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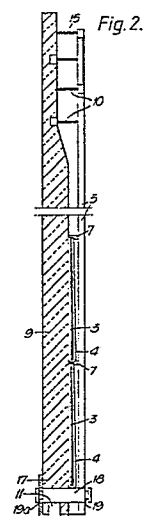
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⑤④ **Information display device.**

⑤⑦ A device for displaying information, the device comprising a transparent faced display board for fixture to a surface the board having carrier means (3) intermediate the transparent face (5) and the surface for carrying a rigid information element (4) and an aperture (15) for inserting the element into the carrier means. The aperture is provided with a baffle, (10), for example comprising resiliently biased elements, allowing entry of a rigid information element (4) but preventing entry of a flexible information element.



Description

Information Display Device

This invention relates to devices for displaying information. More especially the invention relates to devices for displaying advertisements.

One kind of known information display devices comprise a panel on which small posters or cards are displayed. In some of the prior art devices the panel is provided with a series of tracks which carry the cards. These devices are often located near the exit of large stores and are used by the public or small companies to advertise comparatively low value goods and services.

These devices suffer from a number of disadvantages. First, the cards are susceptible to theft. Secondly, the cards are vulnerable to defacement by graffiti. Thirdly, control is difficult in that unauthorised cards or those containing offensive matter may readily be displayed.

The present invention seeks to reduce or eliminate at least some of these disadvantages.

According to the invention there is provided a device for displaying information, the device comprising a transparent faced display board, for fixture to a surface, the board having carrier means intermediate the surface and the transparent face, for carrying a rigid information element and an aperture for inserting the element onto the carrier means the aperture comprising a slot and a baffle allowing entry of a rigid information element but preventing entry of a flexible information element.

Preferably the information element comprises a card and holder.

In some embodiments of the invention the holders are supplied from one or more coin freed vending machines which may be part of the display board. Instead of a coin-freed vending machine a vending machine freed by bank notes, credit cards, charge cards, debit cards, or automated debiting of bank accounts may be used. In these embodiments the user may be supplied with a card holder, card and, optionally, a writing instrument and/or prize draw number or prize. Alternatively the card holder and card could be obtained from a representative of the site owner or from a store. In yet another alternative the card is provided with a validation stamp. This may be obtained, for example, from a vending machine or from a representative of the site owner. In a preferred embodiment the card holder is of similar appearance to the boxes in which music cassettes and especially compact discs are commonly supplied.

In another preferred embodiment the display device is provided with means for printing the message required by the hirer. This can be part of the display board or can be in the vicinity of the board. In one embodiment the printing means would comprise a computer or word processor and printer. Other alternatives would be readily apparent to the skilled worker.

Preferably either or both of the card and holder are provided, for example by printing, with a security code so that it is possible to ascertain readily

whether the card and holder have been obtained from an authorised source. Instructions for use could be printed on the holder or card. Preferably each information element is provided with a dark line or other means to delineate visually one element from another.

In a further embodiment of the invention the information element can be provided with still further information. This information could for example be a letter, numeral, colour. The purpose of the further information would be to encourage consumer interest by offering prizes for completing particular patterns possibly in a similar manner to the well known game of 'Scrabble' (Registered Trade Mark). Alternatives would be readily apparent to those skilled in the art.

Preferably the holder is a U shaped strip of plastics material. Suitable plastics material include polymethyl methacrylate such as that sold under the Trade Mark 'Perspex', polyacrylate and polycarbonate. The holder is preferably of injection moulded plastics material. If the information is carried on a card held between the legs of a U shaped strip at least part of the strip should be transparent. Still more preferably one edge of the strip is provided with a cut out to facilitate opening of the holder. Other types of holders may be used. The holder should be easy to use and cheap to minimise financial loss if stolen. The information element should also be rigid to facilitate passage past the baffles described in more detail hereinafter.

Preferably the element should be comparatively massive so that the user perceives the investment in hiring a element to be good value.

