United States Patent [19]

Anson

[11] **3,739,105**

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[54] **SUPPLEMENTAL PUSH BUTTON INDEX FOR USE WITH PUSH BUTTON ARRAY AS ON A PUSH BUTTON TELEPHONE**

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[21] Appl. No.: **229,758**

[52] **U.S. Cl.** ..... **179/90 K,** 179/90 K

[51] **Int. Cl.** **H04n 1/26**

[58] **Field of Search** ..... 179/90 K, 90 A, 90 AD, 179/90 AN, 90 AT, 90 L; 40/336

[56] **References Cited**

UNITED STATES PATENTS

3,345,769	10/1967	Nathan	40/336
3,445,610	5/1969	Lind	179/90 K
3,479,470	11/1969	Ham	179/90 K
3,120,584	2/1964	Grunfelder	179/90 K

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[57] **ABSTRACT**

An apertured frame is provided which is adapted to fit over a push button array, each aperture of the frame having a tab slidably mounted therein and bearing a legend which may correspond to the legend on the push button associated therewith. Each tab fits over its respective push button and may be secured thereto by means of a pressure sensitive adhesive applied to the underside of the tab. The tabs of the array are larger than the push buttons and are progressively offset in two dimensions with respect to the push button array, thereby to provide a tab array having larger dimensions thatn the push button array.

