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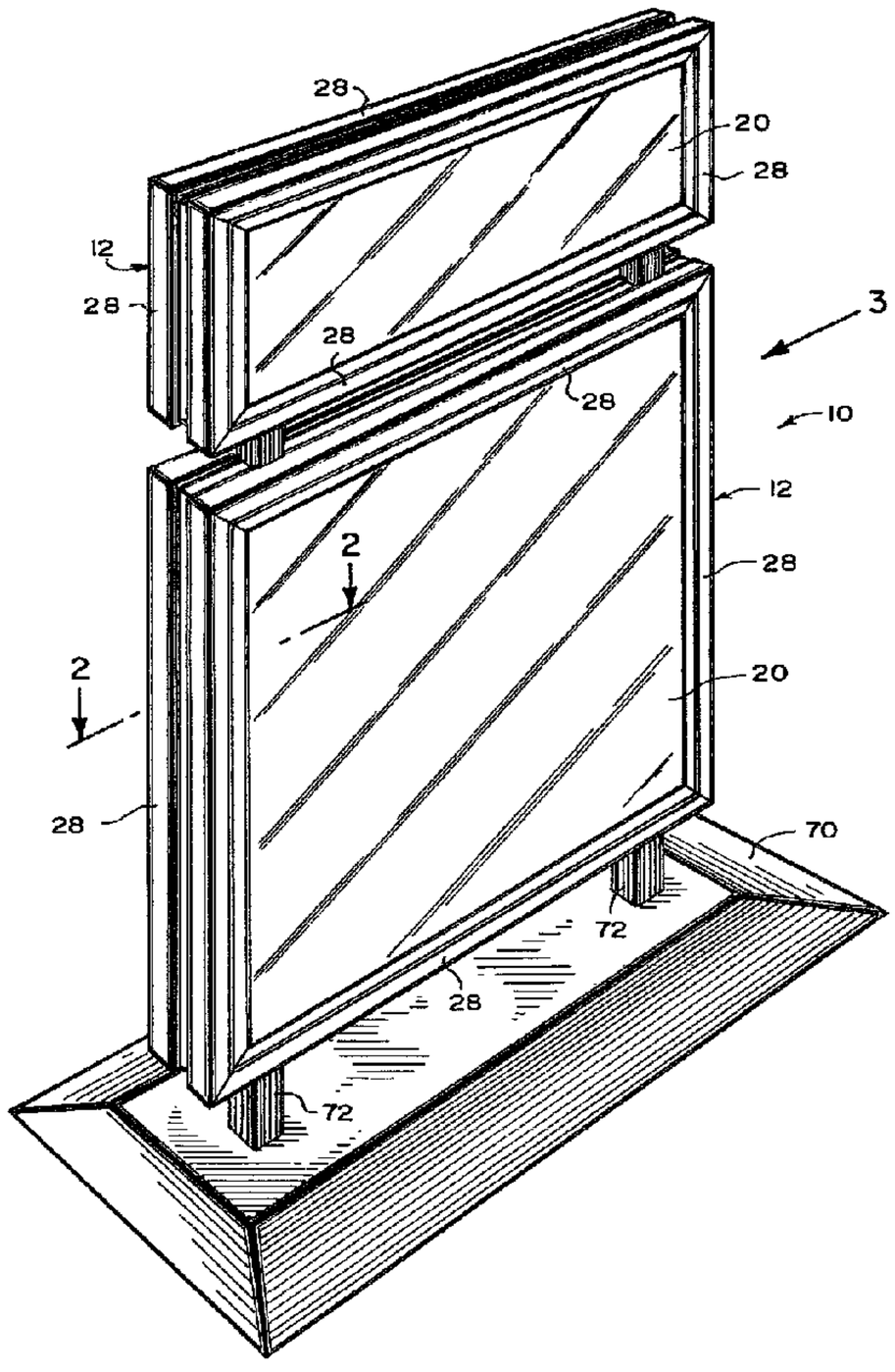
(54) **PANNEAU D'AFFICHAGE**

(54) **DISPLAY SIGN**



(57) Panneau d'affichage (10) amélioré constitué d'un cadre extrudé (12). Le dispositif comporte un panneau arrière (14), un élément (16) servant à monter le périmètre du panneau arrière (14) de façon amovible sur une partie arrière du cadre extrudé (12), un panneau transparent intérieur (18) placé dans une partie avant du cadre extrudé (12), de telle façon que le périmètre (18) vient buter contre une partie intérieure du cadre extrudé (12), ainsi qu'un panneau avant transparent (20). Un élément (22) permet de monter le périmètre du panneau avant transparent (20) de façon amovible sur le panneau intérieur transparent (18), de telle façon qu'une affiche

