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(54) **Writing table**

(57) The present invention relates to a writing table. People with disabilities, particularly those confined to a wheelchair, often have to visit places, such as Post Offices or banks, where they are called upon to sign documents. However, being confined to a wheelchair, they are unable to reach the counter provided, which is at too high a level. Additionally, such facilities often place the cashier behind a glass screen. Users of wheelchairs often have difficulty in hearing what the cashier has to say.

The present invention lies in the appreciation of these difficulties and the provision of a solution which does not inconvenience other users of the facility, but enables compliance with obligations under the Disability Discrimination Act 1995.

In its broadest sense, the present invention provides a writing table having a writing surface mounted for pivotal and slidable or telescopic movement upon a bracket adapted for securing, in use, to a wall or other appropriate surface.

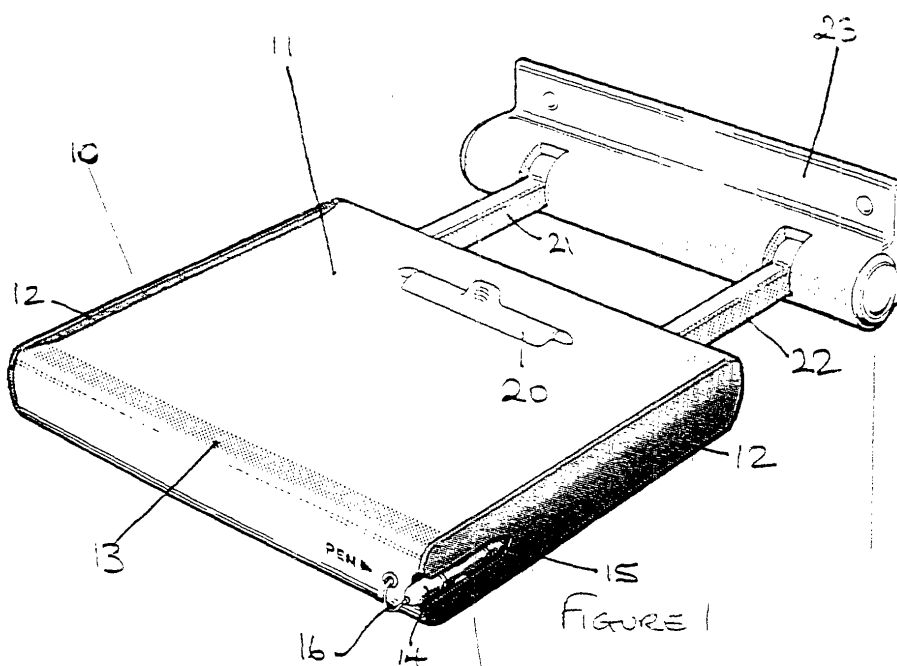


FIGURE 1

Description

[0001] The present invention relates to a writing table.

[0002] People with disabilities, particularly those confined to a wheelchair, often have to visit places, such as Post Offices or banks, where they are called upon to sign documents. However, being confined to a wheelchair, they are unable to reach the counter provided, which is at too high a level. Additionally, such facilities often place the cashier behind a glass screen. Users of wheelchairs often have difficulty in hearing what the cashier has to say.

[0003] The present invention lies in the appreciation of these difficulties and the provision of a solution which does not inconvenience other users of the facility, but enables compliance with obligations under the Disability Discrimination Act 1995.

[0004] In its broadest sense, the present invention provides a writing table having a writing surface mounted for pivotal and slidable or telescopic movement upon a bracket adapted for securing, in use, to a wall or other appropriate surface.

[0005] Preferably, the table incorporates respective components of a two-way communication system, such as a microphone and a loudspeaker. More preferably, the table includes an induction loop system.

[0006] Preferably, the table includes a digital display unit.

[0007] Preferably, the table includes a stowable writing implement.

[0008] Preferably, the writing surface includes a document retaining clip.

[0009] Preferably, the table is provided with a magnifying glass or plate.

