[15] 3,660,918

[45] May 9, 1972

[54] NEGATIVE INSERT HOLDER FOR BUSINESS DIRECTORIES

[72]	Inventor:	Robert Calif.	I.	Bourseau,	Marina	Del	Rey,
[,~]	mvemor.	Calif.	1.	bourseau,	Marina	Del	Rey

[73]	Assignee:	Architectural	Signing,	Inc
------	-----------	---------------	----------	-----

[22] Filed: Mar. 27, 197	[22]	Filed:	Mar.	27,	197
--------------------------	------	--------	------	-----	-----

121	1	Anı	al N	lo.:	23	1 60
[41		API	J1. L	NO.:	43.	137

		The state of the s
[52]	U.S. Cl	40/64, 40/133
[51]	Int. Cl.	
[58]	Field of Search	40/64, 65, 132 D. 133 I

[56] References Cited

UNITED STATES PATENTS

4			
40/64 X	Hector	5/1939	2,160,544
40/64		10/1940	2,219,257
40/133 В	Leech	7/1918	1,271,044
40/133 B X	Stewart et al	2/1930	1,747,400
40/64		4/1935	1,996,541

FOREIGN PATENTS OR APPLICATIONS

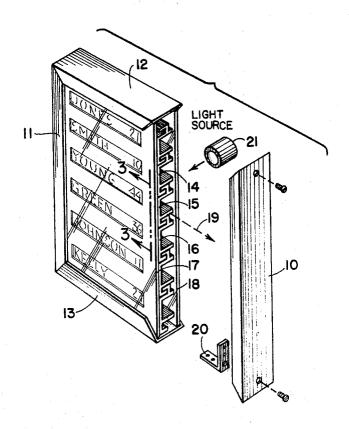
6,402,354	3/1964	Netherlands40/64
1,090,948	10/1960	Germany40/64

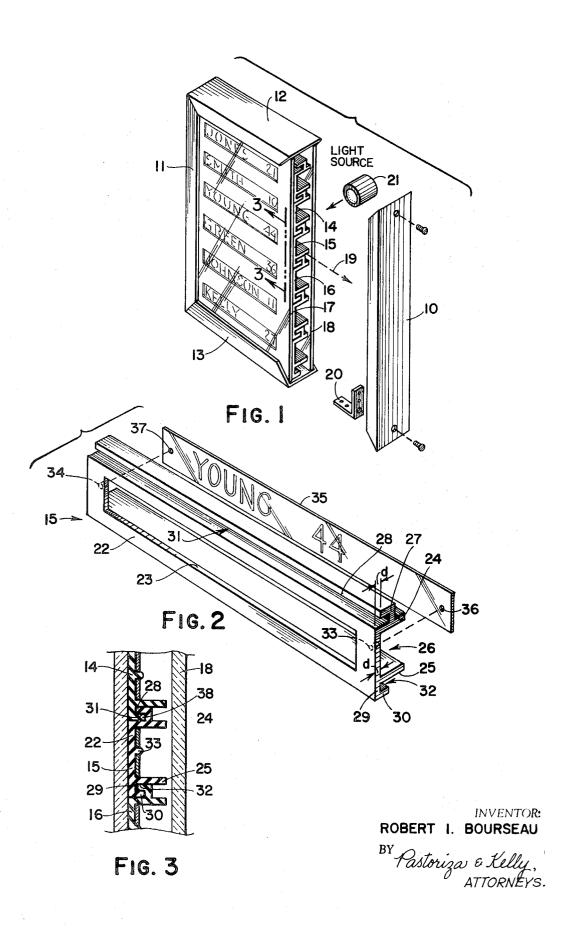
Primary Examiner—Robert W. Michell Assistant Examiner—Richard Carter Attorney—Pastoriza & Kelly

57] ABSTRACT

A directory sign includes a frame for holding a plurality of identical inserts in a vertical column, the inserts displaying name bearing media. Each insert includes a front wall having a cut-out window through which the name on the medium inserted behind the wall is visible. The upper and lower flange means define oppositely facing elongated channels such that the upper channel of the insert may be intercoupled with the lower channel of the next adjacent insert thereabove to define a light proof connection between adjacent inserts when in the vertical column. With this arrangement any one insert is slidable horizontally from between the adjacent inserts to effect a change in the order of the names.

