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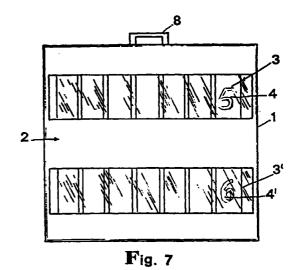
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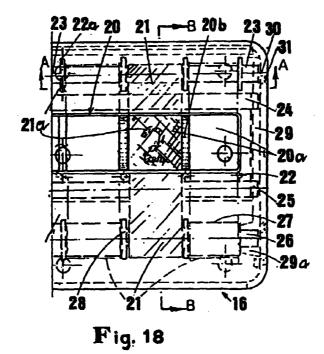
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(54) SYSTEM FOR THE IMMEDIATE EXPOSURE OF CHANGEABLE ASSEMBLIES OF GRAPHICS

(57)Constituted by a not too thick body (1), on the front face (2) of which there is provided one or more horizontal rows (3) (3') of equally spaced windows (20a), and in the interior there are located one or more sets of guiding rolls (13) (23) and tightening shafts (15a) (15b) which will support sliding supporting bands (12) on the external surface of which are located the graphs, figures or letters (4) (4') (21a), which will successively appear when hand moving each band through respective window. The rolls or shafts may be multiple with two intermediate tightening smooth rolls or shafts, or single with a single intermediate tightening smooth roll or shaft (16) provided with sockets with disks (14) as many as band are arranged in each set. Each of the windows of the row corresponds to only one of the sliding supporting bands so that from outside will only be visible at each window the graphs, letter or figure which has been located behind said window. The set of guiding shafts and elements and spacers allow to arrange a series of continuous or not bands as many as divisions or windows are provided at the front opening. If the bands are continuous, they have the smooth rear end shaft, two identical intermediate shafts for tightening and a front shaft on which a series of sockets (27) are located having a grooved surface constituting the hauling element independent for each band. On the internal face of the body there are located a set of upright pivots (22) which constitute guides which will prevent side displacement of the bands and at the rear shaft area there is also a set of U-shaped supports (22a) and in the cavities of which said very shaft (23) remains located. On the internal face of both sides of said body two symmetrical or not symmetrical supports (29) remains fixed provided with offsets (32) in which are housed under pressure the ends of the rear shafts (23) and tighteners (24) and (25) while at the front end it possesses identical offsets (33), so that the front shaft (26) remains socketed and locked sufficiently far away to allow positioning and rotating the grooved sockets (27) hauling the band. The window (20) (20') may be at the front part or at the rear part or at both at same time.





Description

[0001] The patent of invention has the object to guaranty the monopoly of a system devised to immediately display graphic, numerical or alphabetical symbol exchangeable sets in any language which may be exchanged by other symbols of same series, all of it with the aim of allowing the user to have available before him, perfectly visible, a set of graphic symbols which will State, for example, the price of a product in a certain currency and allowing to immediately exchange, by simply handling it, any of the graphs. The essential characteristics of the systems are disclosed below.

STATE OF THE ART

[0002] The state of the art known up to now offers innumerable devices, always from the standpoint of hand control, having multiple characteristics ranging from common slate or board on which with pencil, chalk, etc. one writes the prices of any article to be sold to the public to others which by means of paperboard cards having exchangeable figures usually on flat surfaces provided with windows allows to see through said paperboard cards related figures or graphs.

OBJECT OF THE INVENTION

[0003] Thus, the system for the immediate display of exchangeable graph sets, object of this patent of invention, will be applied to an element provided with the suitable mechanism which will allow to very easily locate, through a preset array of openings or windows, the symbols or graphs required, providing for it several identical means and in parallel arrangement, as many as graphic symbols have to be visible through the windows so that by means of a simple handling, operating the device corresponding to the symbol to be exchanged, a displacement of a sliding band will be provoked, the said band being the support of the said symbols sequentially until once the wished graphic symbol appears, the user stop operating the said device and the support-band stop sliding.

