

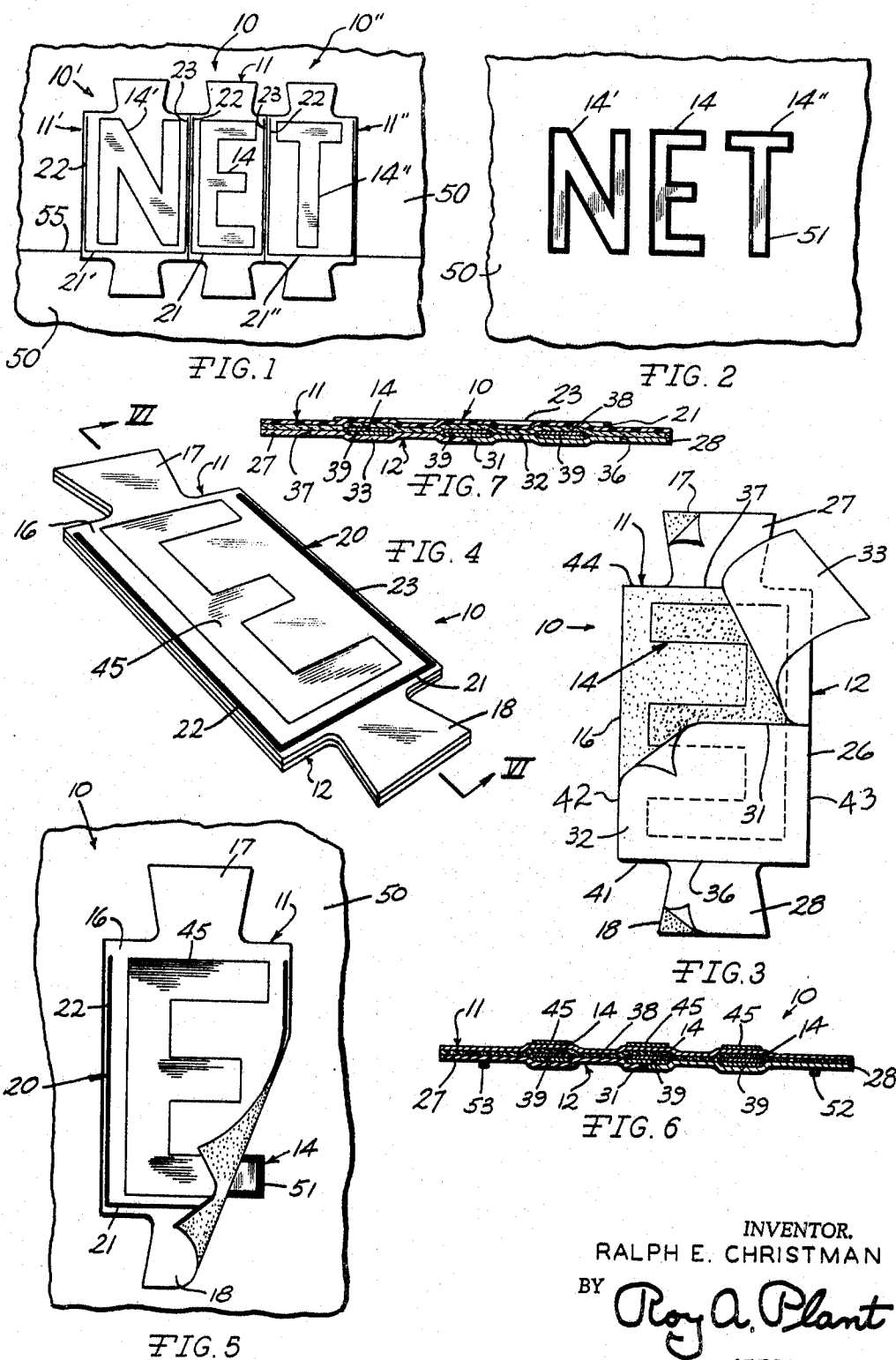
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MOUNTING ASSEMBLY ARTICLE AND METHOD OF APPLYING SAME

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MOUNTING ASSEMBLY ARTICLE AND METHOD OF APPLYING SAME

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7 Claims

ABSTRACT OF THE DISCLOSURE

This is a new lettering system item and method, utilizing upper and lower lobes on a mild pressure-sensitive adhesive coated cover sheet, preferably transparent, having the front face of a letter or the like adhered to the adhesive coated back face of same. An adhesive resisting backing sheet protects the strong pressure-sensitive adhesive coated back face of the letter. Removing said backing sheet from the back of said lobes allows the assembly to be temporarily fastened and held by them on a surface to be lettered, where the letter spacings and relative positioning can be viewed, measured, and adjusted before final adhesion following the removal of the rest of said backing sheet. Then the cover sheet is peeled off leaving the letters permanently anchored in place on the surface in their adjusted position.