(57) An improved display sign (10) comprising an extruded frame (12). A rear panel (14) is provided. An element (16) is for mounting the perimeter of the rear panel (14) in a removable manner to a back portion of the extruded frame (12). An inner transparent panel (18) is placed within a front portion of the extruded frame (12), so that the perimeter (18) will butt against an inner portion of the extruded frame (12). A front transparent panel (20) is also provided. An element (22) is for mounting the perimeter of the front transparent panel (20) in a removable manner to the inner transparent panel (18), so that a sign (24) can fit between the inner

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(24) peut être insérée entre le panneau transparent intérieur (18) et le panneau transparent avant (20). Un système (26) situé à l'intérieur du cadre extrudé (12), entre le panneau arrière (14) et le panneau transparent intérieur (18), diffuse de la lumière, éclairant ainsi l'affiche (24) insérée dans le dispositif.

transparent panel (18) and the front transparent panel (20). A facility (26) within the extruded frame (12) between the rear panel (14) and the inner transparent panel (18) is for producing light, so as to illuminate the sign (24) therein.

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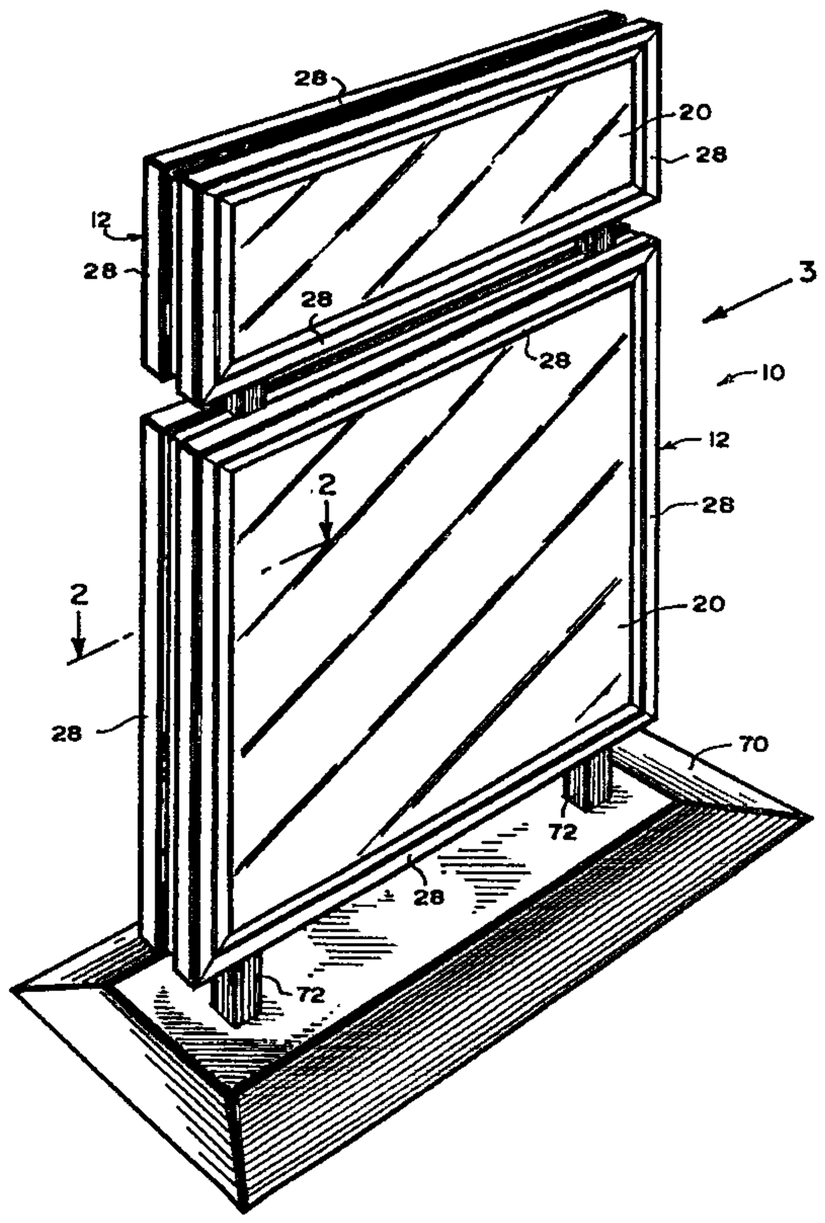
(54) Title: DISPLAY SIGN

(57) Abstract

An improved display sign (10) comprising an extruded frame (12). A rear panel (14) is provided. An element (16) is for mounting the perimeter of the rear panel (14) in a removable manner to a back portion of the extruded frame (12). An inner transparent panel (18) is placed within a front portion of the extruded frame (12), so that the perimeter (18) will butt against an inner portion of the extruded frame (12). A front transparent panel (20) is also provided. An element (22) is for mounting the perimeter of the front transparent panel (20) in a removable manner to the inner transparent panel (18), so that a sign (24) can fit between the inner transparent panel (18) and the front transparent panel (20). A facility (26) within the extruded frame (12) between the rear panel (14) and the inner transparent panel (18) is for producing light, so as to illuminate the sign (24) therein.