3 Claims, 3 Drawing Figures





NEGATIVE INSERT HOLDER FOR BUSINESS DIRECTORIES

This invention relates generally to directories and more particularly, to an improved insert holder for displaying names on a negative type media for use in backlighted business directo-

BACKGROUND OF THE INVENTION

Conventional business directories usually include a rectangular frame with strips of felt horizontally aligned one above the other defining closely spaced grooves there between. With this arrangement, individual letters may be aligned and held in a desired position by means of small ears on the letters receivable in the grooves.

More recent directories introduced on the market utilize name bearing media referred to as negative strips wherein the name is defined by transparent lettering on a substantially opaque film strip background. These strips may then be vertically aligned in a desired order within a directory display 20 frame. The frame itself includes a rear light source which is diffused so that the lettering will be clearly visible from the front of the frame during the day or night hours.

In both the foregoing types of directories and in many other types presently available, to change a name, add a new name. or remove a name, it is generally necessary to rearrange the entire vertical array of names in the column. This rearrangement is necessary to preserve the alphabetical listing of the operations even when only a single name is to be changed can thus be time consuming and annoying.

BRIEF DESCRIPTION OF THE PRESENT INVENTION

With the foregoing in mind, the present invention contem- 35 plates a vastly improved business directory wherein the forgoing time consuming operation of rearranging several names in a vertical array to accommadate a change in only a single name is avoided.

More particularly, the invention, in its preferred embodiment, relates to negative insert type business directories incorporating their own light source and negative film strips as the name bearing media. In accord with the invention, there are provided a plurality of individual inserts or holders for the name bearing strips, these inserts being arranged in a vertical column within the business directory frame. Each of the inserts includes complimentary coupling means at its upper and lower edges such that the upper coupling at the upper edge of one insert can be intercoupled with the complimentary lower 50 coupling of the lower edge of the next adjacent identically designed insert positioned there-above. The intercoupling is such as to provide a substantially light proof connection between the adjacent inserts so that no light lines between names are visible when the directory is viewed from the front 55 and the light source therein is energized.

The intercoupling is also designed such that any one or more of the inserts may be slid horizontally from between the adjacent inserts and the remaining vertical column of inserts above the removed insert slid down as a unit within the frame. It will thus be evident that a name may be removed or another name may be substituted at any vertical point in the column without having to individually rearrange the other inserts since these other inserts, which will remain in intercoupled relationship, can be moved as a unit.

In the preferred embodiment, each of the inserts is identically designed to include a front wall having a cut-out window through which the name on the medium inserted behind the wall is visible. The upper and lower edges of the wall include 70 upper and lower flange means defining oppositely facing elongated channels such that the upper channel of the insert may be intercoupled with the lower channel of the next adjacent insert thereabove to define the desired light proof connection between the adjacent inserts in the vertical column.

BRIEF DESCRIPTION OF THE DRAWINGS

A better understanding of the invention will be had by now referring to the preferred embodiment thereof as illustrated in the accompanying drawings, in which:

FIG. 1 is a schematic perspective view partly exploded illustrating a business directory in accord with the present invention:

FIG. 2 is an enlarged perspective view of one of the in-10 dividual inserts incorporated in the directory of FIG. 1 showing a name bearing medium in position to be received in and held by the insert; and,

FIG. 3 is an enlarged fragmentary cross-section taken in the direction of the arrows 3-3 of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED **EMBODIMENT**

Referring first to FIG. 1 there is shown a directory sign comprised of right side, left side, top, and bottom, channel members 10, 11, 12, and 13, respectively, adapted to be coupled together to define an open frame. In the drawing, the right side channel 10 is shown removed from the remaining structure. The right and left side channels 10 and 11 when assembled have their channels facing inwardly toward each other to define guiding grooves.

A plurality of identical insert holders are positioned within the frame defined by the channel members with their ends received in the opposing guiding grooves. Some of these memnames and avoid random gaps in the overall display. Such 30 bers are indicated at 14, 15, and 16 stacked in a vertical column one above the other. A non-glare treated front glass plate 17 is shown overlying the entire vertical column of inserts and a light diffusing glass plate 18, in turn, is disposed to the rear of the inserts.

