stations are coloured with a predetermined colour(s).

- 26. A calendar device according to claim 25, wherein the/each predetermined colour represents a particular activity and/or event.
- 5 27. A calendar device according to claim 26, wherein the predetermined colour coding is indicated on the calendar device.
- 28. A calendar device according to any of claims 25 to

 10 27, wherein the colouring is formed during the printing

 of the calendar device.
- 29. A calendar device according to any of claims 26 to 28, wherein the specific activity and/or event is selected from any of the following: Start of Term; School Holidays and Half-Term; St. George's Day; Staff Inset Days; Remembrance Sunday; Bank Holiday; Open Evenings; Sports Day; Governor's Meetings; Parents' Evenings and Examination Results.

30. A calendar device according to any of claims 25 to 29, wherein the calendar device is in the form of a self-adhesive label removably adhered to a backing layer.

- 31. A calendar device according to claim 30, wherein the self-adhesive label and backing layer each are provided with respective first and second laminate coatings.
- 5 32. A display device substantially as hereinbefore described with reference to the accompanying drawings.
 - 33. A calendar device substantially as hereinbefore described with reference to the accompanying drawings.







Application No: Claims searched:

GB 0208907.6

1-24

Examiner:

Richard Gregson

Date of search:

29 July 2003

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance		
X	1 at least	GB 2273079 A	(NYLEX) - see diagrams, abstract and page 2, line 30 to page 5, line 22 in particular.	
Y	1 at least	WO 8901216 A1	(SCANWATCH) - see diagrams, abstract and column 4, line 27 to column 5, line 11 in particular.	
Y	1 at least	US 2001/0037594	(BOHEN) - see diagrams, abstract and page 1, paragraph 18 in particular.	
Y	1 at least	US 6150035 A	(DEFIFE et al) - see diagrams and abstract in particular.	
A	1 at least	FR 2364518 A	(BICHET) - see whole document.	
Α	1 at least	US 5016373 A	(THENO) - see whole document.	

Categories:

x	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKCV:

B₅N

Worldwide search of patent documents classified in the following areas of the IPC7:

B32B: B42D: B42F: G09F

The following online and other databases have been used in the preparation of this search report:

EPODOC, WPI, JAPIO