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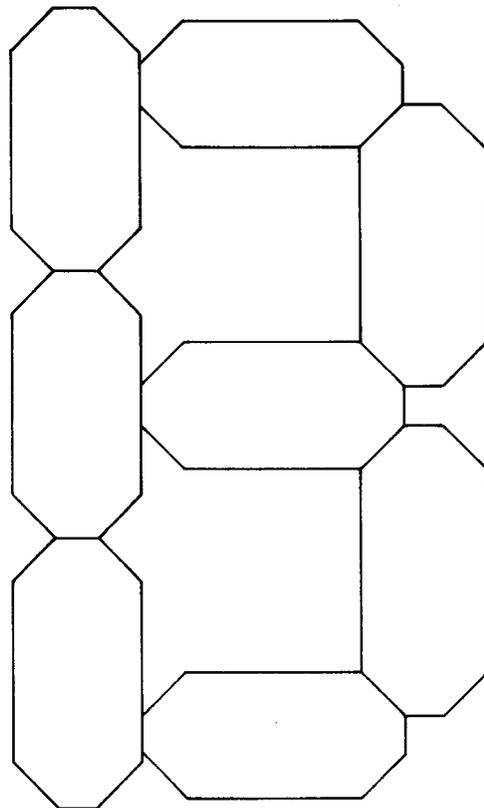
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54 **Display means.**

57 The invention is concerned with means and method for providing re-usable displays of the type that are formed of alphanumeric characters and are usable in shop windows and the like. Each character can be formed from a number of like elements and strips thereof, the elements being in the form of elongate rectangles having chamfered or tapered or rounded end portions and the elements and/or strips being made from or coated with a material which allow them to be peeled from the display surface for subsequent re-use.

Fig. 7.



This invention is concerned with display means, especially but not exclusively for use in or by retail outlets, as for example in shop windows and the like.

Temporary window signs, such as those which are to be seen whenever a retail store is advertising a short-term promotion, such as the holding of a sale or is carrying out a particular sales promotion, are to be found throughout the world. Such signs are used for very many other purposes, but are predominantly used on the internal surface of a glass door or window, although they may be used on products themselves within a retail outlet.

There are a number of different ways of displaying messages on a window, namely a first in which individual characters are formed from a single piece of material, either formed as a cut-out character shape or painted onto a transparent blank which adheres electrostatically to the window, a second in which complete words or slogans are similarly formed on a single piece of material, a third in which adhesion of the characters or words is by use of adhesive-coated characters and materials, and a fourth in which characters are actually painted onto such a surface.

Each of the above types of display sign has drawbacks. In the first and second types recited above, there is the problem that, when not in use, the characters, words or slogans must be stored and often deteriorate or become damaged as a result. Furthermore, they only have limited application, depending upon the number of characters stored; for example, the letter of the word 'SALE' may be in a different font, case and/or size from other characters and so be unsuitable for use therewith. There is also the additional problem of alignment of the characters of a word when they are mounted on a large surface such as a shop window.

If adhesion of characters, word(s) or a slogan is by use of an adhesive material, then there is the problem of cleaning the window after removal of the characters. This is also a problem with the fourth approach to display signs in that paint has to be removed from the window.

With the advent of self-adhesive peelable materials, there is the opportunity to provide an alternative solution to the provision of window displays which is more flexible and economical and easier to use than hitherto.

The present invention seeks to provide an alternative means of providing a display essentially of alphanumeric characters but not necessarily exclusively thereof, in which not only can the characters be readily created by the user with a uniqueness of style, but wherein the essential elements can be used and re-used and stored easily and can be arranged uniformly prior to use as a window sign so as to provide a neat, professional presentation.

Accordingly, the present invention provides reusable display means for creating alphanumeric char-

acters and displays thereof for mounting on flat display surfaces, the display means comprising a plurality of like elements, each formed from planar display material and having the general shape of an elongate rectangle having chamfered, tapered or rounded end portions whereby adjacent elements can be located in juxtaposed relationship to form alphanumeric characters as aforesaid, each element having a coating or being formed of or including a material whereby it will adhere to a display surface and can be readily removed therefrom by peeling or lifting therefrom.