> With the foregoing arrangement, and the right side channel member 10 removed as shown, any one of the inserts, such as the insert 15, may be slid from between the adjacent inserts in a horizontal direction as indicated by the arrow 19 to remove the same. The individual inserts themselves are arranged to hold negative film strips bearing a suitable name defined by transparent portions. With all of the inserts properly positioned, the side member channel 10 can be secured to the right side of the frame. Towards this end a suitable corner bracket such as indicated at 20 may be utilized to hold the side, top, and bottom channel members together.

> The closed frame structure will incorporate a light source. schematically indicated in FIG. 1 at 21. This light source is such as to be diffused by the diffusion glass plate 18 so that all of the names will be clearly visible from the front of the directory during daylight or evening hours.

Referring now to FIG. 2, there is shown one of the inserts 15 in greater detail. Since all of the inserts are identically constructed, a detailed description of one will suffice for the others.

As shown, the insert 15 includes a front wall 22 having a rectangular cut-out window 23 through which any medium disposed behind the wall will be visible. The upper and lower longitudinal edges of the front wall 22 include upper and lower flange means 24 and 25 extending rearwardly as shown to define a C-shaped channel 26. The upper flange means 24 includes an upwardly extending portion 27 turning into a forwardly extending portion 28 terminating short of a plane of the front wall 22 by a given distance d.

The lower flange means 25 includes a lower flange extending rearwardly from a point spaced a given distance above the lower edge of the front wall portion indicated at 29. This portion merges into the lower edge itself which then turns rearwardly at 30.

The upper and lower flange means define, respectively an elongated forwardly facing upper channel 31 and an elongated rearwardly facing lower channel 32. The rear side of the wall 22 adjacent to the ends of the elongated rectangular cut-out window 23 include locating pins such as indicated at 33 and 75 34. These pins are provided for properly positioning and in-

dexing a name bearing medium such as a negative film strip 35 shown exploded from the insert in FIG. 2. Suitable holes 36 and 37 in the film insert 35 are arranged to register with the pins 33 and 34 respectively so that the name indicia on the film strip will be visible through the rectangular window.

Referring now to FIG. 3, it will be apparent as to the manner in which the plurality of inserts may be positioned one above the other to define a vertical column. Thus, considering the insert 15 with the upper and lower adjacent inserts 14 and 16, it will be noted that the elongated forwardly facing upper channel 31 is dimensioned to receive the turned in portion 38 at the lower edge of the next adjacent insert 14 thereabove corresponding to the rearwardly turned portion 30 of the insert 15. The reception of this turned in portion is such that the 15 elongated rearwardly facing lower channel of the said next adjacent insert 14 corresponding to the lower channel 32 of the insert 15 receives the forwardly extending portion 28 at the upper edge of the first insert 15. This intercoupling arrangement assures a light proof connection between the adjacent in- 20

The intercoupling is the same for the lower elongated rearwardly facing channel 32 of the insert 15, this channel receiving the forwardly extending portion of the upper flange means the insert 15 being received in the upper elongated forwardly facing channel for the insert 16.

With reference once again to FIG. 2, it will be noted that the small deminsion "d" corresponds to the thickness "d" of the front wall 22. As a result, when the inserts are intercoupled as illustrated in FIG. 3, the front walls of all the inserts will be coplanar.

OPERATION

In operation, the individual inserts are provided with negative film strips bearing suitable names to be included in the directory of FIG. 1. These film strips may readily be inserted against the rear surface of the wall 22 as described in conjunction with the insert 15 in FIG. 2 by disposing the small openings 36 and 37 over the locating pins 33 and 34. The respective inserts are then intercoupled as described and shown in FIG. 3 with the left end of the inserts as viewed in FIG. 1 received within the channel of the side frame member 11. After the inserts have been positioned between the glass plates 17 and 18 as shown in FIG. 1, the remaining right side frame member 10 is fastened into position.

When the light incorporated within the frame structure is energized, the various names will be clearly visible and there 50 will be no light leakage between adjacent inserts as a consequence of the unique intercoupling relationship.