1 Claim, 4 Drawing Figures

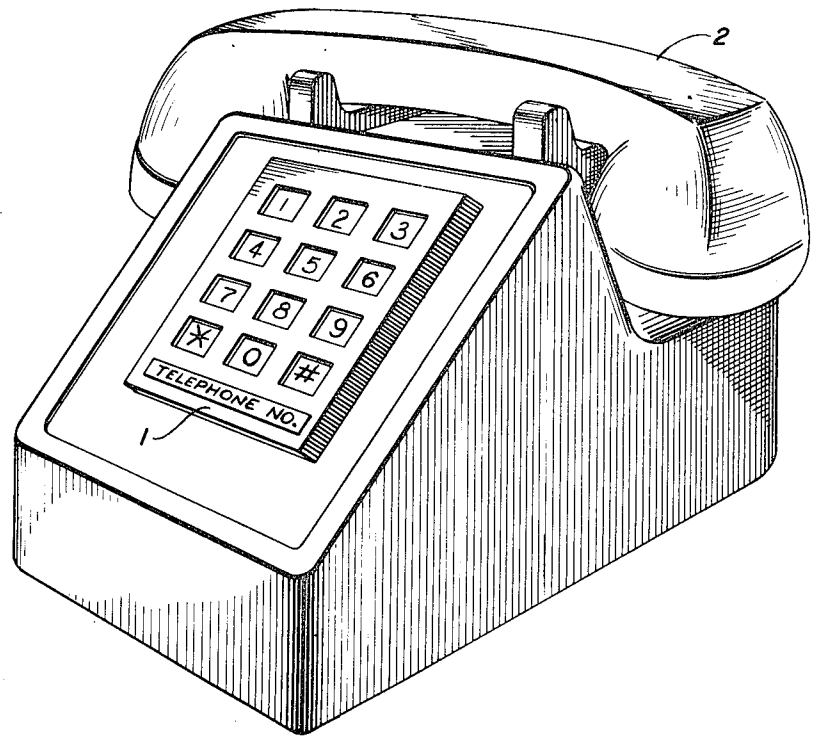


Fig. 1

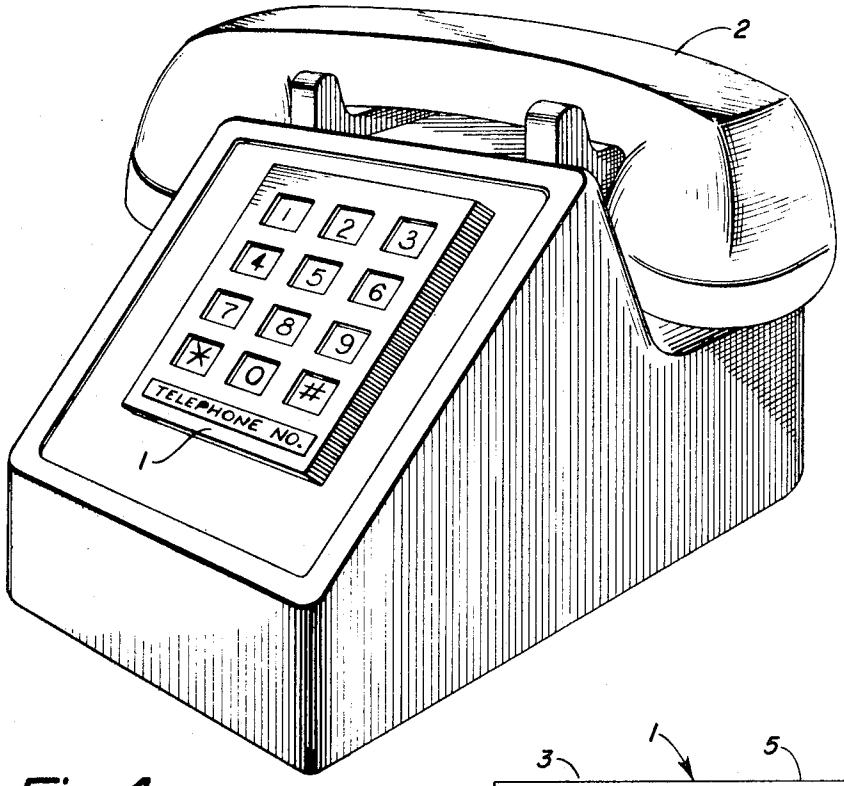


Fig. 2

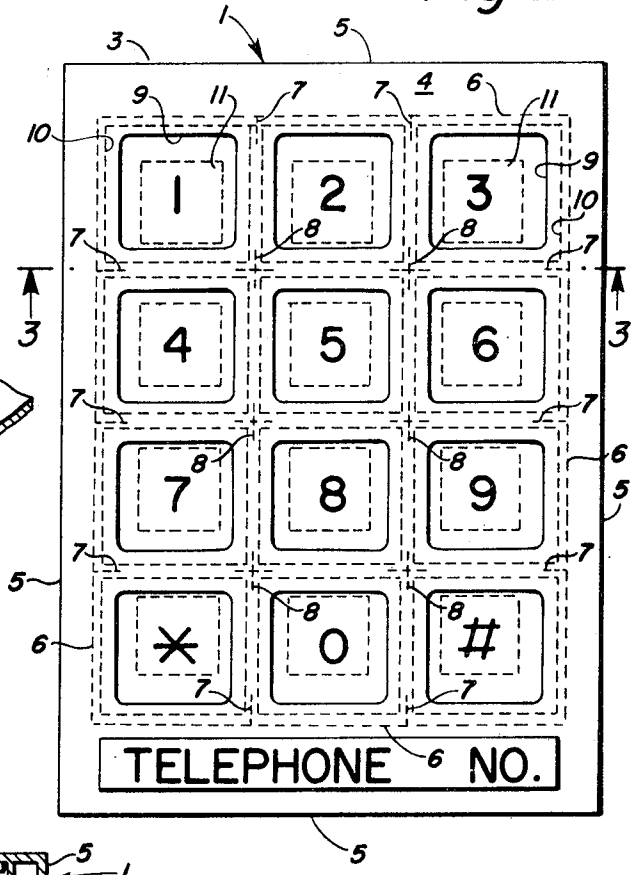


Fig. 4

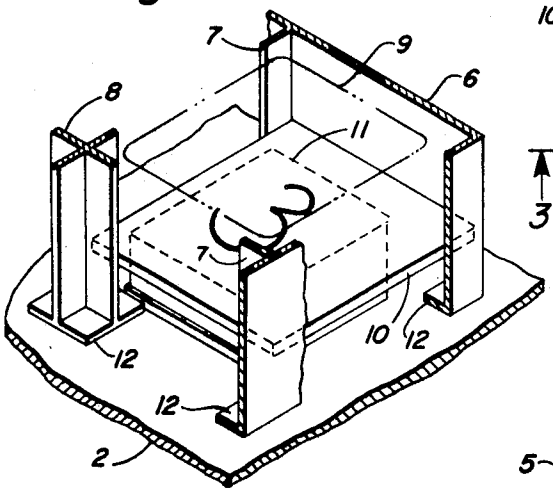
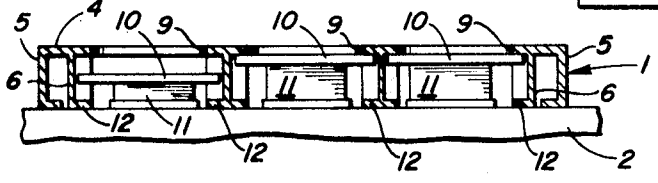