In display means as set forth in the last preceding paragraph, multiples of said elements may be integrally formed in end-to-end relationship to provide unitary strips of said elements. Such an arrangement assists the creation of characters such as those having an elongate vertical element as do the letters B, D, E, F, H, I, K to N, P, R, T and U. It has been found that strips which are equivalent to two, three or four elements are most useful in this respect.

In display means as set forth in the last preceding paragraph, it is preferred that the chamfered or tapered end portions of each element are each formed at substantially the same angle of and within the range of from substantially 40 degrees to substantially 45 degrees, as this provides considerable flexibility in forming and designing alphanumeric characters, as will be explained hereinafter, to provide a unique character set. Whilst 45 degrees is perceived as an optimum angle, particularly for non-italicised characters, it will be appreciated that for some character sets, different angles may be more appropriate.

Alternatively to the shape of the end portions specified in either one of the last two immediately preceding paragraphs, the end portions of each element may be curved to semi-circular or elliptical form and the elongate edges of the generally rectangular shape of the element may be shallowly curved. In yet another alternative form, each element is trapezium-shaped with each base angle of the trapezium also within the aforementioned range.

The elements themselves can be formed from any flexible or semi-rigid material, preferably a plastics material, made from or coated with or including a material which will allow the element to be mounted removably on a display surface. Such materials include film-form plastics materials which adhere electrostatically to surfaces such as of glass, wood and metal, and materials which are formed from releasably self-adhesive compositions or are coated, on at least the surface which is to be applied to the mounting surface on which a display is to be formed, with such compositions. For magnetic surfaces, the material of the elements and strips may comprise magnetic materials or may be coated at least on one surface with a magnetic coating.

The present invention further provides a former for use with display means according to the invention

for producing alphanumeric characters, the former comprising one or more templates each having an aperture therein which corresponds in outline to the outline of one or more of the characters to be formed.

The present invention also provides a display kit comprising display means according to the invention and means for assisting correct layout and positioning of each element to form the characters prior to mounting or positioning on a display surface, the latter means comprising a support sheet having indicated thereon a plurality of markings which correspond to the positions to be adopted by individual elements in the formation of each alphanumeric character, in juxtaposition to adjacent characters, the support sheet having a support surface onto which the elements can be placed and from which they can be transferred to a display surface.

The present invention also provides a method of forming a display of one or more alphanumeric characters from display means according to the invention, the method comprising the steps of selecting a plurality of elements of the display means, assembling the elements in a preformed template having the external shape required of the or each alphanumeric character and positioning the or each alphanumeric character so formed on a display surface or on a surface from which the or each alphanumeric character can be transferred to the display surface.

The invention will now be hereinafter described with reference to the accompanying drawings which illustrate by way of example several forms of element according to the present invention.

In the accompanying drawings:

Figure 1 is a plan view of a first element according to the present invention;

Figure 2 is a plan view of a second element according to the present invention;

Figure 3 is a plan view of a third element according to the present invention;

Figure 4 is a plan view of elements of the type shown in Figure 1 assembled to illustrate the formation of the letters 'B', 'C', 'D', 'E', 'H', 'J', 'K', 'O', 'P', 'S', 'T', 'U' and the numerals '1' to '9';

Figure 5 is a plan view of elements of the type shown in Figure 3 assembled to illustrate the formation of the letters 'A', 'B', 'C', 'D', 'E', 'K' and 'S' and the numerals '1' to '3';

Figure 6 is a plan view illustrating a number of examples of the formation of the character 'A' using elements such as are shown in Figure 3;

Figure 7 is a plan view, showing in enlarged form the character 'B' seen in Figure 4;

Figure 8 is a plan view of two strips of two and three integrally-formed elements respectively of the type shown in Figure 1 and which can be used in making alphanumeric characters in accordance with the invention; and

Figures 9A and 9B are plan views of two templates according to the invention, selected to illustrate by way of example the manner of creation of alphanumeric characters according to the invention using those templates.

Referring firstly to Figure 1, the element according to the invention which is shown therein comprises a piece **10** of flexible plastics material having a length-to-width ratio of approximately two to one. The element is rectangular and has chamfered corners **12** with the length of each chamfered edge **14** being substantially equal to the length of the remaining central end edge **16** of the piece **10**.

The element is mounted on a piece of backing material from which it can be peeled when required and onto which it can be replaced after use.

In Figure 2 there is illustrated a second embodiment **20** which has the same length-to-width proportions as that shown in Figure 1 but which has semi-circular end portions as shown.