DISPLAY SIGN

Description

Technical Field

The instant invention relates generally to signs and more specifically it relates to an improved display sign.

Disclosure of the Invention

A primary object of the present invention is to provide an improved display sign that will overcome the shortcomings of the prior art devices.

Another object is to provide an improved display sign which contains a special aluminum extruded frame having a narrow profile to retain neon and/or fluorescent lighting tubes therein, and hold multiple, interchangeable paper posters or multiple acrylic sign faces behind its transparent removable front panel.

An additional object is to provide an improved display sign that is portable due to its lightweight and can be free standing, hanging or wall mounted, since it has a narrow profile and a built-in interlocking frame system.

A further additional object is to provide an improved display sign that has the ability to interchange neon tubes via hook and loop type fasteners, such as VELCRO, so as to increase portability of the neon tubes, while reducing breakage and cost thereof.

A further object is to provide an improved display sign that is simple and easy to use, with the ability to take apart the extruded frame and re-sized to smaller dimensions.

A still further object is to provide an improved display sign that is economical in cost to manufacture.

Further objects of the invention will appear as the description proceeds.

Brief Description of the Drawing Figures

Various other objects, features and attendant advantages of the present invention will become more fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein;

FIGURE 1 is a perspective view of the instant invention.

FIGURE 2 is an enlarged cross sectional perspective view taken along line 2-2 in Figure 1.

FIGURE 3 is an enlarged side view taken in the direction of arrow 3 in Figure 1, with parts broken away and in section, while some parts are shown in dotted hidden lines.

List of Reference Numbers in the Drawing Figures

10 improved display sign

12 extruded frame of 10

14 rear panel of 10

16 first mounting element of 10

18 inner transparent panel of 10

20 front transparent panel of 10

22 second mounting element of 10

24 sign between 18 and 20

26 light producing facility of 10

28 segment of 12

30 joining assemblage for 28

32 built-in rear channel in 28

34 built-in inner channel in 28

36 front corner passageway in 28

38 corner bracket of 30

40 matching back plate of 30

42 setscrew in 38

44 acrylic material of 14, 18 and 20

46 strip of hook and loop type fastener material for 16

48 strip of hook and loop type fastener material for 22

50 neon tube for 26

51 quick mount mounting pad on 50

52 adhesive backing on 51

53 tie on 51

54 transformer and ballast for 50

56 fluorescent lighting fixture with ballast for 26

58 fluorescent bulb in 56

60 picture frame type spring between 18 and 12

62 extruded H channel member for 18

64 elongated slot in 12 at 36

66 neon tube in 36

68 O-ring on 66

70 flat base

72 leg

73 interlocking screw on 12

74 angle iron bracket

76 first fastener in 74

78 vertical wall

80 second fastener in 74

Detailed Description of the Preferred Embodiment

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, Figures 1 through 3 illustrate an improved display sign **10**, comprising an extruded frame **12**. A rear panel **14** is provided. An element **16** is for mounting the perimeter of the rear panel **14** in a removable manner to a back portion of the extruded frame **12**. An inner transparent panel **18** is placed within a front portion of the extruded frame **12**, so that the perimeter of the inner transparent panel **18** will butt against an inner portion of the extruded frame **12**. A front transparent panel **20** is also provided.

An element **22** is for mounting the perimeter of the front transparent panel **20** in a removable manner to the inner transparent panel **18**, so that a sign **24** can fit between the inner transparent panel **18** and the front transparent panel **20**. A facility **26** within the extruded frame **12** between the rear panel **14** and the inner transparent panel **18** is for producing light, so as to illuminate the sign **24** therein.

The extruded frame **12** consists of four segments **28** fitted together to extend about the perimeters of the rear panel **14**, the inner transparent panel **18** and the front transparent panel **20**. An assemblage **30**, as shown in Figure 3, is for joining the four segments **28** of the extruded frame **12** together. Each segment **28** of the extruded frame **12** includes a built-in rear channel **32**, a built-in inner channel **34** and a front corner passageway **36**.

The joining assemblage **30** consists of a plurality of corner brackets **38** and a plurality of matching back plates **40**. Two setscrews **42** are for each corner bracket **38**. One corner bracket **38** and one back plate **40** can be inserted into the built-in rear channel **32** and the built-in inner channel **34**, between two segments **28** of the extruded frame **12**. The setscrews **42** are tightened to hold the segments **28** together.