As it has been stated, a display made [0004] according to the system object of this invention, will have different and useful applications, the most usual applications being preferably in the commerce. The arrangement in one or several sets of graphs of the ordinary numerical series will allow to display at the several windows a figure equivalent to the cost of the object or product to be sold while, for example, and in an application currently very useful, in the other windows will appear the numbers corresponding to the former price, but stated in Euros or any other currency, displayed figures which will greatly facilitate purchase and sale and exchange operations, as well as the assimilation of the cost or value of the products in the currency currently in force and in any other currency or in Euros, mainly for

the member states to which they are applicable.

[0005] The system for displaying graphs which is disclosed will therefore allow, when produced in the practice, to locate the numerical or alphabetical symbols so that they are visible from outside through an opening split into windows, situated on the display front face. A practical embodiment provides the arrangement of several openings to display an identical amount of numbers by changing the amount of windows depending on the device application.

[0006] An embodiment can be likewise provided with a front window and another back window, the display having so a double band mechanism and duplicating the thickness of the body involved.

[0007] The display will be provided within it with a series of identical elements, situated parallel to each other, as many as graph sets have to be visible, the said elements being designed so that by the user simply handling it, any of the sockets arranged for such aim will be hand rotated and this will provoke the displacement of the sliding continuous or discontinuous band on which said graphs are located in logical sequence, (in the event of numbers, by its ordinal sequence from zero to nine) stopping the operation at the moment when the wished graph appears at the stated window, the band remaining from this moment stopped until it is interesting to newly operate the device.

[0008] In order to be able to disclose with every details the as well technical as operative features and characteristics of the system to display the sets of graphical symbols object of this invention, a series of drawing is attached to this specification in which for no limitating example purpose practical embodiments of a display has been illustrated to which the system features have been applied.

[0009] In said drawings:

Fig. 1 is a sectional front view of the display in the version of embodiment with two sets of multiple rolls or shafts, to guide the bands supporting the graphical symbols;

Fig. 2 is a likewise sectional front view equivalent to that of above figure but in a simple version with shafts or rolls and with a single tightening shaft.

Fig. 3 is a sectional front view of the display according to figure 1, showing all the sliding supporting bands placed at their respective place;

Fig. 4 is a diagrammatical detail of the device with rolls or shafts in the multiple version, showing a way of locating a sliding endless supporting band;

Fig. 5 is also a diagrammatical detail of the device with rolls or shafts in the simple version of Fig. 2, also showing the location of the likewise endless sliding supporting band.

Fig. 6 is another diagrammatical detail in perspective of a lengthwise cut type socket to hook a normal band, i.e. not endless.

Fig. 7 is a front view of the display showing its front

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face, with two openings each provided with rows of aligned windows;

Fig. 8 is a view equivalent to the preceding figure, but showing the display back cover or face.

Fig. 9 is a side view of the device object of this embodiment, showing a top element for fastening; Fig. 10 is a view of the display, identical to the preceding figure, showing the arrangement of a flange for fastening it.

Fig. 11 is also a side view of the display, as the two preceding figures, showing the fastening of the display by means of a hooked nail or the like.

Fig. 12 shows a practical variation in a likewise side view, of the location of the display on a shifted foot support.

Fig. 13 is a view of another practical embodiment of the system disclosed, which consists in a display provided with operating elements different from those of the preceding embodiment, said display being shown by its front and in a rectangular prismatic version.

Fig. 14 is a front elevation view according to section AA of the body or cover in correspondence with the preceding figure.

Fig. 15 is another front view, according to section BB of the said body or cover and also in correspondence with Fig. 13;

Fig. 16 is a side view, according to section CC, of the display body, corresponding as the preceding ones, to Fig. 13.

Fig. 17 is a detail, at larger scale, of the back area of the body hinge, according to Fig. 16.

Fig. 18 is a front or ground plane part view of the display, and at larger scale, shoving the arrangement of the elements it possesses within it for tightening and operating the continuous bands supporting the graphs;

Fig. 19 is a front elevation view, according to section AA, corresponding to the preceding figure;

Fig. 20 is a side elevation view, according to section BB, also corresponding to Fig. 18.