[0010] The above and other aspects of the present invention will now be described in further detail, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a first embodiment of a writing table in accordance with the present invention in a fully extended configuration;

Figure 2 is a perspective view of the table of Figure 1 in a fully stowed configuration;

Figure 3 is a perspective view of the table of Figure 1 in an opened but retracted configuration;

Figure 4 is a perspective view of a second embodiment of a writing table in accordance with the present invention in a fully stowed configuration;

Figure 5 is a perspective view of the table of Figure 4 in an opened, retracted configuration;

Figure 6 is a perspective view of the table of Figure 4 in an opened, extended configuration;

Figure 7 is a side view of the table of Figure 4 in the configuration shown in Figure 5;

Figure 8 is a side view of the table of Figure 4 in the configuration shown in Figure 6;

Figure 9 is a plan view of the table of Figure 4 in the configuration shown in Figure 5;

Figure 10 is a plan view of the table of Figure 4 in the configuration shown in Figure 6;

Figure 11 is a perspective view of a third embodiment of a writing table in accordance with the present invention in a stowed configuration;

Figure 12 is a perspective view of the embodiment of Figure 11 in an operative configuration;

Figure 13 is a front view of the embodiment of Figure 11;

Figure 14 is a side view of the embodiment of Figure 11; and

Figure 15 is an exploded perspective view of the embodiment of Figure 11.

[0011] Referring to Figures 1 to 3 there is shown generally at 10 a first embodiment of a table in accordance with the present invention. The table 10 has a writing module 11 having a writing area on the upper surface thereof and having on its left and right sides (in use) raised side panels 12. Side panels 12 act to stop pens etc falling off the edge of the module. Preferably, the writing area is provided with a non-slip surface. As is shown in Figure 1, preferably, the upper surface of writing module 11 is inclined at its front portion 13 upwardly with respect to the rest of the upper surface. This also acts to prevent objects falling off the front of the writing area, but enables coins, for example, to be easily slid from the writing area.

[0012] A pen 14 or other writing implement is provided in a housing 15 in a side of the writing module 11. The pen is secured to the module by means of a retractable cord 16. A clip 20 is provided towards the rear of the upper surface of the writing module 11 for a user of the table to secure documents.

[0013] The writing module 11 is typically moulded from a plastics material such as ABS (acrylonitrile buta-styrene copolymer resin) or polycarbonate, but equally well could be wooden or metal. It is mounted for sliding movement upon two rails 21,22. Stops (not shown) are provided at the end of each rail within the module to pre-

vent it being removed from the rails. At their other ends, the two rails are mounted for pivotal movement within a mounting bracket 23. Mounting bracket 23 will typically be secured to a vertical surface below the level of the standard countertop of the Post Office, bank or other premises. The bracket includes means to retain the writing module in an upright or stowed position so that it does not inconvenience users who do not need to use it. Alternatively, a clip may be provided on the vertical surface to retain the module in the stowed position in a similar manner to that in which aircraft seat tables are stowed. Those skilled in the art will have no difficulty in devising suitable mechanisms.

[0014] Figures 2 and 3 illustrate the sequence of operation of the table. From the upright, stowed, position, the module is pulled downwardly using a handle 24 on the underside of the writing module (Figure 2). The rails 21, 22 pivot within mounting bracket 23. Once in the lowered position (Figure 3) the writing module 11 may be pulled away from the mounting bracket 23 as may be required by the user. (Figure 1). Stowage of the module is simply the reverse procedure.

[0015] The bracket 23 may include a rack (not shown) for display of literature, such as relevant forms, or may include means for carrying advertisements.

[0016] As users of the table will be at a lower level than ordinary users, they may have difficulty in hearing what a cashier or other person serving them may be saying. Equally, the person serving may have difficulty hearing the disabled person's requests. Accordingly, in a preferred embodiment, the table includes an intercom arrangement, comprising a microphone and loudspeaker and associated circuitry. In particular, in preferred embodiments, the table includes an induction loop system to enable the hard of hearing to use their hearing aids without difficulty or interference.

[0017] A second embodiment is illustrated in Figures 4 to 10. Generally the construction is similar to that of the first embodiment and where features correspond, the same reference numerals have been used. In this embodiment, mounting bracket 23 is enlarged to include a literature display rack 30, retractable pen 14 and importantly loudspeakers 31 and a microphone 32 forming the intercom arrangement between cashier and user. An induction loop system is also constructed within this mounting bracket housing.

[0018] As is most clearly seen from Figures 7 to 10, a travel limit stop 33 is built into the writing module 11. This engages a guide slot 34 in the rail assembly to prevent extension of the writing module beyond a predetermined range during pivoting and extension of the writing module 11.