The rear panel **14**, the inner transparent panel **18** and the front transparent panel **20** are fabricated out of acrylic material **44**. The first mounting element **16** is a strip of hook and loop type fastener material **46**. The second mounting element **22** is a strip of hook and loop type fastener material **48**. The first mounting element **16** can also be screws, double sided tape or a weld.

The light producing facility **26** consists of a neon tube **50**. A plurality of quick mount mounting pads **51** with adhesive backings **52** and ties **53** are for attaching the neon tube **50** to an inner surface of the rear panel **14**. A self contained transformer **54** is carried between the rear panel **14** and the inner transparent panel **18**. The transformer and ballast **54** will electrically power the neon tube **50**.

The light producing facility **26**, shown in Figure 3, can also include a fluorescent lighting fixture **56** with ballast affixed into the extruded frame **12**, between the rear panel **14** and the inner transparent panel **18**. A fluorescent bulb **58** is carried in the fluorescent lighting fixture **56** and will be electrically powered by the ballast therein.

As shown in Figure 2, a plurality of picture frame type springs **60** can be supplied. They are compressed and inserted between the inner transparent panel **18** and a front portion of the extruded frame **12**, so as to force the inner transparent panel **18** to better butt against the inner portion of the extruded frame **12** depending upon thickness thereof. An extruded H channel member **62** can be inserted about the perimeter edges of the inner transparent panel **18**, to allow electrical wiring access therethrough.

As shown in Figure 2, an inner portion of the extruded frame **12** can have an elongated slot **64** at the front corner passageway **36**. A neon tube **66** is provided. A plurality of O-rings **68** are placed onto the neon tube **66**. The neon tube **66** can be inserted into the front corner passageway **36**, to light up the edges of the inner transparent panel **18**.

The improved display sign **10** shown in Figure 1, contains a flat base **70** to sit upon a floor. A pair of legs **72** spaced apart and are attached by screwing each leg **72** to an interlocking screw **73**, as shown in Figure 3, on the bottom of the extruded frame **12** and are also attached to the flat base **70**, so as to support the improved display sign **10** in an upright position from the floor. In Figure 3, an angle iron bracket **74** is mounted by a first fastener **76**, to a vertical wall **78**. The angle iron bracket **74** is mounted by a second fastener **80** to a top surface of the extruded frame **12**, so as to support the improved display sign **10** in an upright position on the vertical wall **80**.

Claims

1. An improved display sign, comprising:

a) an extruded frame;

b) a rear panel;

c) means for mounting the perimeter of said rear panel in a removable manner to a back portion of said extruded frame;

d) an inner transparent panel placed within a front portion of said extruded frame, so that the perimeter of said inner transparent panel will butt against an inner portion of said extruded frame;

e) a front transparent panel;

f) means for mounting the perimeter of said front transparent panel in a removable manner to said inner transparent panel, so that a sign can fit between said inner transparent panel and said front transparent panel; and

g) means within said extruded frame between said rear panel and said inner transparent panel for producing light, so as to illuminate the sign therein, wherein said light producing means includes:

i) a neon tube;

ii) a plurality of quick mount mounting pads with adhesive backings and ties for attaching said neon tube to an inner surface of said rear panel; and

iii) a self contained transformer and ballast carried between said rear panel and said inner transparent panel, whereby said transformer and ballast will electrically power said neon tube.

2. An improved display sign, comprising:

a) an extruded frame;

b) a rear panel;

c) means for mounting the perimeter of said rear panel in a removable manner to a back portion of said extruded frame;

d) an inner transparent panel placed within a front portion of said extruded frame, so that the perimeter of said inner transparent panel will butt against an inner portion of said extruded frame;

e) a front transparent panel;

f) means for mounting the perimeter of said front transparent panel in a removable manner to said inner transparent panel, so that a sign can fit between said inner transparent panel and said front transparent panel;

g) means within said extruded frame between said rear panel and said inner transparent panel for producing light, so as to illuminate the sign therein,

h) a plurality of picture frame type springs that are compressed and inserted between said inner transparent panel and a front portion of said extruded frame, so as to force said inner transparent panel to better butt against the inner portion of said extruded frame depending upon thickness thereof; and

i) an extruded H channel member inserted about the perimeter edges of said inner transparent panel to allow electrical wiring access therethrough.

3. An improved display sign, comprising:

a) an extruded frame

b) a rear panel;

c) means for mounting the perimeter of said rear panel in a removable manner to a back portion of said extruded frame;

d) an inner transparent panel placed within a front portion of said extruded frame, so that the perimeter of said inner transparent panel will butt against an inner portion of said extruded frame;

e) a front transparent panel;

f) means for mounting the perimeter of said front transparent panel in a removable manner to said inner transparent panel, so that a sign can fit between said inner transparent panel and said front transparent panel;

g) means within said extruded frame between said rear panel and said inner transparent panel for producing light, so as to illuminate the sign therein;

wherein said extruded frame consists of four segments fitted together to extend about the perimeters of said rear panel, said inner transparent panel and said front transparent panel; and means for joining said four segments of said extruded frame together; wherein each segment of said extruded frame includes:

i) a built-in rear channel;

ii) a built-in inner channel; and

iii) a front corner passageway.