BACKGROUND OF THE INVENTION

This invention relates generally to a mounting assembly article and particularly to a letter and numeral mounting structure and the method of mounting same.

With the increase in business activity and the mobility of office personnel and equipment there has developed a need in the industrial lettering arts for a precise, accurate and artistic method and means to letter various surfaces such as windows, doors, walls, mirrors, automobile and truck paneling, et cetera, to better serve the industrial and commercial worlds. The time required to hand letter the various surfaces used to service these areas becomes quite expensive and time consuming. Particular increases are noticed in office facilities and large fleet units of vehicles. The layout of lettering including accurate spacing of the mounting assembly articles and the ability to actually see the final appearance before the articles are permanently affixed is a problem in the art.

Accordingly, among the objects of the present invention is the provision of a mounting assembly which can be temporarily positioned on a surface for viewing before final attachment.

A further object is to provide a mounting assembly which can be temporarily positioned in alignment with adjacent mounting assembly articles in a temporarily mounted manner to provide visual inspection and alignment adjustment before final mounting takes place.

A further object is to provide a mounting assembly having the final form positioned between separable cover and backing sheets.

A further object is to provide a mounting assembly having a removable transparent cover sheet and a removable opaque backing sheet.

A further object is to provide a mounting assembly having a final form mounted between a transparent cover sheet and an opaque backing sheet with a registered aligning form circumscribing a portion of the final form.

A further object is to provide a mounting assembly having a transparent cover sheet and a transparent backing sheet with a registered aligning form circumscribing portions of the final form.

A further object is to provide a mounting assembly having upper and lower temporary mounting lobes.

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Another object of the present invention is to provide a mounting assembly having a backing sheet with a cut substantially across its middle area dividing the backing sheet into two substantially equal sections.

Another further object is to provide a mounting assembly having an upper and lower lobe with a cut line on a backing sheet separating one of the backing sheet's lobes from the rest of the backing sheet.

Another further object is to provide a mounting assembly of the backing sheet having upper and lower lobes with a first cut line substantially through the middle portion of its backing sheet and a second cut line separating one of its lobes from the remainder of the backing sheet.

Another further object is to provide a mounting assembly article with upper and lower lobe units having a backing sheet with a cut line substantially through its middle portion and two separate cut lines separating the upper and lower lobe portions of the backing sheet from the rest of the backing sheet.

A still further object is to provide a mounting assembly with upper and lower lobe portions having cut lines separating the lobe portions from the remainder of the backing sheet.

Another object of the invention is to disclose a method of mounting preformed numerals and letters on surfaces with aligning steps included.

Still further objects and advantages of the present invention will appear as the description proceeds.

BRIEF DESCRIPTION OF THE DRAWING

To the accomplishment of the foregoing and related ends, the invention, then, consists of various features and means hereinafter fully described and particularly pointed out in the claims, the annexed drawing, and the following description setting forth in detail various illustrative embodiments of the invention, such disclosed embodiments, however, illustrating but several of the various ways in which the principle of the invention may be used.

In the annexed drawing:

FIGURE 1 is a front elevational view illustrating three mounting assembly articles aligned and temporarily mounted on a surface along the guide line.

FIGURE 2 is a second view similar to FIGURE 1 illustrating permanent mounting of the temporarily mounted letters.

FIGURE 3 is a back view of a mounting assembly article with portions of a backing sheet being removed.

FIGURE 4 is a front perspective view of a mounting assembly article illustrating the principles of the present invention as illustrated in FIGURES 1, 2 and 3.

FIGURE 5 is a front illustration of the cover sheet of a mounting assembly article being removed after a letter has been permanently affixed in place.

FIGURE 6 is a cross sectional view of the mounting assembly article illustrated in FIGURE 4 taken along line VI—VI.

FIGURE 7 is a cross sectional view similar to FIGURE 6 illustrating an alternate embodiment of the present invention.