In the third embodiment, shown in Figure 3, the element **30** is substantially trapezoidal in shape with the longer side **32** being about twice the length of the shorter parallel side **34** and the width of the element being about half the length of the shorter parallel side. This formation provides tapered edges which are at about 45 degrees to the parallel sides of the element.

As shown in Figure 4, elements as illustrated in Figure 1 can be assembled in side-by-side relationships to form alphanumeric characters in a number of different ways. Considering firstly the characters 'T', 'H' and 'E' it can be seen that each horizontal segment of the characters is joined to the others by placing the segments in butting relationship end on to the vertical segments whereas in other characters, for example in 'U', 'C' AND 'K' the characters are formed by butting the end edge of some segments with the chamfered edge of others. Finally, as can be seen in the characters 'J', 'P' and 'S' and in the numerals '2', '3', '5', '6', '8' and '9', the segments can be butted together at their chamfered edges alone.

The flexibility of the system which the present invention provides is such that the characters can be formed in a number of different ways without detracting from the proportions of the characters. If for example, a display were to be created from simple rectangular elements then it is quickly established that certain characters have disproportionate gaps or overlaps in their structure as compared to the size of the character itself while in some instances it is not possible to create characters which are not confusingly similar to others; this can be readily appreciated from comparison of the two characters 'D' and 'O', for example.

Turning now to Figure 5, there are illustrated further letters of a different style formed from elements such as are shown in Figure 3. A further comparison

of character variation is shown in Figure 6. The elements shown in these Figures can, as with those shown in Figure 4, be assembled without disproportionate sizing of any of the characters due to the shaping of the end portions of the elements. The effect of this can be most clearly demonstrated with reference to the characters 'K' and 'S' where other than chamfered end portions would provide characters which were either too broad or too tall.

In Figure 6, there is shown a number of examples of formation of the character 'A' to demonstrate the aforementioned flexibility of the use of the elements in constructing alphanumeric characters.

The elements are readily formable from sheet-form plastics material mounted on a backing material from which the elements are readily peelable.

In constructing characters, a former may be provided which illustrates a complete alphanumeric character set, including possible variants of some characters, printed thereon. The former also includes alignment marks which provide guidance to a user for positioning a backing sheet of transparent plastics material thereon onto which the elements of each character can be placed as the backing sheet is positioned manually on the former to present each next character space over the character representation in order to overlay the elements on the appropriate segments of the representation. For this purpose the backing sheet is provided as an elongate strip which is long enough to form a word or slogan thereon.

With the characters formed on the backing sheet, the entire sheet can then be presented to the surface onto which the characters are to be transferred, and the backing sheet peeled away. When subsequently it is desired to remove the characters from the window, they can be simply peeled away by hand.

Referring now to Figure 8, there are shown therein two examples of strips of elements according to the present invention. These two strips are each formed as a single piece so that the strip has the shape of the two or three elements joined end-to-end. By using strips of integrally joined elements, the process of creating and forming characters is made much easier.

In constructing characters, a series of templates may be used as an alternative to the process described in the last preceding paragraph but one. The series of templates provides all of the outline shapes for all the twenty-six alphabetic characters and for the numbers from '0' to '9'. Two such templates are illustrated by way of example in Figures 9A and 9B. The template **40** shown in Figure 9A is suitable for forming the letters A, C, E, F, H, I, L, N, O, Q, T and U and the numbers 3 and 8, while the template **42** shown in Figure 9B is suitable for forming the letters B and P and the numbers 4, 6 and 9. Wherever a diagonal is present in a character, as in the letter N, the diagonal element is inserted by hand.

It will also be appreciated that, for those cases in

which it is desired to place the characters onto a front display surface, a former can be provided on which the character representations are formed in mirror image.

Claims

1 Display means for creating alphanumeric characters and displays thereof for mounting on flat display surfaces, the display means comprising a plurality of like elements, each formed from planar display material and having the general shape of an elongate rectangle having chamfered, tapered or rounded end portions whereby adjacent elements can be located in juxtaposed relationship to form alphanumeric characters as aforesaid, each element having a coating or being formed of or including a material whereby it will adhere to a display surface and can be readily removed therefrom by peeling or lifting therefrom.

2 Display means according to claim 1 wherein multiples of said elements may be integrally formed in end-to-end relationship to provide unitary strips of said elements.