If is is desired to change, remove, or insert a name in a desired alphabetical position, it is only necessary to remove one of the side frames such as the frame 10 as shown in FIG. 1. 55 The insert to be removed is then slid horizontally from between the adjacent members, the upper and lower flange means permitting this horizontal sliding movement. After removal, the negative film strip such as 35 illustrated in FIG. 2 may be removed and replaced with the new name if the name 60 is to be changed or, if no addition is to be made, the remaining inserts may be moved upwardly as a unit and the upper flange means of the top insert caused to engage the lower flange means of the lower insert in the upper set of inserts. This 65 coupling can be accomplished either by making the opposing frame member guide grooves of sufficient width to accommodate movement of the insert out of its plane or by sliding the entire vertical column out from the guide groove channel formed in the frame member 11 so that the inserts to be cou- 70 pled together can be moved out of the plane of their front walls to effect the intercoupling. The entire vertical column of the inserts may then be received back in the guide channel of the frame member 11. The remaining side member 10 is then fastened back in place.

The same procedure may be used if an additional name is to be inserted. Thus, the proper alphabetical position is selected and the vertical column simply uncoupled at this point. This additional name and insert is then intercoupled at the points of separation of the vertical column and the upper and lower coupled members making up the column moved as units respectively up and down to accommodate the new insert. There is no necessity to decouple or disengage each individual insert or to shift them individually.

Where only a change in the name itself is involved and wherein the name begins with the same alphabetical letter so that there is no need to relocate the insert, it is only necessary to remove the negative insert film strip such as the strip 35 of FIG. 2 and substitute therefor the new film strip bearing the new name. In this case, it is only necessary to slide the insert horizontally partially from the remaining inserts to facilitate replacement of the name bearing medium.

From the foregoing description, it will thus be evident that the present invention has provided a greatly improved directory sign wherein various problems associated with signs heretofore available are overcome.

What is claimed is:

1. In a directory sign for displaying a plurality of name bearfor the adjacent insert 16 and the inturned lower portion 30 of 25 ing media in a vertical column within a frame structure, a plurality of identical inserts for holding respectively said media, each insert including: a front wall having a cut-out window through which the name on a medium inserted behind said wall is visible, the upper and lower edges of said wall including upper and lower flange means, the upper flange means including an upper flange extending rearwardly from the upper edge of said insert, said upper flange having an upwardly extending portion turning into a forwardly extending portion terminating short of the plane of said front wall by a given distance to 35 define an upper elongated channel, the lower flange means including a lower flange extending rearwardly from a point spaced a given distance above the lower edge of said insert, said lower edge turning rearwardly to define with said lower flange an oppositely facing lower channel, said upper channel being dimensioned to receive the turned in portion of the lower edge of the next adjacent insert thereabove such that the oppositely facing lower channel of the next adjacent insert receives the forwardly extending portion of the first-mentioned insert, so that a light proof intercoupling is effected between adjacent ones of said inserts, said first mentioned given distance corresponding to the thickness of said front wall so that the front walls of all said inserts when intercoupled together in series are substantially coplanar, any one insert being slidable horizontally from between the adjacent inserts to effect a change in the order of the names.

A directory sign for displaying a plurality of name bearing media in a vertical column, comprising, in combination:

- a. right side, left side, top, and bottom channel members coupled together to define an open frame with the channels of at least the right and left side members facing inwardly towards each other to define guiding channel grooves; and,
- b. a plurality of identical insert holders for receiving said media, respectively, and insert holders extending horizontally between said channels, one above the other, with their ends received in said guiding grooves, each insert holder comprising:
 - 1. a front wall having a rectangular cut-out window through which the name on a medium inserted behind said wall is visible,
 - 2. said wall having an upper flange extending rearwardly from its upper edge, said upper flange including an upwardly extending portion turning into a forwardly extending portion terminating short of the plane of said front wall by a given distance to define an elongated forwardly facing upper channel,
 - 3. said wall having a lower flange extending rearwardly from a point spaced a given distance above its lower edge, said lower edge turning rearwardly to define with

said lower flange an elongated rearwardly facing lower channel, said elongated forwardly facing upper channel being dimensioned to receive the turned in portion of the lower edge of a next adjacent insert thereabove such that the elongated rearwardly facing lower channel of said next adjacent insert receives said forwardly facing portion of said first mentioned insert so that a light proof intercoupling is effected between adjacent ones of such inserts, said first mentioned given distance corresponding to the thickness of said front wall so that 10

the front walls of all said inserts when intercoupled together in series are substantially coplanar, any one insert being slidable horizontally from between its adjacent inserts by removing one of said side members defining said open frame.

3. A directory according to claim 2, in which each insert includes locating pins on the rear surface of the front wall for properly positioning a name bearing medium received between the upper and lower flanges.

15

20

25

30

35

40

45

50

55

60

65

70