DESCRIPTION OF SPECIFIC EMBODIMENTS

Referring generally to FIGURES 3 and 4, there is shown a mounting assembly article 10 having a cover sheet 11 and a backing sheet 12. A letter member 14 is positioned between the cover sheet 11 and the backing sheet 12 and these elements substantially make up the structure of the mounting assembly article 10. The cover sheet 11 has a cover body portion 16, an upper temporary mounting lobe 17 and a lower temporary mounting lobe 18. The embodiment illustrated in FIGURE 4, shows a registered aligning form 20, having a general U shape with a base line 21 and aligning legs 22 and 23, the full purpose

and function of which will be explained in more detail below.

The backing sheet 12, as seen best in FIGURE 3, has a similar profile to that of cover sheet 11 and is provided with a backing body portion 26, upper lobe 27 and lower lobe 28. A cut 31 substantially passes through the mid-section of backing body portion 26 separating into lower sheet 32 and upper sheet 33. Cuts 36 and 37 are shown in this embodiment and are substantially along a bottom edge 41 and a top edge 44, respectively, of mounting assembly article 10. Cut 36 separates lower lobe 28 from lower sheet 32 and cut 37 separates upper lobe 27 from upper sheet 33.

The cover sheet 11 has its bottom surface, which contacts backing sheet 12 and letter member 14, coated with a low grip adhesive coating 38 called in the art as having a temporary adhesive aggressiveness. The back surface of numeral letter 14 is coated with a layer of high grip adhesive coating 39 called in the art as having a permanent adhesive aggressiveness. The backing sheet 12 has its back surface, which contacts cover sheet 11 and letter member 14, treated with an adhesive repellent substance permitting the backing sheet 12 to be easily removed from the pressure-sensitive adhesive coatings 38 and 39, the full purpose and function of which will be explained in more detail below. The mounting assembly article 10 is also provided with the side edges 42 and 43.

Referring to FIGURE 4, there is illustrated a cover letter member 45 on cover sheet 11 which will have application in some embodiments of the present invention as will be explained in more detail below.

Referring to FIGURE 1, a series of mounting assembly articles 10 are positioned on a mounting surface 50 along a laid-out guideline 55. The mounting assembly articles 10', 10, 10'' provide the letters N, E and T, respectively. The base lines 21', 21, 21'' are aligned with guideline 55 and spacing is provided by adjusting the aligning legs 22 and 23 with adjacent mounting assembly articles 10', 10 and 10''.

The backing sheet 12 can be provided with many cut combinations separating it into various sections. Cuts 31, 36 and 37 are shown in FIGURE 3 as a preferred embodiment. With this style of cut arrangements on backing sheet 12 a method of positioning the mounting assembly articles 10 as they are being aligned would be to remove upper lobe 27 from upper temporary mounting lobe 17 permitting the low pressure-sensitive adhesive coating 38 on its backside to secure part of the mounting assembly article 10 to the mounting surface 50. Then, the lower lobe 28 will be removed from lower temporary mounting lobe 18 permitting the low pressure-sensitive adhesive coating 38 on its backside to also act on mounting surface 50 holding the mounting assembly article 10 in a secure temporary mounting position on said mounting surface.

After all the mounting assembly articles are temporarily mounted in place, proper spacing and alignment can be viewed and the mounter can easily ascertain the appearance of the lettering before permanent mounting takes place. When the spacing and appearance are recognized as proper, then the mounter can go back and lift the upper temporary mounting lobe 17 and remove the upper sheet 33 of backing sheet 12 exposing the back portion of cover sheet 11 with its low pressure-sensitive adhesive coating 38 and the back portion of the letter member 14 exposing the high-pressure-sensitive adhesive coating 39 to the mounting surface 50. Then the mounting article 10 is moved into place to permanently mount the upper part of the letter member 14 to the mounting surface 50. Then the lower temporary mounting lobe 18 is lifted and the lower sheet 32 of backing sheet 12 can be removed exposing the remainder of the back portions of letter member 14 and cover sheet 11 to the mounting surface 50. After the letter member 14 is permanently mounted in this manner the cover sheet 11 can be peeled off from the mounting surface 50, as viewed in FIGURE 5, without

any effect on the letter member 14 because letter member 14 has the high pressure-sensitive adhesive coating 39 and the low pressure-sensitive adhesive coating 38 will easily separate from the upper surface of the letter member 14 giving a final appearance after all cover sheets 11', 11 and 11'' are removed, as shown in FIGURE 2. In the present illustration, the letter members 14', 14 and 14'' have edge printing border 51 outlining their outer edge.