4. An improved display sign as defined in Claim 3, further including:

a) an inner portion of said extruded frame having an elongated slot at said front corner passageway;

b) a neon tube; and

c) a plurality of O-rings placed onto said neon tube, so that said neon tube can be inserted into said front corner passageway, to light up the edges of said inner transparent panel.

5. An improved display sign as defined in Claim 3, wherein said joining means includes:

a) a plurality of corner brackets;

b) a plurality of matching back plates; and

c) two setscrews for each said corner bracket, so that one said corner bracket and one said back plate can be inserted into said built-in rear channel and said built-in inner channel between two said segments of said extruded frame and said setscrews tightened to hold said segments together.

6. An improved display sign as defined in Claim 5, wherein said rear panel, said inner transparent panel and said front transparent panel are fabricated out of acrylic material.

7. An improved display sign as defined in Claim 6, wherein said first mounting means is a strip of hook and loop type fastener material.

8. An improved display sign as defined in Claim 7, wherein said second mounting means is a strip of hook and loop type fastener material.

9. An improved display sign as defined in Claim 8, wherein said light producing means includes:

a) a neon tube;

b) a plurality of quick mount mounting pads with adhesive backings and ties, for attaching said neon tube to an inner surface of said rear panel; and

c) a self contained transformer and ballast carried between said rear transparent panel and said inner transparent panel, whereby said transformer and ballast will electrically power said neon tube.

10. An improved display sign as defined in Claim 9, wherein said light producing means includes:

a) a fluorescent lighting fixture with ballast affixed into said extruded frame between said rear panel and said inner transparent panel; and

b) a fluorescent bulb carried in said fluorescent lighting fixture and will be electrically powered by said ballast therein.

11. An improved display sign as defined in Claim 10, further including:

a) a plurality of picture frame type springs that are compressed and inserted between said inner transparent panel and a front portion of said extruded frame, so as to force said inner transparent panel to better butt against the inner portion of said extruded frame depending upon thickness thereof; and

b) an extruded H channel member inserted about the perimeter edges of said inner transparent panel to allow electrical wiring access therethrough.

12. An improved display sign as defined in Claim 11, further including:

a) an inner portion of said extruded frame having an elongated slot at said front corner passageway;

b) a neon tube; and

c) a plurality of O-rings placed onto said neon tube, so that said neon tube can be inserted into said front corner passageway, to light up the edges of said inner transparent panel.

13. An improved display sign as defined in Claim 12, further including:

a) a flat base to sit upon a floor; and

b) a pair of legs spaced apart are attached by screwing each said leg to an interlocking screw on the bottom of said extruded frame and are also attached to said flat base, so as to support said improved display sign in an upright position from the floor.

14. An improved display sign as defined in Claim 12, further including an angle iron bracket mounted by a first fastener to a vertical wall and mounted by a second fastener to a top surface of said extruded frame, so as to support said improved display sign in an upright position on the vertical wall.