In other embodiments of the invention the information element comprises a rigid sheet. Information can be written on the sheet, for example with a Chinagraph (Trade Mark) pencil or other erasable writing instrument thereby avoiding the need for a separate card and holder.

The skilled worker will be able to devise other holders for example an at least partially transparent box into which an information carrying card is inserted.

The front panel of the device should be transparent at least in those areas covering the information elements. Preferably it should be of strong, shatter-proof, and easily cleaned material. The front panel is not essential to the invention but is preferred as it prevents the information elements from being defaced.

The carrying means are preferably vertical and in general it will be found that other orientations except horizontal are not acceptable to users. Preferably the carrying means comprise parallel spaced channel sections or extrusions.

The device is preferably provided with a baffle to resist nonrigid objects such as a post card or other unauthorised information elements. The baffle can comprise a stiff brush or a resiliently biased plate or shutter. In some embodiments the information

element is provided with a coded magnetic strip which is read by a reader situated near the mouth of the carrying means. If the element carries the correct code then a shutter will open and allow insertion of the element. Such reading devices are commercial available and known in other arts.

Preferably the device is lockable so that only representatives of the management may remove cards. Elements would be removed at the end of a hire period or earlier if carrying offensive material.

In some situations it may be necessary for users to 'post' completed elements into an opaque box for editing by the management before display.

Embodiments of the invention will be illustrated by reference to the accompanying drawings in which:

Figure 1 shows a front view of a vending and display device according to the invention,

Figure 2 shows a cross sectional view of a baffle fitted to an entry slot of the board,

Figure 3 shows a perspective view of a card clipped into a holder,

Figure 4 shows a cross sectional view of the base of the device,

Figure 5 is a front elevational scrap view of an alternative baffle,

Figure 6 is a side elevational scrap view of the baffle of Figure 5, and

Figure 7 is a sectional view of a preferred card holder.

Referring to the drawings, a typical system comprises a display device 1, a vending machine 2 and multiplicity of advertising cards 3 and card holders 4. The display panel 1 is equipped with a transparent front panel 5 having integrally formed equi-spaced vertical ribs 6 spaced to suit the card holder 4. Each rib has small integrally formed projections 7 to form a retaining device in order to keep the card holder 4 at the first location until a further card holder 4 displaces the card into the next position. Alternatively the card holder 4 may be held by other methods, such as magnetic inserts 8 in the card holder 5 attached to ferrous faced rear panel 9, a rubber or other friction or locking material such as Velcro (Trade Mark) faced rear panel 9, springs and or ball catches in the vertical ribs 6. The transparent front panel 5 is secured to a rear panel 9 in such a manner as to permit the incorporation of a deflection device 10 at its upper edge and a card extraction system 11 at its lower edge, the whole being equipped with brackets or other anchor pivots 12 to enable it to be secured to a wall or other structure.

A card holder 4 is formed by folding a strip of transparent plastics material such as Perspex (Trade Mark) into a very tight "U" form 13 producing a clip like shape with legs 14 which may be sprung open by finger pressure in order to insert a card 3 and which will hold the card 3 firmly in place.

In order that non vended cards and other similar unwanted flexible material should not be permitted to enter into the display panel a deflection device 10 across the entrance to the slots 15 is constructed from a multiplicity of short brush like strips, the fibres of which project inwardly from both front and back of the display panel 1 in such a manner as to be displaced vertically alternately from front and back to

form a baffle 16 which will accept stiff card holders 4 but will bend and deflect any flexible materials pushed into the device. At the lower end of the display board 1 is provided a card holder retainer system 17 comprising a series of cylindrical pins 18 having a circumferential groove 19 at each end and passing through the transparent panel 5 such that a lockable slide bar 20 at the lower rear face of rear panel 9 can slideably engage the rear groove 19a and by moving a small distance can disengage the groove 19a and allow the pin 18 to be removed forward through the front panel 5 by virtue of its also passing through circular holes 21 in the slide bar 20 thus permitting card holders to be withdrawn from display. Re-insertion of the pins 18 and locking the slide bar into the groove engaging position locks the display system.