Fig. 21 is a ground plane view, at larger scale, of one of the supports of the device shafts;

Fig. 22 is an elevation view of same support, according to the preceding figure;

Fig. 23 is a side view of the support, corresponding to Fig. 21;

Fig. 24 is a view according to section AA, of the said support, according to figures 21 and 22;

Fig. 25 is another view of the support head, according to section BB of same figures 21 and 22;

Fig. 26 is a side view of one of the sockets operating the continuous bands with which the device is provided:

Fig. 27 is an elevation view of the socket itself of the preceding figure;

Fig. 28 shows the diagrammatical section of a version of the device with front and back windows, and

simplified as for the rotation of the continuous or endless bands;

Fig. 29 is equivalent to the preceding one in simplified version with a continuous band and a with single front window;

Fig. 30 is a view analogous to that of Fig. 26 of a socket for discontinuous band;

Fig. 31 is also an analogous to Fig. 27 but for discontinuous band;

Fig. 32 illustrates a shaft with a series of sockets of the type adapting the discontinuous bands, and Fig. 33 is a diagrammatical way of embodiment with discontinuous bands and joined to their respective sockets arranged on related sustaining shafts;

[0010] According to the drawings, the system to display sets of exchangeable graphic symbols, object of this invention consists, in a first version, in a not too thick rectangular prismatic body (1), provided at its front face (2) with one or two horizontal rows of rectangular windows (3) (3'), in the illustrated case seven windows at each row, through which the graphic symbols (4) and (4') will be visible, such as numbers or letters, as suitable and according to the device concrete use.

[0011] On the back face or cover (5) of the said body (1), there is suitable self-adhesive bands (6) which will allow to definitely or occasionally stick the said body (1) against any surface.

[0012] The external part of the body (1) is completed with a top tilting or fixed ring or hoop (8) which will allow, in the different modalities of support, to place, for example, a flexible flange (9) for fastening, as shown in Fig. 10, or to be suspended from a suitable eyebolt (10), fixed on avail (7), as shown in Fig. 11, as well as, eventually, to fasten it from the top part of the foot support (11) as illustrated in Fig. 12.

[0013] Within the display body (1), are arranged the sets of rolls or shafts which will sustain due sliding supporting bands and will allow they slide in order to visibly display through related window the graphical symbol wished each time.

[0014] As diagrammatically illustrated in Fig. 4, the sliding supporting band (12) is an endless band, wound around the two end rolls or shafts (13), provided with protruding disks (14) which serve as a guide for the said bands (12) in their sliding, allowing at same time the user, quite simply and easily to provoke the said bands (12) rotation by hand and therefore that they slide in one direction or the other, concretely the band the position of which it is wished to change in order that any other graphical symbol (4) appears at related window (3).

[0015] The band (12), coming from the end roll or shaft (13) in an embodiment (Fig. 4) is wound around the opposite internal plain shaft (15a), immediately passing to be wound around the other plain internal shaft (15b), and from this later, to be eventually wound around the guiding roll (13) of the other end, all of it in full continuity, the said band remaining preferably tight-

ened by the action of the double set of internal shafts.

[0016] Fig. 5 shows a simpler system of rolls or shafts, for a shorter band (12), likewise provided with two end shafts or rolls (13), provided with guiding disks (14) but with a single central plain shaft (16) with acts as tightener for said sliding supporting band (12).

[0017] The band (12) could be endless and wound, like a film reel (13'), in sockets having a longitudinal cut (13") as illustrated in Fig. 6.

[0018] The practical embodiment explained and illustrated in Fig. 1 is that of a display provided with two multiple sets of rolls or shafts and more particularly and for example purpose, having seven bands (12) each, as it can be seen in Fig. 3, while Fig. 2, where the bands were not drawn, shows a display with a simple set of rolls or shafts, corresponding to Fig. 5.

[0019] In the first case, the embodiment allows to dispose of two horizontal rows of windows (3) and (3') because there is two groups of sliding bands (12) (12'), while in the embodiment of Fig. 2, the display will only have a single row of windows (3), not shown, as it is provided with a single set of sliding bands (12) (not drawn).

[0020] It must be said that the graphical symbols (4) or (4') may be as well numbers as letters, as required, according to the display use.