Various combinations and arrangements can be provided of mounting assembly article 10. FIGURES 6 and 7 show cross sections of two embodiments of the mounting assembly article 10. The layer thicknesses are distorted out of proportion for illustrative purposes only. The mounting assembly article 10, as viewed in FIGURES 4 and 6, illustrates the printing of a cover letter member 45 on the upper surface of cover sheet 11 and of tear lines 52 and 53 on its back side. Cover sheet 11, as illustrated in FIGURES 4 and 7, shows the printing of base line 21 and aligning legs 22 and 23 of registered aligning form 20. The registered aligning form 20 and the cover letter member 45 can be registered with each other and with letter member 14 and used in one embodiment as illustrated in FIGURE 4. The low pressure-sensitive adhesive coating 38 and the high pressure-sensitive adhesive coating 39 would have a very thin cross section as compared with cover sheet 11 and backing sheet 12. However, as explained above, this distortion is for illustrative purposes only. Cut 37 is illustrated separating upper lobe 27 from upper sheet 33, as viewed in FIGURES 3 and 7, cut 31 is shown as mentioned earlier substantially across the mid-portion of backing sheet 12 and cut 36 is illustrated separating lower lobe 28 from lower sheet 32.

FIGURE 7 is illustrated with a transparent cover sheet 11 which would be a polyester film such as Dupont markets under the trade name of "Mylar" which consists generally of the following chemical composition, a polymer of ethylene glycol and terephthalic acid. Another material for the transparent cover sheet 11 could be cellulose acetate. Because these materials are transparent there would be no need for a cover letter member 45 as the letter member 14 would be visible in these embodiments. In this embodiment the letter member 14 would be visible upon temporary mounting as covered above so that when viewing the layout and spacing the actual figures would be presented to the mounter as he proceeds. In another embodiment not illustrated, the backing sheet 12 could also be made of transparent material so that the mounter would have a complete representation without obstructions to his viewing as he proceeds in laying out the mounting assembly articles 10. The registered aligning form 20 could be made of various colors, in some applications a very light gray would be appropriate so as not to distort the view of the person laying out the figures.

FIGURE 6 illustrates a mounting assembly article 10 having an opaque sheet 11 and an opaque backing sheet 12. This illustration has a cover letter member 45 printed on cover sheet 11 registered with the letter member 14. In this embodiment side edges 42 and 43 and bottom edge 41 are precisionally cut and registered with letter member 14 and can be used as a registered aligning form, similar to registered aligning form 20. This type of registration is not the preferred method because it is quite difficult and expensive to perform. The registered aligning form 20 as shown in FIGURES 4 and 7 is the preferred embodiment and has proved to be quite beneficial because it does not become distorted or damaged as easily as the cut edges and is not as difficult or costly to accomplish. FIGURE 6 provides tear printed lines 52 and 53 which are used to indicate to the mounter what line to tear along when temporarily mounting the mounting assembly article 10 without having to provide cut lines on the backing sheet 12. Cut line 31 is still provided at the mid portion to facilitate permanent mounting as explained above.

Some applications such as automobile and truck panels may benefit from having a lacquer or spar varnish coat

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applied after the mounting surface 50 has the mounting assembly articles 10 permanently attached.

A preferred embodiment and several alternate embodiments of the present invention have been illustrated and described herein. However, it is to be understood that minor modifications may be made in the mounting assembly article construction and be within the spirit and scope of the invention as herein described and illustrated. It is further to be noted that while directional terms have been used, same are not to be construed as a limitation of the invention since such use has been availed of only to better describe the invention as illustrated.

Other modes of applying the principles of my invention may be employed instead of those explained, change being made as regards the means and the methods herein disclosed, provided those stated by any of the following claims or their equivalents be employed.

I therefore particularly point out and distinctly claim as my invention:

1. A mounting assembly article having a figure member or the like to be adjustably positioned, mounted and left on a suitable surface, comprising, in combination:

- (a) a figure member having adhesive means on one side,
- (b) a cover sheet covering the non-adhesive coated side of said figure member and having adhesive means on the side contacting said figure member, said cover sheet having a cover body portion and an upper and a lower lobe, said lobes having a width considerably less than the width of said body portion,
- (c) a backing sheet covering said figure member's adhesive side, said backing sheet substantially covering the figure member and the exposed adhesive coated side of said cover sheet and having a cut substantially across the middle portion, and
- (d) a registered aligning form placed on said cover sheet and forming a part of said mounting assembly article.