Other means for allowing cards to be removed will be readily apparent. In one alternative embodiment the transparent plate is pivotable about the base of the device.

A more sophisticated baffle means is shown in Figures 5 and 6. In this embodiment a shutter 22 is biased by springs 23 to close the slot or track for carrying an element information element into the body of the device. Pawls 24, 24a engage shutter 22 preventing it from opening. There are preferably two or three pawls per shutter but more or less may be used. The pawls are biased to this position by springs (not shown). Alternatively spring means or counterbalance means can be used.

When an information element of the correct size and weight is introduced into the device both pawls 24, 24a are disengaged from the shutter 22. The weight of the element overcomes the biasing means of the shutter which pivots allowing the element to enter the body of the device. After passage of the element the apparatus returns to the rest position described. If the element is too narrow then both pawls will not be disengaged thereby preventing the shutter from opening. If the element is too light it will not be able to overcome the biasing means also preventing the element from entering the body of the device. It will be remembered that it is preferred that the information element be relatively massive and so many attempts to insert using cards and other authorised information elements will be thwarted.

A preferred information element is shown in Figure 7. It comprises a box or solid block 25 which may be of transparent plastics material of similar dimensions to a box for compact discs. One face 26 carries a card 3 for a message or a slot for insertion of such a card, a business card or a photograph. The opposite face may carry a lottery ticket or the like in a slot. The information holder may be provided with a cavity 27 or other means for storing a writing instrument. Preferably at least part of the mechanism is covered by an opaque panel when the device is in use.

In some cases where an advertised product or service is no longer available the representatives of the site owner may have to remove the 'sold' information holder. This generally requires the display device to be opened. The problem can be overcome by providing the board or the operator

with a number of 'sold' signs 26. The sign is moved over the required advertisement and then secured for example with a non-standard size hexagon key so as to prevent unauthorised use. Those skilled in the art will recognise that other systems for example using magnets, chemical indicators or light sensitive materials could be used. Those skilled in the art will recognise that board can be fixed to a surface in many ways including by screws, nails, brackets mounting on supports and the like.

The display device may also carry other information for example, maps or advertisements for large organisations especially radio or tv stations which generally do not carry "small ads". This information is generally carried on the periphery of the board and not in information holders.

Advantageously each site operator is supplied with boards in which the operative width is unique to him thereby avoiding users obtaining information elements from one site operator and using them in another. In this case each shutter will generally require at least two pawls. Alternatively the ribs could be a constant distance apart and the pawls movable.

Where the shutter is actuated by a magnetic strip only the code need differ.

Claims

A device for displaying information, the

device comprising a transparent faced display board for fixture to a surface the board having carrier means intermediate the transparent face (2) and the surface for carrying a rigid information element (5) and an aperture (6) for inserting the element onto the carrier means, characterised in that the aperture is provided with a baffle, (9) for example comprising resiliently biased elements, allowing entry of a rigid information element but preventing entry of a flexible information element.

2. A device as claimed in claim 1 wherein an information element (5), comprises a U-shaped holder of clear plastics material for receiving and gripping a card (12).

3. A device as claimed in claim 1 or claim 2 wherein the carrying means define vertical tracks provided with a plurality of resiliently biased location means (4) for retaining an information element (5) until displaced to an adjacent position by a further information element.

4. A device as claimed in any one of the preceding claims wherein the device has lockable removal means (15,16,17) for removal of an element.

5. A device as claimed in any one of the preceding claims additionally comprising a vending machine (11) for supply of information elements.

Fig. 1.