[0021] It is obvious that the user who is willing to use the device of the invention may interrelate Fig. 3 and 7, by moving the back cover being open and with the fingers the bands (12) arranged on the rolls or shafts (13) until situating them in suitable position while the symbol, number, etc. (4) appears though one of the windows (3) and so on, in the windows top row. Thereafter, he will move in same way the lower bands (12') which will slide, allowing in turn to see other figures (4') on the windows row (3'), figures which will be the suitable ones to have the relation with those of the formerly mentioned windows (3). Thus, and for example purpose, an amount of up to seven figures may let be displayed at the device drawn and more concretely an amount which may correspond to the price of an item in any currency and at the lower row, another amount different but equivalent to another currency thus the public can see, at once, the equivalence of the price in two different currencies. It is logical that on the body (1) external surface or front cover, to best understand, the currency to which each amount or price correspond will be written.

[0022] The system for the immediate display of exchangeable graph sets, object of this invention, shows as a variation to its embodiment, the display constituted by a body (16) preferably rectangular prismatic, having blunt vertices and not too thick with relation to its size. It possesses, at its back edge, cylindrical recesses (17) to house the fastening shafts (18) and to move the back cover (19) which conveniently closes the set, protecting its interior and constituting a box.

[0023] It is obvious that the way disclosed may vary depending on the function to which it is applied and even on its size, because the application in commerce

requires it so.

[0024] On the body (16) front external face a rectangular opening (20) remains situated, arranged lengthwise and split into a row of identical windows (20a), six in the example illustrated and which will correspond with six continuous bands (21) with which the display is provided in the drawn example (Fig. 18). Through these windows (20a) the coincident areas of each continuous band (21) situated below will be visible. The sides of each window (20a) are delimited by a suitable signalling (20b) which allows to form the said windows (20a) on the opening (20) and which help to correctly check the graphs (21a).

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[0025] On the body (16) internal and front face are located a series of slightly frustum-shaped spindles (22), arranged in a row just close to the edge of a rectangular opening (20) and seven in total in the example drawn, spindles which will serve as guides to prevent an accidental side displacement of the said bands (21).

[0026] On same body (16) back part internal face, are arranged and close to the hinging edge, U-shaped supports (22a) placed in a row and so that on them a back lengthwise shaft (23) is placed while the said supports (22a) also constitute guides to prevent the displacement of the bands (21), when sliding around said shaft (23).

[0027] The said continuous bands (21) moving and supporting device is constituted, in addition by the back shaft (23), in the case shown in Fig. 18 to 20, two tightening intermediate shafts (24) and (25) and the front shaft (26), which is provided in turn with a series of sockets (27) having a preferably grooved surface which constitute the bands (21) pulling element on the said front shaft (26), the said element allowing to individually pull each band (21) as each of these sockets (27) possesses a protruding edge (28) having a likewise grooved surface, on which, by hand, it will be operated to make the socket rotates and, together with it, to provoke the respective band (21) move by pulling it. The possibility to operate by hand on respective band, without operating on the edge (28), in an extreme case, is perfectly admissible.

[0028] The said sockets (27) in a total of six in the example illustrated, are placed juxtaposed on the front shaft (26), constituting an homogenous set. Each band (21) runs around the socket (27) grooved external surface, while the larger diameter grooved edge (28) also constitutes a guide which will prevent the accidental side movement of the respective continuous band (21). The arrangement of the end shafts (23) and (26) as well as the tightening shafts (24) and (25) that of the bands is clearly and concretely drawn in Fig. 20.

[0029] On the body (16) internal side faces supporting parts (29) are arranged, which will be sustained by means of the spindles (30) which are engaged under pressure in related holes (31) of the body (16) side faces. These supports are provided with offsets on which the band roll or sliding and tightening shaft ends

will be situated, numerals (23 to 26), the said shafts remaining, thus perfectly socketed and fastened.

[0030] The said supports possess first three equal offsets (32) having a flanged mouth and a rounded and larger bottom so that the end of related shaft is engaged under pressure to remain tightly fixed in said rounded bottom (32'). These shafts will be, concretely, the back shaft (23) and the tightener intermediate shafts (24) and (25).

[0031] On the front part these supports possess an offset (33), having a profile equivalent to the one of the front supports, but situated on an emerging stub (29a) so that the front shaft (26) when being housed there under pressure will remain somewhat apart from the body internal face, allowing the sockets (27) arrangement and rotation motion together with the grooved edges (28) thereof. The said stub will likewise keep the sockets set (27) situated on the shaft (26) very close to one of the following ones and without possibility to be displaced sidewards.