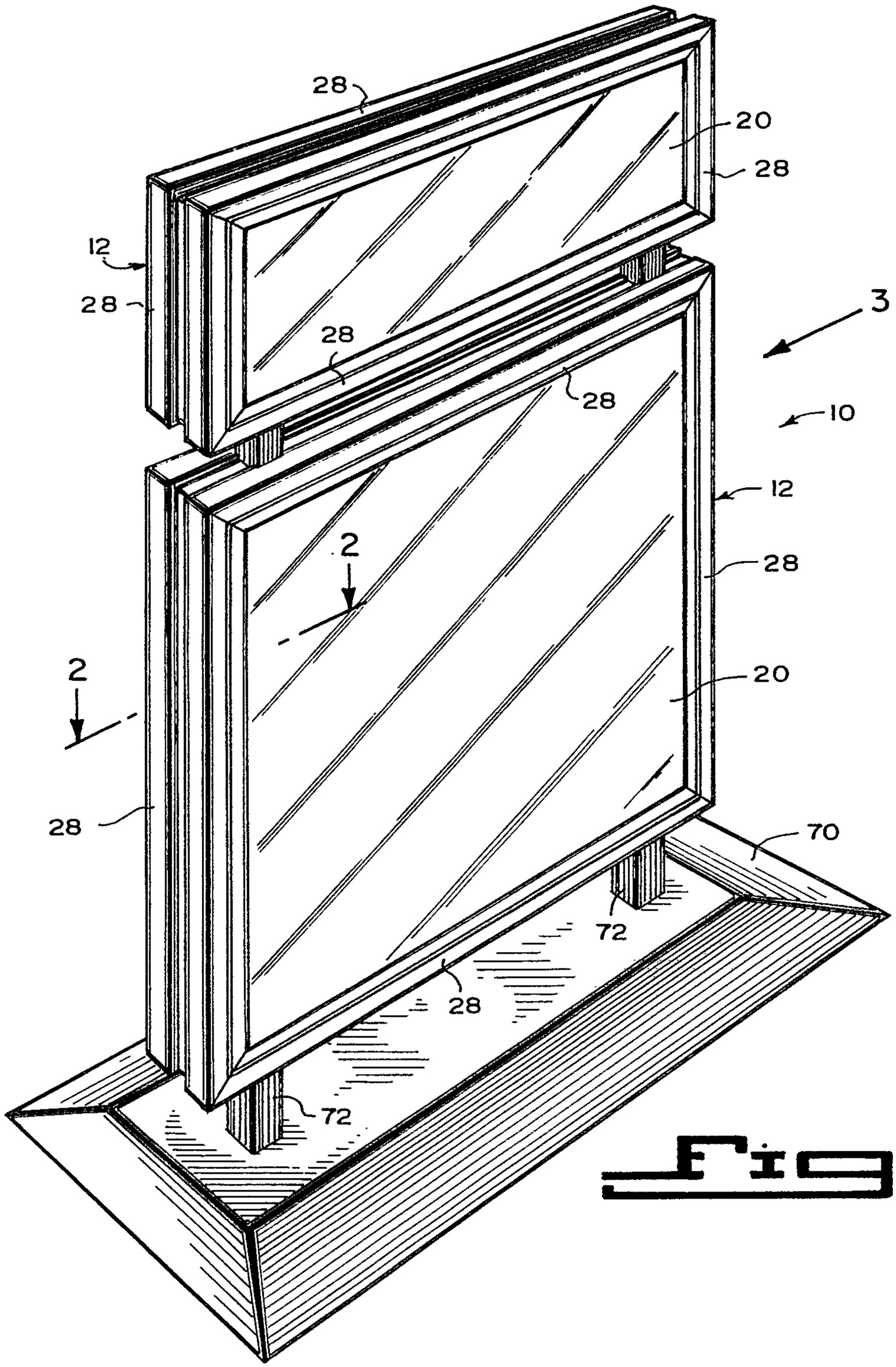
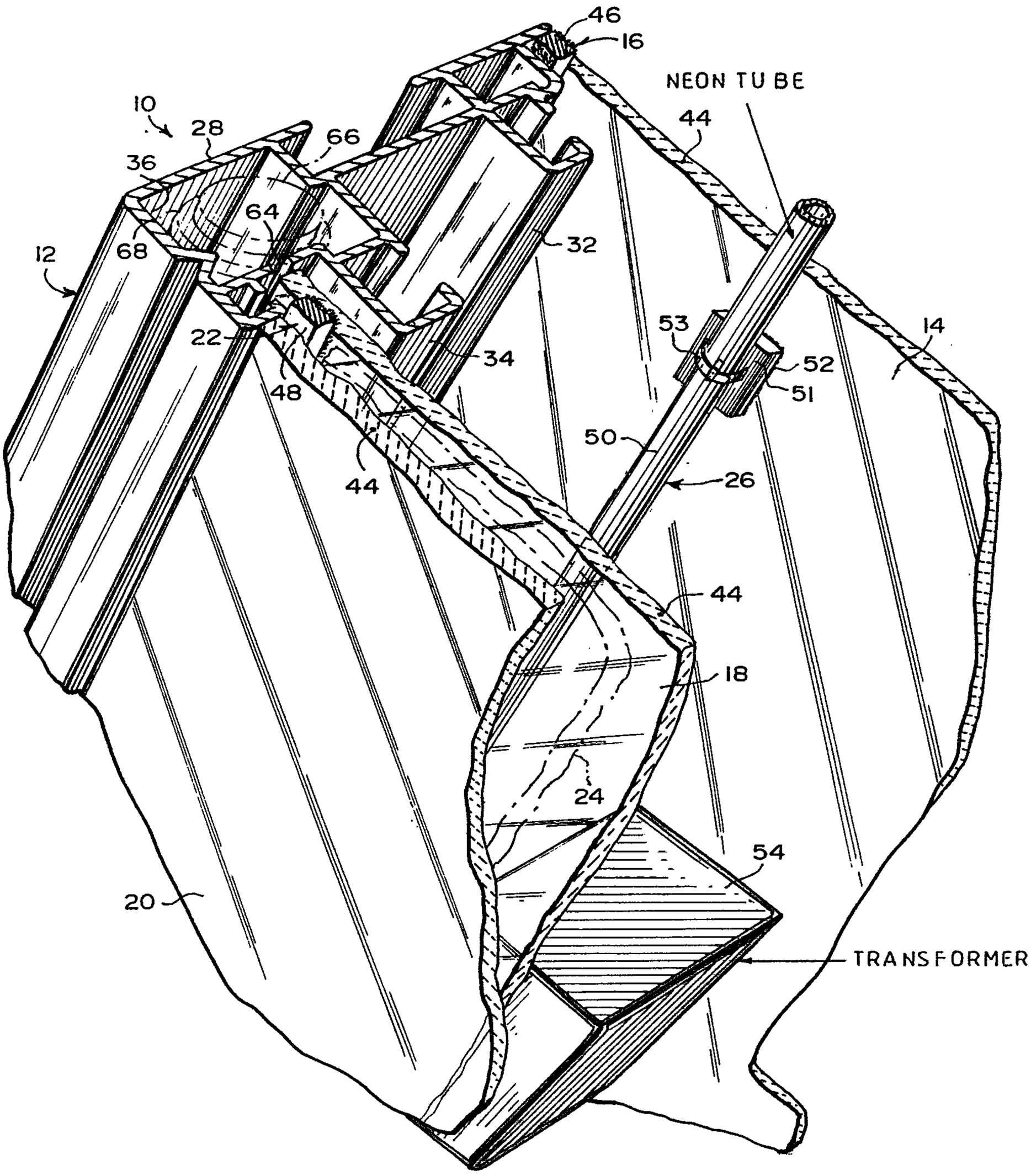