[0019] A third, preferred embodiment is illustrated in Figures 11 to 15. The writing table 50 has a writing module 51 comprising upper 52 and lower 53 module components (Figure 15). A slip-resistant writing surface 54 is provided on the upper surface of the upper writing module component 52. The lower writing module com-

ponent 53 is provided with left and right parallel channels 55 aligned front to rear.

[0020] The writing table 50 also includes a wall plate assembly 60 comprising a wall plate 61 and a wall plate cover 62. Wall plate 61 is, in use, secured to the vertical surface.

[0021] The wall plate 61 is generally U-shaped in cross-section forming a vertically elongate channel. An elongate aperture 63 is formed along each upstanding wall 64 of the plate.

[0022] Within each channel 55 is mounted a respective cantilever arm 65 having front 66 and rear 67 ends. Between the two rear ends 67 of arms 63 and passing through the apertures 63 of the wall plate 61 is horizontally mounted a vertically sliding rod 70. A further, intermediate, horizontal rod 71 is mounted between the cantilever arms 65 at a point intermediate their ends 66, 67. A compression strut 72 is mounted at an upper end thereof upon intermediate rod 71. At its lower end, strut 72 is mounted on a bottom rod 73, held horizontally between two projections 74 formed in the lower end of wall plate cover 62.

[0023] This arrangement allows the writing table to pivot between the folded configuration shown in figures 11, 13 and 14 and the opened configuration shown in Figure 12. As a user pulls on the upper edge (as shown by arrow A in Figure 11) of the writing module 51, cantilever arms 65 are caused to pivot about the axis of the intermediate rod 71 and with respect to strut 72, causing sliding rod 70 to slide from a position adjacent to lower end of wall plate apertures 61 to an elevated position within the apertures. At the same time, strut 72 pivots about the axis of the bottom rod 73 such that it pivots from a substantially vertical position in the folded configuration (Figure 11) to a position at which it is inclined at around 30-60°, preferably about 45°, to the vertical in the unfolded configuration. Compression strut 72 acts to transmit vertical forces applied to the writing module 51, through the wall plate to the counter wall upon which the table is mounted.

[0024] As with the previously described embodiments, this embodiment preferably incorporates intercom and induction loop arrangements. Suitably, these components are installed within the wall plate cover 62. Alternatively, the components may be installed within the writing module 51. However, in view of the intermediate components through which any electrical wiring would need to be routed, this arrangement is considered to be less preferable.

[0025] Preferably, a damper, such as a gas strut (not shown), is incorporated into the assembly to provide damped deployment of the writing module.

[0026] In a modification of the embodiments described above, the table may include a digital display unit, displaying any relevant information such as the value of a transaction, or the weight of an item, being weighed on counter-top scales. Advantageously, the display is mounted in the wall mounted component 23,