3 Display means according to claim 2 wherein each strip is formed from two, three or four like elements.

4 Display means according to any one of the preceding claims wherein the chamfered or tapered end portions of each element are each formed at substantially the same angle of and within the range of from substantially 40 degrees to substantially 45 degrees, optimally 45 degrees.

5 Display means according to any one of claims 1 to 3 wherein the end portions of each element may be curved to semi-circular or elliptical form.

6 Display means according to any one of the preceding claims wherein the elongate edges of the generally rectangular shape of the element may be shallowly curved.

7 Display means according to claim 1 wherein each element is trapezium-shaped with each base angle of the trapezium within the range of from substantially 40 degrees to substantially 45 degrees.

8 Display means according to any one of the preceding claims wherein the elements are formed from any flexible or semi-rigid material, preferably a plastics material, made from or coated with or including a material which will allow the element to be mounted removably from a display surface.

9 Display means according to claim 8 wherein said flexible or semi-rigid material comprises film-form plastics materials which adhere electrostatically to surfaces such as glass, wood and metal, materials which are formed from releasably self-adhesive compositions or are coated, on at least the surface which is to be applied to the mounting surface on which a display is to be formed, with such compositions, or

materials formed from or coated with magnetic materials.

10 A former for use with display means as set forth in any one of the preceding claims for producing alphanumeric characters, the former comprising one of more templates each having an aperture therein which corresponds in outline to the outline of one or more alphanumeric characters. 5

11 Alphanumeric characters formed from display means as set forth in any one of claims 1 to 10. 10

12. A display kit comprising means for creating alphanumeric characters and displays thereof as set forth in any one of claim 1 to 9 and means for assisting correct layout and positioning of each element to form the characters prior to mounting or positioning on a display surface, the latter means comprising a support sheet having indicated thereon a plurality of markings which correspond to the positions to be adopted by individual elements in the formation of each alphanumeric character, in juxtaposition to adjacent characters, the support sheet having a support surface onto which the elements can be placed and from which they can be transferred to a display surface. 15 20

13. A method of forming a display of one or more alphanumeric characters from display means according to any one of claims 1 to 9, the method comprising the steps of selecting a plurality of elements of the display means, assembling the elements in a pre-formed template having the external shape required of the or each alphanumeric character and positioning the or each alphanumeric character so formed on a display surface or on a surface from which the or each alphanumeric character can be transferred to the display surface. 25 30 35