[0032] Every element constituting the display object of this invention being arranged, as it was disclosed before, the operation will be as follows:

[0033] First and once every and each continuous band (21) are placed in the arrangement shown in Fig. 20, they are suitably tightened while their external face on which the graphs (21a) are situated are facing and against the opening (20) windows (20a), the coincident graph appearing and being visible from the exterior, which in the case shown is an ordinal number.

[0034] At the moment when it is wished to change the graph (21a) visible through any of the windows (20a) it will be enough to open the body (16) back cover (19) and there will be a direct access to the sockets (27) situated on the front shaft and provided with the larger diameter rib and grooved surface (28). Acting on said ribs the rotatory motion of related socket will be achieved and, together with it, the band (21) situated around it will slide, until another wished graph coincides with related window. The band tightening is secured thanks to the tightening shafts (23), (24), and ((25).

[0035] In this practical use, the display can be used as a single element, or several, therefore the user will have the possibility to have two or several window sets (20a) through which displaying different graph sets, as suitable.

[0036] Between the windows, the gaps (20b) can be signalled with other graphs, such as dots, commas, etc. in order that the figures appear through the general opening or window, for example, with decimals.

[0037] Very diagrammatically, several variations of the body or box (16) have been shown in Fig. 28 and 29, with continuous band without tightening shafts to show it is also possible to arrange a single window (20) on one face, either the front or the back one or even in both (20) and (20').

[0038] In an advantageous embodiment, discontinuous bands (21') can be used as those illustrated in Fig.

(33) and, in that case, respective rolls or shafts (23') and (26') will be occupied by a series of sockets (27') in a way equivalent to the formerly disclosed but provided with protruding studs (34) on which due holes (35) will be housed which have been drilled close to the bands (21') ends.

[0039] In this case, applying the rotatory motion on respective sockets (27') edges (28') in one direction or the other, subsequent motion of the discontinuous band will occur because the stud which corresponds to it will pull said band, being wound on the socket this can be done so in both directions and on any of the reference sockets.

[0040] These examples could be extended to the concrete use of names or styles in a window row and price in the lower one, styles in different languages in each row, etc., i.e. this device allows multiple matching as well in numbers of rows as in number of windows, as well as length of sliding bands, either endless or not, which will be directly proportional to the number of symbols, numbers or letter arranged on each band.

[0041] It must be stated too that any change in size, aspect and external shape, as well as decoration and types and quality of the materials used in the practical embodiment of the displays, shall not impair the essence of this patent of invention, the said essential characteristics being summarized in following claims.

Claims

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- System for the immediate display of exchangeable graph sets characterized in that it is constituted by a not too thick rectangular, circular prismatic body or having any other geometrical shape, on the front face of which are situated one or several horizontal rows of windows in a regular and equidistant way, while on its back face or cover are situated several adhesive fastening bands on a suitable surface, and on its top edge a tilting or fixed ring is arranged to make possible the body is fastened in different ways, being likewise characterized in that within the body one or several guiding rolls and tightening shafts are located which will sustain the sliding supporting band, on whose external surface are located the graphs, number or letters which successively will appear, when moving by hand each band, through the respective window of the display itself.
- 2. System for the immediate display of exchangeable graph sets, according to above claim, characterized in that said rolls or shaft sets can be multiple, with two intermediate rolls or plain tightening shafts, or single, with a single intermediate roll or plain tightening shaft and in that the end rolls and shafts are provided with sockets with disks, as many as bands are arranged in each roll or shaft set, plus an end one which guide the bands in their sliding, allowing

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to carry out the said sliding by hand, in one or the other direction.