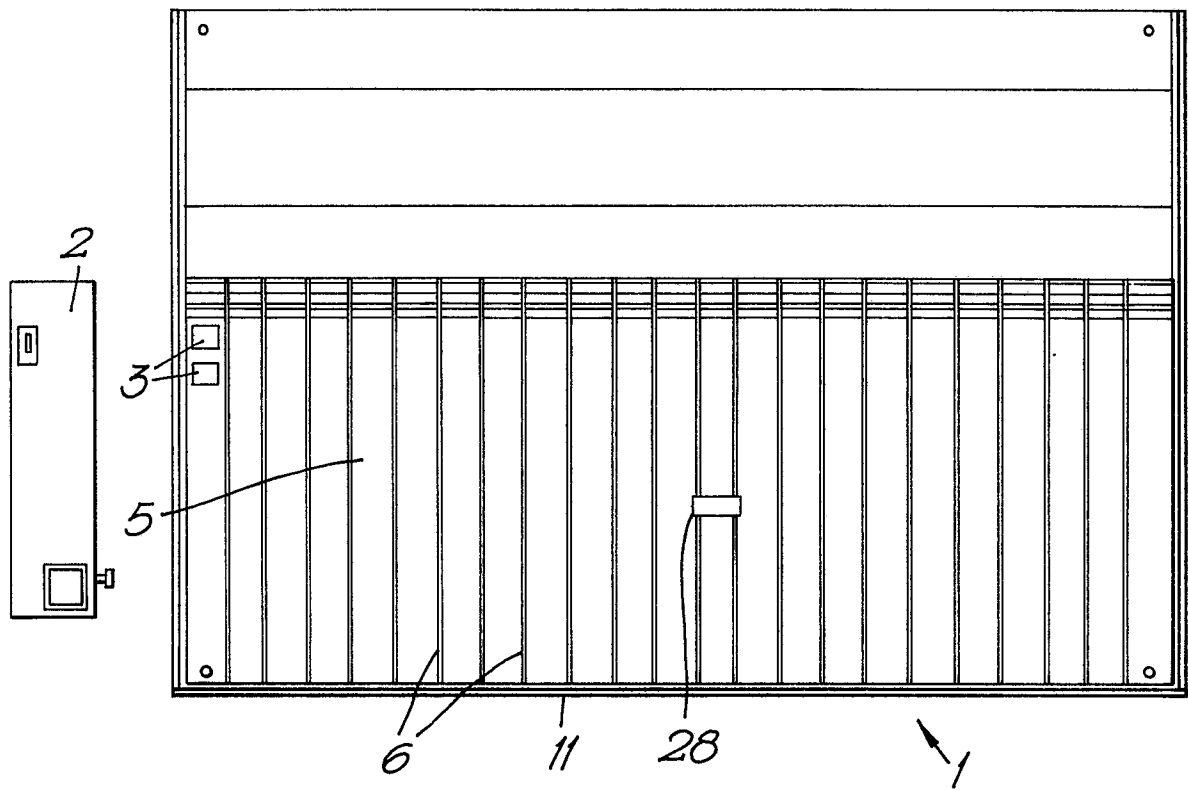
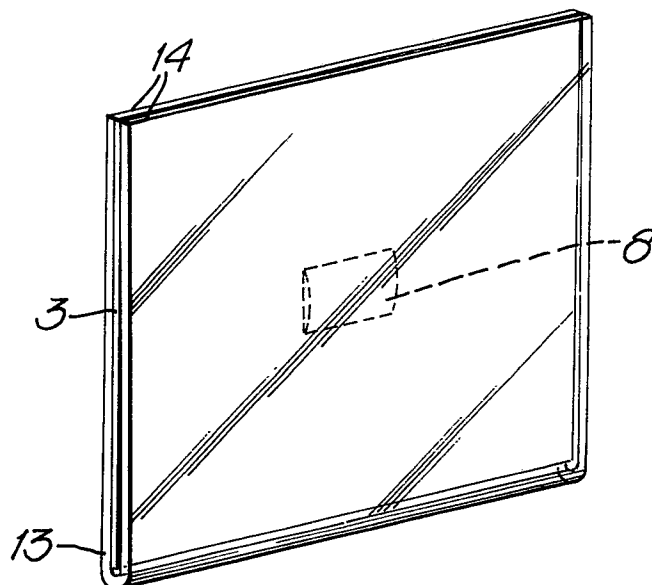


Fig. 3.