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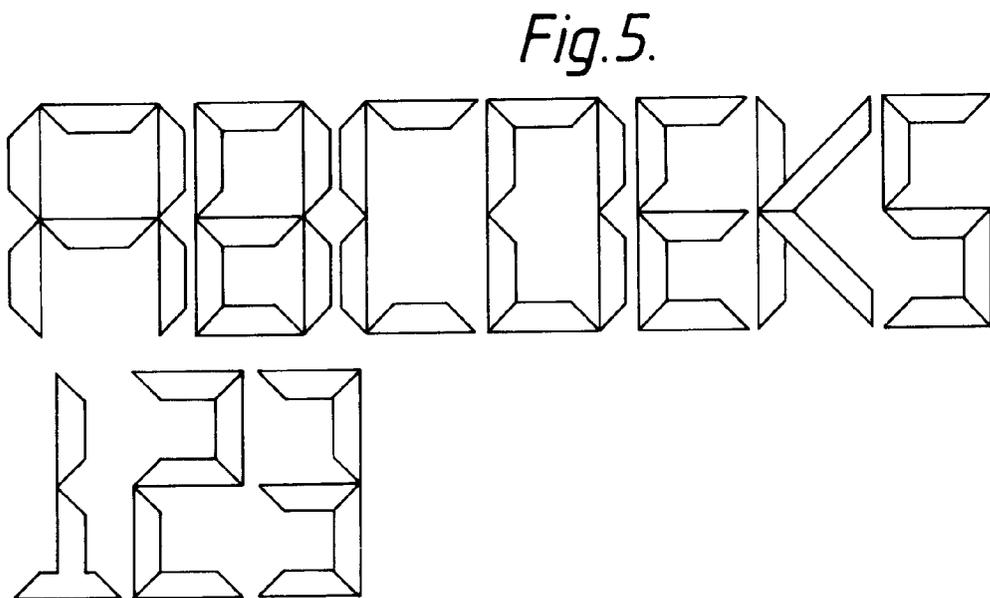
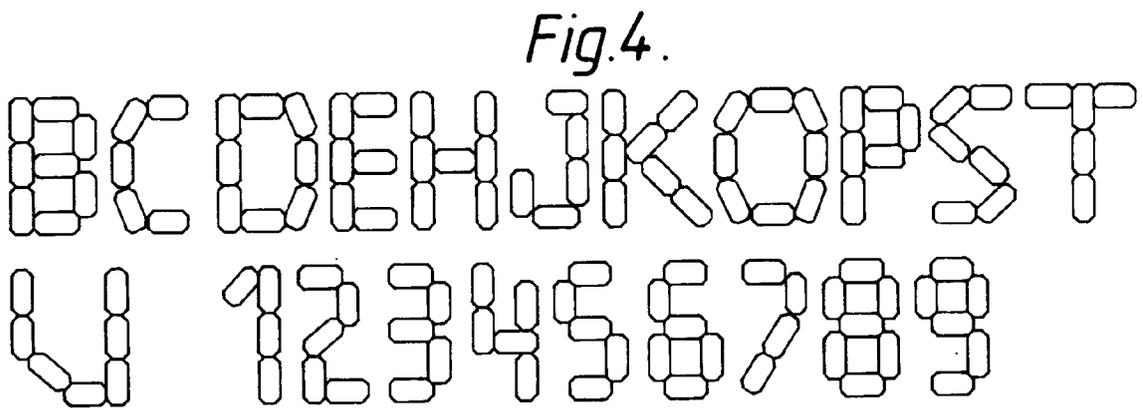
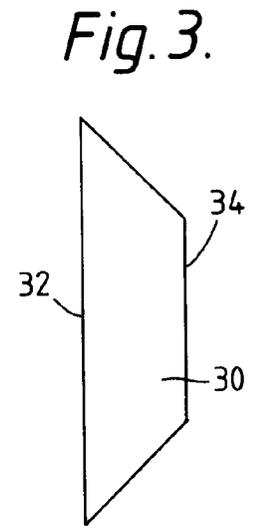
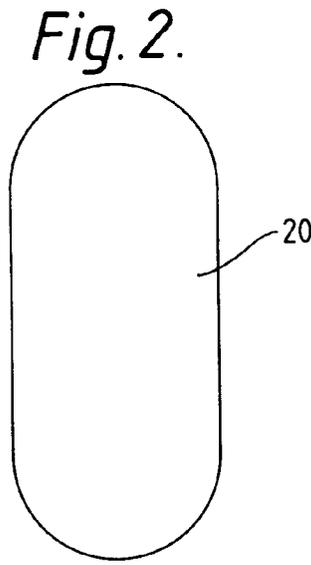
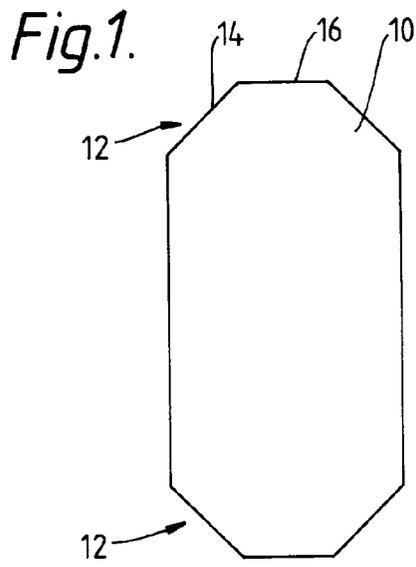


Fig. 6.

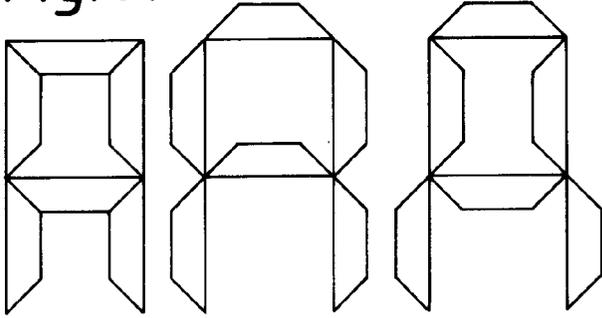


Fig. 7.