- 3. System for the immediate display of exchangeable graph sets according to claims 1 and 2, character- 5 ized in that the windows situated on the body top face, will remain situated in rows, as many as multiple or single roll or shaft sets are housed within it, each window corresponding to the row with a single of the sliding supporting band situated within the body and in the corresponding rolls or shafts set, all of it so that from the exterior at each window there is only visible the graph, letter or number, which has been situated behind the said window when making the band slides operating by hand the end socket disk.
- **4.** System for the immediate display of exchangeable graph sets, according to claims 1 to 3, characterized in that the sliding bands bearing the graphic symbols can be endless or more or less long bands and joined at their ends to sockets of the type preferably having a longitudinal cut.
- **5.** System for the immediate display of exchangeable graph sets, according to preceding claims, characterized in that it shows as variation of embodiment the rectangular body, on the front face of which is arranged an horizontal rectangular opening, signalled in equal divisions, like windows in consecutive rows, said body being closed by a tilting back cover or of any other type on its end supports, fixed on related housing situated at the back edge and characterized in that it has within it a set of shafts and guiding and separating elements which will allow the arrangement of a series of continuous or discontinuous bands, as many as divisions or windows the front opening possesses, on the external surfaces of the said bands the sets of required graphs will be located and which will be visible from the exterior through related divisions of the front opening.
- 6. System for the immediate display of exchangeable graph sets according to the preceding claim, characterized in that the sustaining device and the operation of the continuous bands are constituted by a plain back end shaft, two identical intermediate shafts, for tightening, and a front shaft, on which a series of sockets with grooved surface are situated and with one of its ribs protruding like a disk and likewise grooved, all of them fastened on the said front shaft and forming an even set, constituting the pulling element of the continuous bands situated around it, an action which is carried out independently for each band, rotating by hand the rib protruding from related socket, so that the band is displaced coinciding with different graphs through

related openings of the front window.

- 7. System for the immediate display of exchangeable graph sets, according to claims 5 and 6, characterized in that on the body internal face a set of upright studs is situated, close to the horizontal opening and located equidistant, so that they constitute guides which will prevent the bands sidewards displacement and characterized in that at the back shaft area it also shows a set of U-shaped supports, symmetrically arranged and in whose recesses just said shaft is located, constituting guides which prevent the continuous bands displacement.
- System for the display of exchangeable graph sets, according to the claims 5 to 7, characterized in that on the internal face of both sides of the body two symmetrical or no symmetrical supports are fastened by means of the pressurized engagement of the studs they possess to that aim, the said supports being provided with offsets on which are housed under pressure the ends of the back tightening shafts, while at its front end they possess identical offsets, situated on a trapezoidal stub, so that the front shaft is engaged and fastened, sufficiently apart to allow positioning and rotating the grooved sockets pulling the band and characterized in that in the case that said bands are discontinuous bearing graph holes can be provided close to its ends to house them on studs emerging from each of the sockets.
- System for the immediate display of exchangeable graph sets, according to claim 5 characterized in that the display box can show the front window as well at the front part as at the back part or both at same time because the group of continuous or discontinuous bands shows its graphs as well on the front as usual as also on the back.

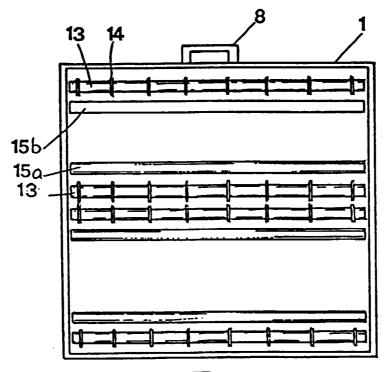
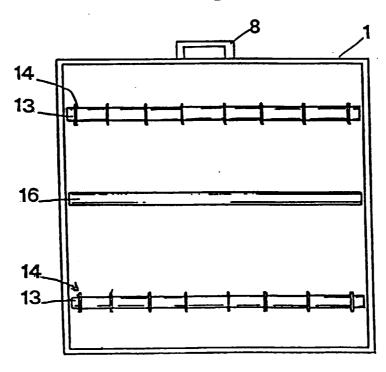
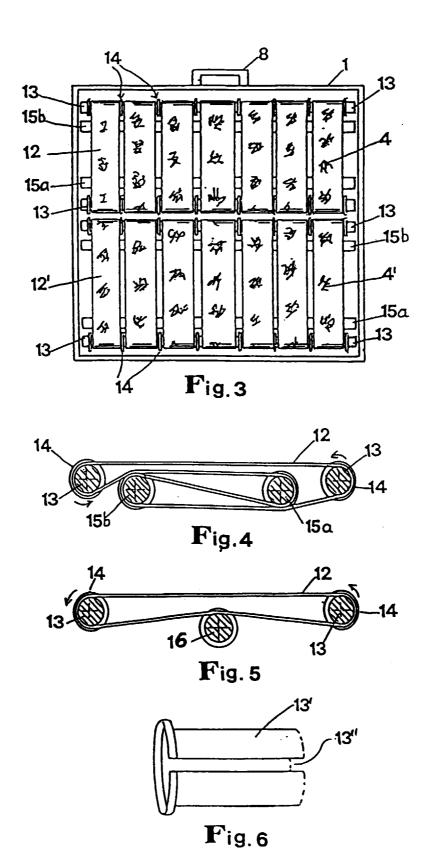
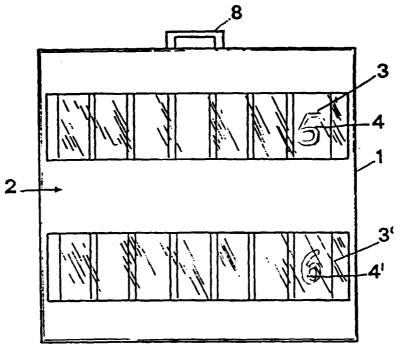