Fig. 3



SUPPLEMENTAL PUSH BUTTON INDEX FOR USE WITH PUSH BUTTON ARRAY AS ON A PUSH BUTTON TELEPHONE

BACKGROUND OF THE INVENTION

1. Field of the Invention:

This invention relates, broadly speaking, to a supplemental push button index for use with a push button array. More specifically, this invention relates to a supplemental push button index for use with the push button array of a push button telephone.

2. Description of the Prior Art

Supplementary dial attachments for use with the dial telephone are known, as shown for example in my U.S. Pat. No. 3,197,573(1965).

An index frame adapted to fit over the array of push buttons of a push button telephone is shown in U.S. Pat. No. 3,345,769(1967) to Nathan.

Until the present invention, there has been no supplemental push button index adapted for use with a push button array as on a push button telephone.

SUMMARY OF THE INVENTION

One of the objects of this invention is to provide a supplemental push button index for use with a push button array.

Another of the objects of this invention is to provide a supplemental push button index for use with the push button array of a push button telephone.

A further object of this invention is to provide a supplemental push button index to facilitate the operation of a push button array.

Still another object of this invention is to provide a supplemental push button index to expand the push button array of a push button telephone and facilitate the operation thereof.

Other and further objects of this invention will become apparent during the course of the following description and by reference to the accompanying drawing and the appended claims.

Briefly, I have discovered that the foregoing objects may be attained by providing an apertured frame adapted to fit over a push button array, each aperture of the frame having a tab slidably mounted therein and bearing a legend which may correspond to the legend on the push button associated therewith. Each tab fits over its respective push button and may be secured thereto by means of a pressure sensitive adhesive applied to the underisde of the tab. The tabs of the array are larger than the push buttons and are progressively offset in two dimensions with respect to the array of push buttons, thereby to provide a tab array having larger dimensions than the push button array.

BRIED DESCRIPTION OF THE DRAWING

Referring now to the drawing, in which like numerals represent like parts in the several views:

FIG. 1 represents a view in perspective showing the supplemental push button index in operative position over thepush buttons of a push button telephone.

FIG. 2 is an enlarged view in plan of the supplemental push button index, showing in dotted lines the outline of the push button array thereunder and the respective orientation of the tab array and the push button array.

FIG. 3 is a section taken along the line 3—3 of FIG. 2, showing a row of tabs and their respective push buttons, one of said tabs being depressed thereby to depress and operate its respective push button.

FIG. 4 is a fragmented view in perspective of a section of the frame of the supplemental push button index, showing the tab slidably mounted therein and seated on a push button.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The supplemental push button index **1** of the present invention is shown in FIG. **1** in its preferred association with push button telephone **2.**

Index **1** comprises frame **3** having upper surface **4,** peripheral side walls **5,** and inner walls **6** located inwardly of peripheral side walls **5** and bounding a rectangular area. Inner walls **6** are provided at regular spaced intervals therealong with legs **7** projecting inwardly and perpendicular thereto. Frame **3** also has cruciform legs **8** within area a rea bounded by inner walls **6.** It will be seen, from FIG. **2,** that legs **7,** cruciform legs **8,** and the intersections of inner walls **6** define a regular rid pattern of squares. Apertures **9** are formed through upper surface **4,** each of said apertures **9** registering with one square of the said regular grid pattern, the said apertures **9** being somewhat smaller in dimensions than the dimensions of a square of the said regular grid pattern.