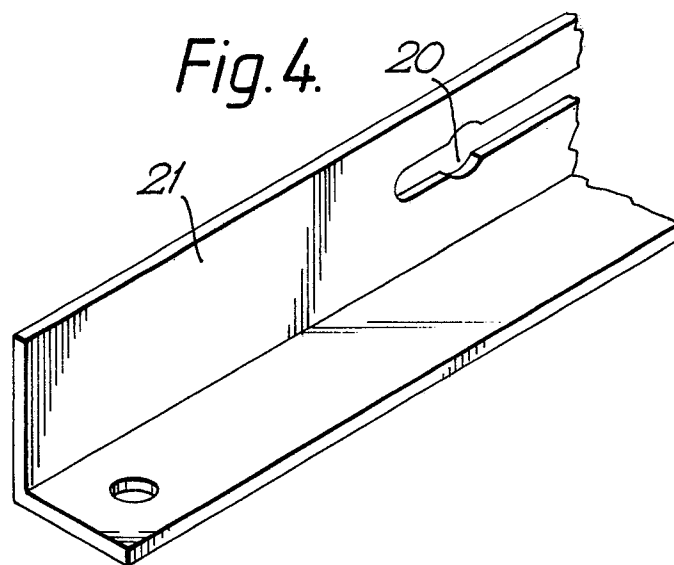
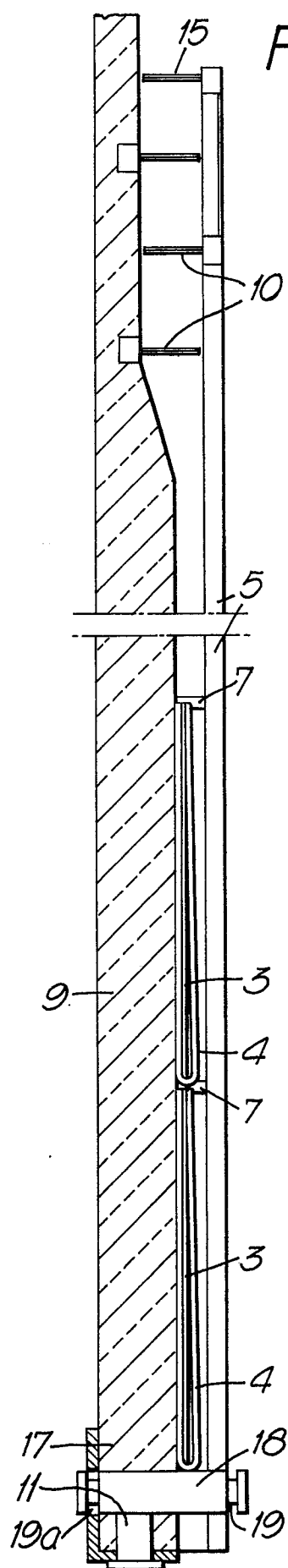


Fig. 5.