Fig.1

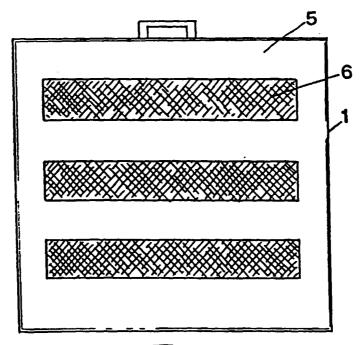


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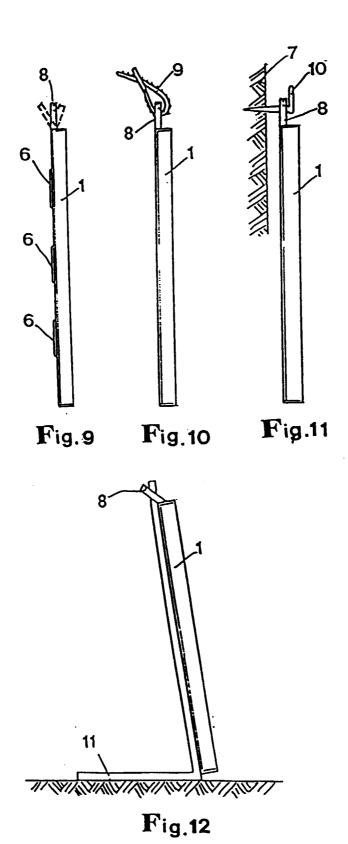


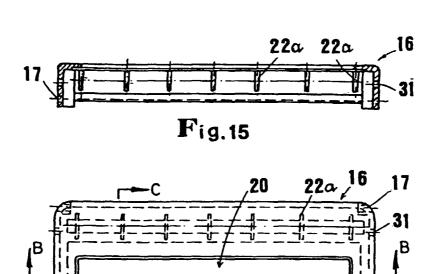


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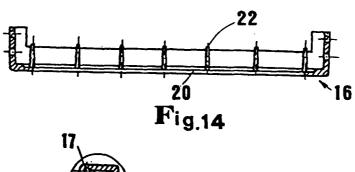


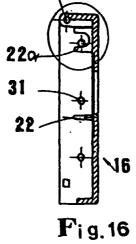
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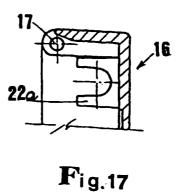