Within each square of the regular grid pattern in slidably mounted a tab **10,** the tab **10** being proportioned so as to closely slidably fit in the square as defined by legs **7** and/or cruciform legs **8** and/or the intersections of inner walls **6,** depending upon the location of the square in the regular grid pattern, as shown particularly in FIG. **4.** Tab **10** is preferably formed with a bottom surface of suitable convexity to mate with the concavity of the push button **11** associated therewith. Tab **10** is provided on its upper surface with the appropriate legend which, in the preferred embodiment, will be the same as that on the associated push button underneath, and tab **10** is preferably made of material which glows in the dark, thereby to facilitate use in darkened surroundings.

The bottoms of walls **5** and **6** and legs **7** and **8** are footed or flanged as at **12,** as shown in FIGS. **3** and **4,** whereby to retain, after assembly, tabs **10** in place in their respective squares between the said feet or flanges **12** and those portions of upper surface **4** bounding apertures **9.** Tabs **10** may be installed in the squares by slightly bending and/or cocking the tabs **10** to place them in the squares between the said feet or flanges **12** and the portions of upper surface **4** bounding apertures **9.** This method would be pqrticularly useful when supplemental push button index **1** is made in one operation and in one integral piece from plastic material. Alternatively, when supplemental push button index **1** is assmbled from several components, tabs **10** may be installed in the squares in an appropriate portion of the assembly operation, as will be apparent to any skilled artisan. It will be noted, from FIG. **2,** that each tab **10** is larger than its respective push button **11,** that the dimensions of the array of tabs **10** are somewhat larger than the dimensions of the array of push buttons **11,** and that the center of the array of tabs **10** lies over the center of the array of push buttons **11.** Thus, the tabs **10** of the arrya thereof are progressively offset in two dimensions (e.g., the vertical and the horizontal dimensions of the sheet of drawing) with respect to the push buttons **11** of the

array thereof (i.e., those tabs **10** farthest away from the center of the array of tabs **10** are offset with respect to thier respective push buttons **11** a greater amount than those tabs **10** closer to the center of the array of tabs **10**).

It will be seen, therefore, that a larger matrix of operation of tabs **10**, and therefore of push buttons **11**, is provided, facilitating the operation of the said push buttons **11** for people who are not too adept with their fingers. Moreover, tabs **10**, being consideralby larger than their respective push buttons **11**, facilitate the operation of push buttons **11** by people with defective eyesight.

In order to secure the positioning of index **1** over telephone **2**, the bottoms of tabs **10** may be provided with a pressure-sensitive adhesive to secure the said tabs **10** to theri respective push buttons **11**. Alternatively, the bottoms of the feet or flanges **12** may be provided with such pressure-sensitive adhesive to secure the index **11** to the body of the telephone **2**.

Index **1** may be made very inexpensively of plastic materials, and used as a novelty device carrying suitable advertising legends.

As a further alternative, cruciform legs **8** may be extended to meet adjacent cruciform legs **8** or legs **7**.

As yet another alternative, tabs **10** may bear the appropriate legends in Braille, to facilitate the use of index **1** by the blind.

I claim:

1. A push button index for use with an array of push buttons, said push button index comprising:

a. a frame having an upper surface with a grid of a plurality of apertures extending therethrough, each aperture being adapted to correspond with one push button of said array of push buttons,

b. a plurality of guide means mounted to said frame below said upper surface and adjacent said apertures, said guide means being adapted to support said frame over said array of push buttons,

c. a plurality of tabs, each tab being associated wqth one of said apertures and being adapted to sit on one push button of said array of push buttons, each tab being slidably mounted below its respective aperture between those guide means adjacent said respective aperture, said tabs being larger in dimension than their respective apertures,

d. whereby said array of push buttons may be operated in sequence by manually depressing said tabs in sequence,

e. said tabs are made from material which is adapted to glow in the dark,

f. said tabs have bottom surfaces which are provided with profiles compelemntary to the profiles of the upper surfaces of said push buttons,

g. adhesive means on the bottoms of said tabs and adapted to adhere to the upper surfaces of said push buttons,

h. the dimensions of said grid of apertures are larger than the dimensions of said array of push buttons,

i. the center of said frame is adapted to overlie the center of said array of push buttons,

j. whereby said tabs are progressively offset from their respective push buttons proceeding outwardly from the center of said frame,

k. retaining means at the bottoms of said guide means to retain said tabs in position between adjacent guide means.

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