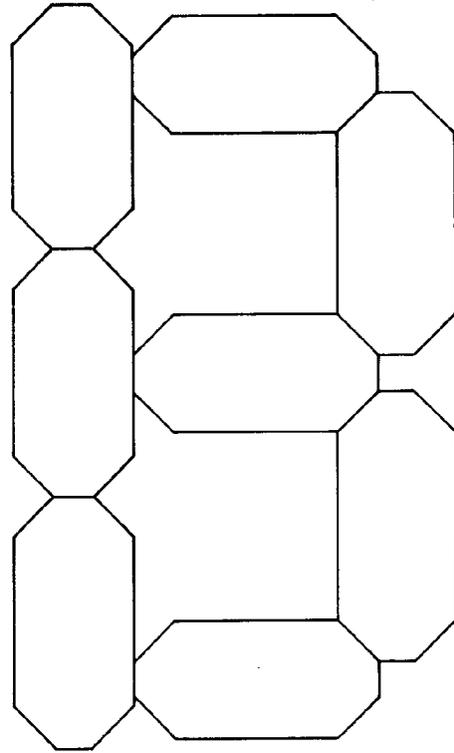


Fig. 8.

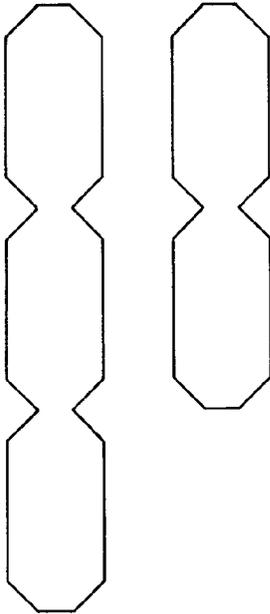


Fig. 9A.

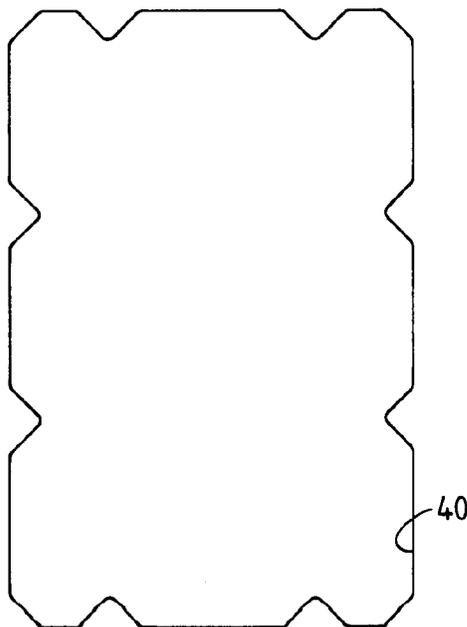
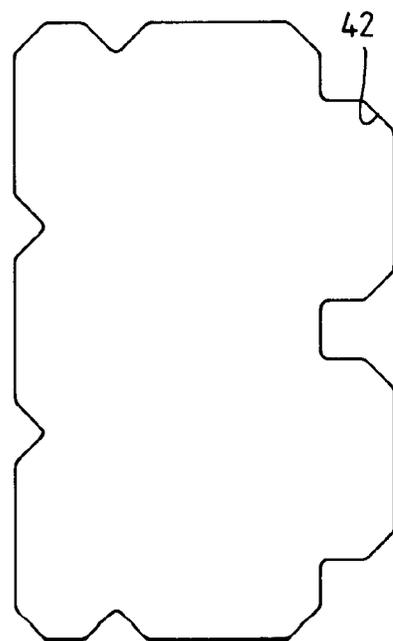


Fig. 9B.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 92 30 7747

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X A	EP-A-0 333 285 (BOOTSMA) * the whole document * ---	1,7-9,11 4-6	G09F7/14 G09F7/02
A	CH-A-665 041 (TRUNINGER) * the whole document * ---	1,4,7-11	
A	US-A-4 583 312 (KING ET AL) * column 3, line 16 - column 4, line 17; figures 1,4 * ---	1,4,7-11	
A	DATABASE WPIL Week 8142, Derwent Publications Ltd., London, GB; AN 81-K8433D & NL-A-8 000 910 (VAN DEN BERG) * abstract * -----	1,8-13	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G09F
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 19 NOVEMBER 1992	Examiner P. TAYLOR
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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