Fig. 1

Fig-2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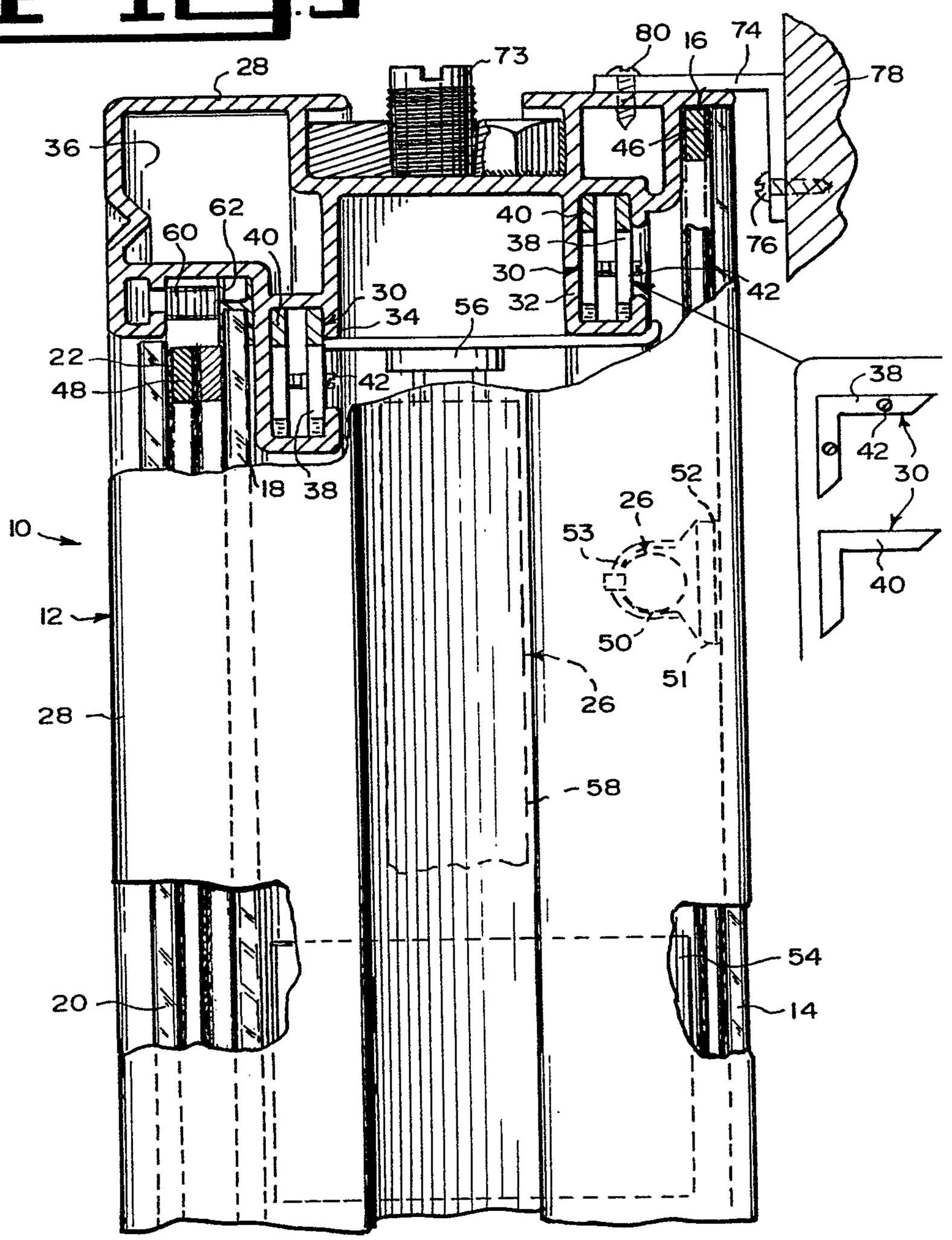
TRANSFORMER