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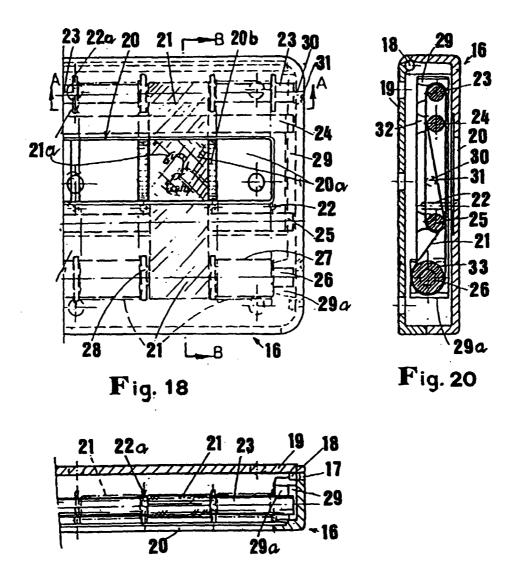
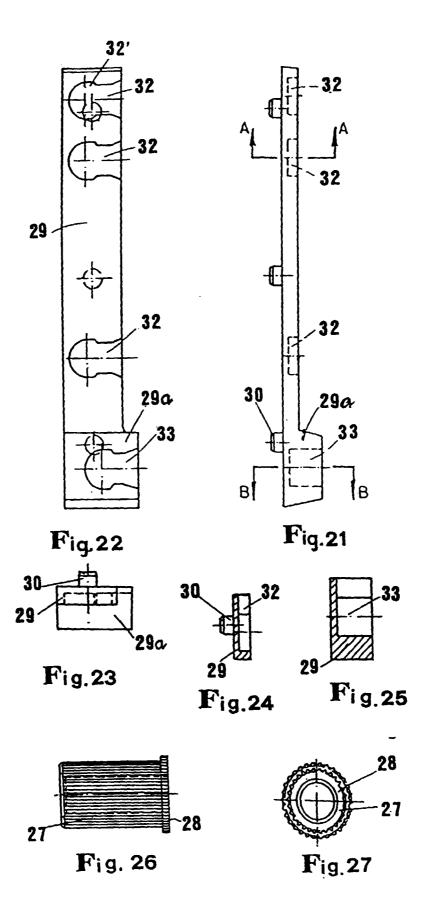
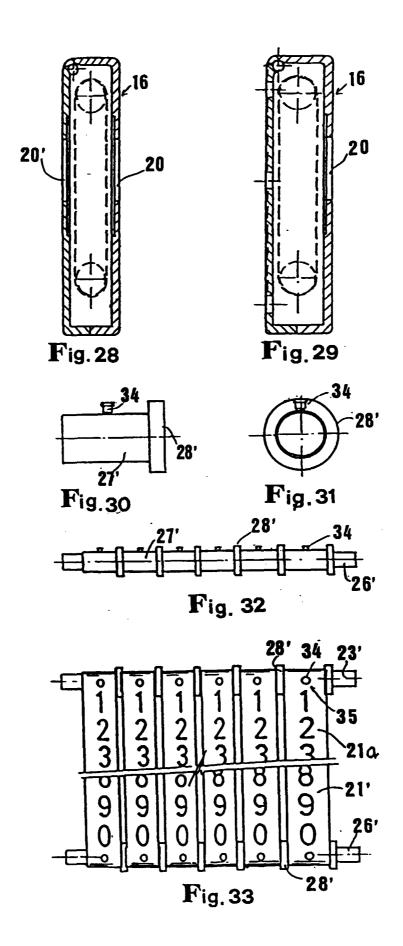


Fig. 19





INTERNATIONAL SEARCH REPORT ional Application No PCT/ES 99/00216 A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G09F11/29 G09F G09F3/20 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) G09F IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 4 201 002 A (BARTON EDSON K) Y 1-9 6 May 1980 (1980-05-06) the whole document Y GB 2 149 178 A (LEWIS ALBERT JAMES 1-9 COLLINGWOOD) 5 June 1985 (1985-06-05) the whole document CH 352 558 A (K.FAUL) 1-9 14 April 1961 (1961-04-14) the whole document GB 2 281 999 A (TIME MOS ELECTRONICS LTD) 22 March 1995 (1995-03-22) abstract; claims; figures -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex X I * Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is Taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person stilled in the art. *O* document referring to an oral disclosure, use, exhibition or "P" document published prior to the international filling date but later than the priority date claimed "5" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 1 1 11 1999 29 September 1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nt, Fax: (+31-70) 340-3016

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 750 524 A (AUTOROUTE ROUTE PARKING SIGNAL) 2 January 1998 (1998-01-02) abstract; claims; figures	1-9
A	US 2 121 390 A (W.ROLAND) 21 June 1938 (1938-06-21) claims; figures	1-9