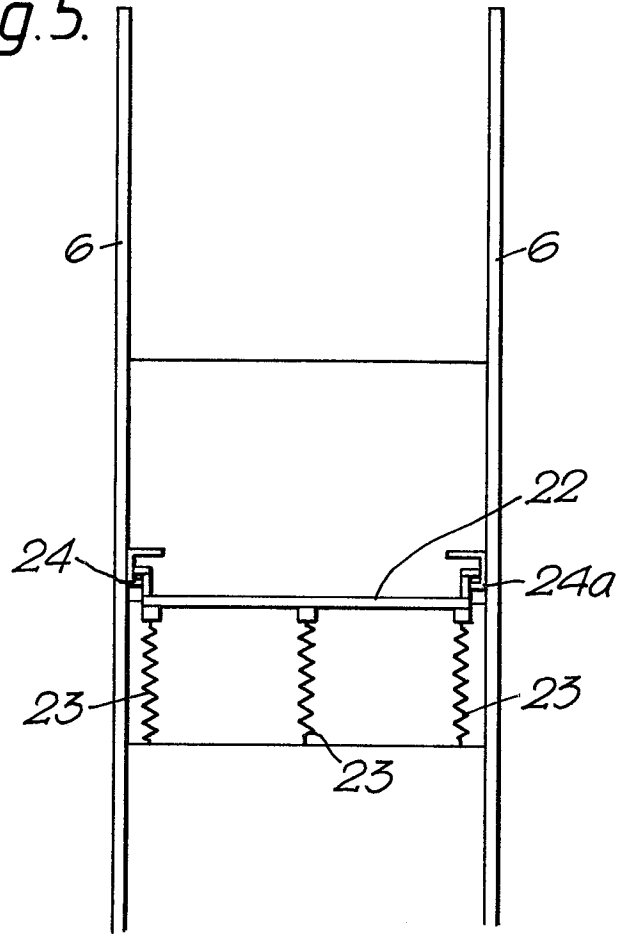


Fig. 6.

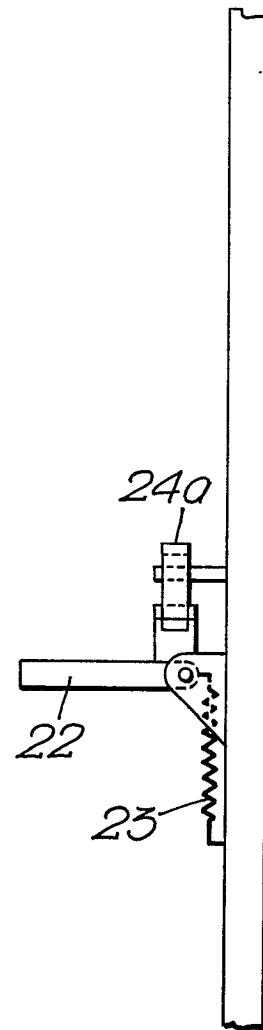
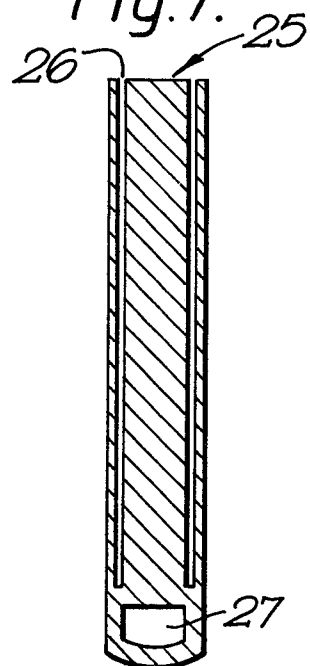


Fig. 7.





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	FR-A- 578 036 (G. VILBONNET) * Abstract, points 1,2,4; page 1, line 40 - page 2, line 24; figures 1-8 *	1-2	G 09 F 15/00 G 09 F 7/10
A	US-A-2 951 301 (SHAW & SLAVSKY) * Claim 1; column 2, line 66 - column 3, line 27; figures 1-5 *	1	
A	US-A-1 329 568 (E.E. YAXLEY) * Claim 1; page 1, lines 57-95; figures 1-3 *	1-3	
A	US-A-2 101 965 (MEDALLIC ART CO.) * Claim 1; page 1, line 39 - page 2, line 12; figures 1-6 *	1,4	
A	US-A-3 456 771 (E. LANDENBERGER) * Column 3, lines 10-59; figure 1 *	1,5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			G 09 F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 26-07-1989	Examiner FRANSEN L.J.L.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			