Fig.3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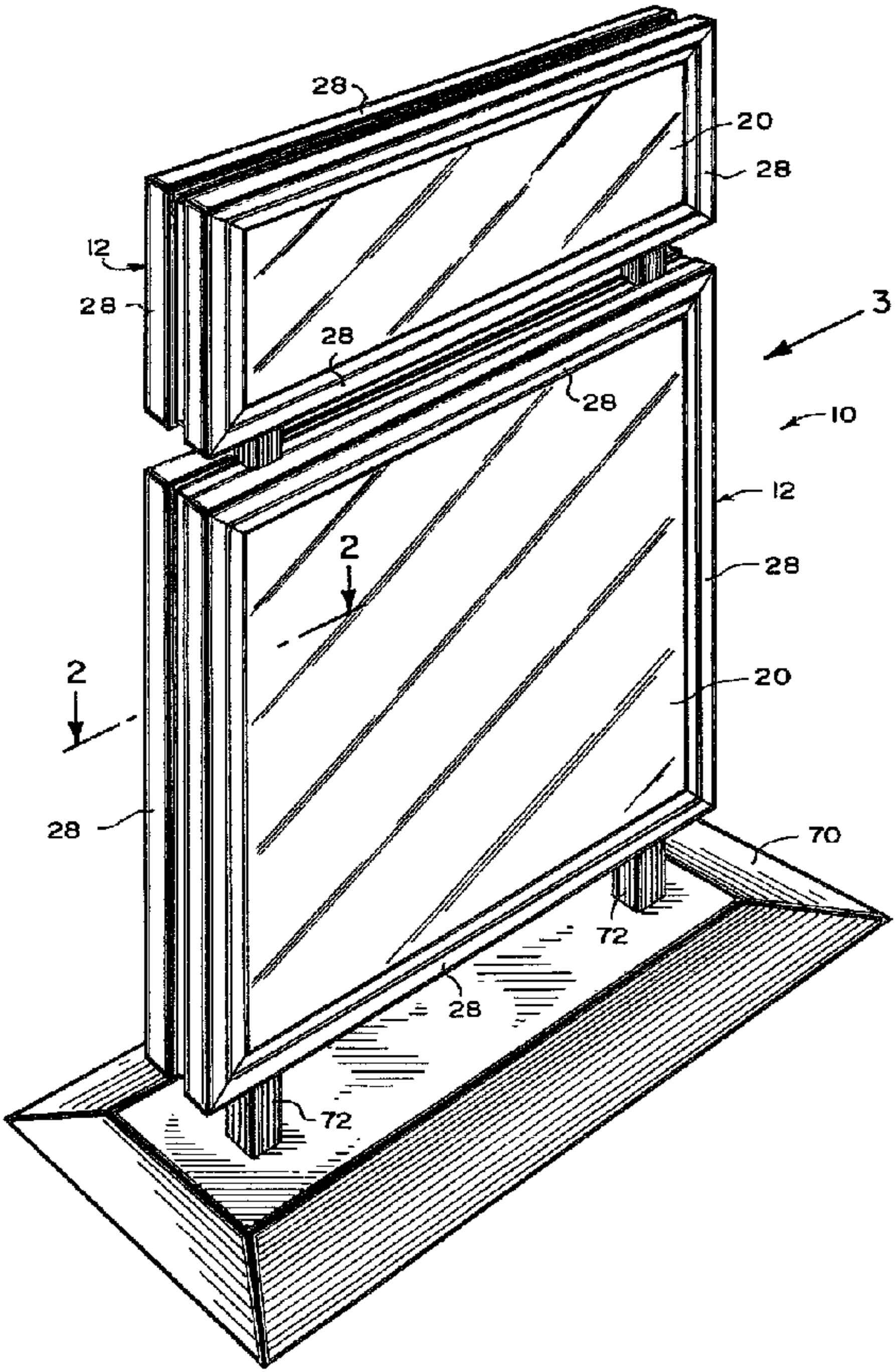
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