2. A mounting assembly article having a figure member or the like to be adjustably positioned, mounted and left on a suitable surface, comprising, in combination:

- (a) a figure member having adhesive means on one side,
- (b) a cover sheet covering the non-adhesive coated side of said figure member and having adhesive means on the side contacting said figure member, said cover sheet having a cover body portion and an upper and a lower lobe,
- (c) a backing sheet covering said figure member's adhesive side, said backing sheet substantially covering the figure member and the exposed adhesive coated side of said cover sheet, and having first and second cuts severing said upper and lower lobes for ease of removal from the end lobe portions of said cover body portion,
- (d) a registered aligning form placed on said cover sheet and forming a part of said mounting assembly article, said registered aligning form being a printed form on said cover body portion,
- (e) said form having parallel aligning legs extending substantially the length of said figure member, and
- (f) a base line along one end of said figure member and substantially perpendicular to said legs.

3. A mounting assembly article as defined in claim 2, wherein

- (a) said backing sheet having a middle cut substantially across the middle of said cover body portion, and
- (b) said middle cut forms an upper sheet adjacent said upper lobe and a lower sheet adjacent said lower lobe.

4. A mounting assembly article having a figure mem-

ber or the like to be adjustably positioned, mounted and left on a suitable surface, comprising, in combination:

- (a) a figure member having adhesive means on one side,
- (b) a cover sheet covering the non-adhesive coated side of said figure member and having adhesive means on the side contacting said figure member, said cover sheet having a cover body portion and an upper and a lower lobe member,
- (c) a backing sheet covering said figure member's adhesive side, said backing sheet having a shape substantially the same as said cover sheet and substantially covering the adhesive side of said cover sheet,
- (d) said backing sheet having first and second cuts severing said upper and lower lobes for ease of removal from the end lobes of said cover body portion,
- (e) said backing sheet having a middle cut substantially across the middle of said cover body portion said middle cut forming an upper sheet with said first cut adjacent said upper lobe and a lower sheet with said second cut adjacent said lower lobe, and
- (f) a registered aligning form placed on said cover sheet and forming a part of said mounting assembly article, said registered aligning form being a printed form on said cover body portion, said form having parallel aligning legs extending substantially the length of said figure member and a base line along one end of said figure member and substantially perpendicular to said legs.

5. A mounting article having a figure member or the like to be adjustably positioned, mounted and left on a suitable surface, comprising, in combination:

- (a) a figure member having adhesive means on one side,
- (b) a cover sheet covering said figure member and having adhesive means on the side contacting the figure member on its non-adhesive coated side,
- (c) a backing sheet substantially covering said figure member's and side cover sheet's exposed adhesive surfaces and having a shape substantially the same as said cover sheet, said backing sheet having a middle cut substantially across the middle of said cover body portion forming an upper and a lower sheet, said backing sheet having an upper and a lower lobe,
- (d) a first cut separating said upper lobe from said upper sheet, and
- (e) a second cut separating said lower lobe from said sheet.

6. The method of applying on a mounting surface some mounting assembly articles each having an adhesive coated back figure member with a backing sheet and an adhesive coated cover sheet and having thereon a registered aligning form with a base line and aligning legs which comprises:

- (a) providing said articles with temporary upper and lower mounting lobes,
- (b) establishing a guideline on said mounting surface,
- (c) aligning said base line on a first mounting assembly article with said guideline,
- (d) removing a portion of said backing sheet from said first mounting assembly article and temporarily mounting said first article on said mounting surface by means of said upper and lower temporary mounting lobes of said cover sheet,
- (e) aligning the base line of a second article with said guideline,
- (f) spacing an aligning leg portion of said registered form of said second article from an adjacent aligning leg portion of the registered form on said first article,
- (g) removing a portion of a backing sheet from said second article and temporarily mounting it to said mounting surface,

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- (h) viewing said first and second articles for proper spacing and aligning,
 (i) making necessary adjustments to spacing and alignment, and
 (j) removing the remainder of said backing sheets on said first and second articles by removing an upper sheet of said remainder of said backing sheet to permanently mount the upper portion of said figure member and by removing a lower sheet of said remainder of said backing sheet to permanently mount the lower portion of said figure member.
7. A method of applying mounting assembly articles on a mounting surface as set forth in claim 6, including
 (a) applying a protective coating over said permanently mounted figure members.

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