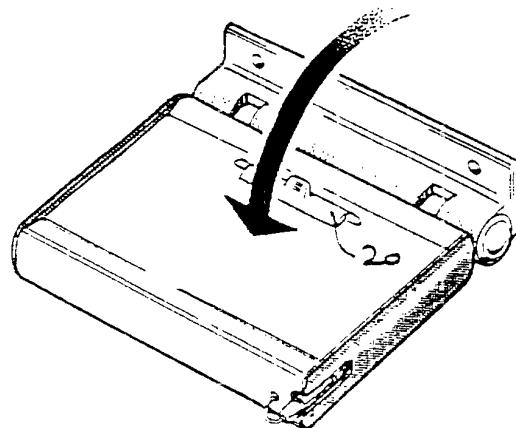
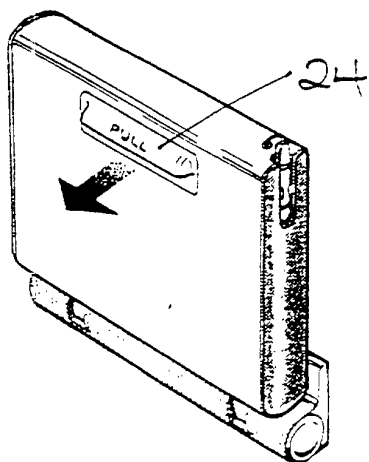
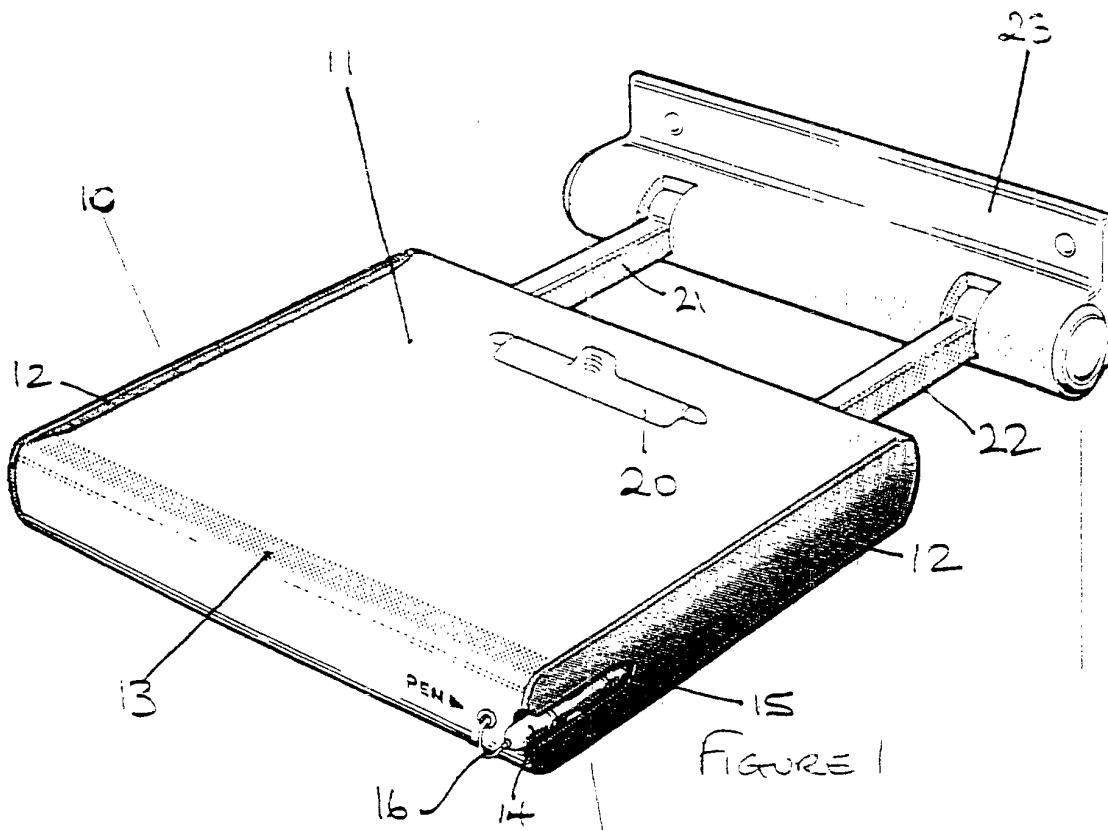
60 of the table of the present invention. The display may also be adapted to display textual messages from the cashier to the customer. Furthermore, the writing module 11, 51 may incorporate a weighing device of its own, coupled to the display unit.

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Claims

1. A writing table (10) having a writing surface (11) mounted for pivotal and slidable or telescopic movement upon a bracket (23) adapted for securing, in use, to a wall or other appropriate surface. 10
2. A writing table as claimed in claim 1 which further comprises respective components of a two-way communication system, such as a microphone and a loudspeaker. 15
3. A writing table as claimed in claim 2 wherein the table includes an induction loop system. 20
4. A writing table as claimed in any one of claims 1 to further comprising a digital display unit. 25
5. A writing table as claimed in any one of claims 1 to 4 further comprising a stowable writing implement.
6. A writing table as claimed in any one of claims 1 to 5 further comprising a document retaining clip. 30
7. A writing table as claimed in any one of claims 1 to 6 further comprising a magnifying glass or plate.
8. A writing table as claimed in any one of claims 1 to 7 wherein the writing surface is formed upon a writing module (11) mounted for sliding movement upon a plurality of rails (21,22); each of which rails is mounted for pivotal movement with respect to the mounting bracket (23). 35
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9. A writing table as claimed in any one of claims 1 to 7 wherein the writing surface is formed upon a writing module (51) comprising upper and lower writing module components (52,53); and wherein the table further comprises a wall plate assembly (60) comprising a wall plate (61) of generally U-shaped cross-section forming a vertically elongate channel having side walls (64) in each of which walls is formed an elongate vertical aperture (63); wherein the lower writing module (53) is provided with left and right parallel channels (55) aligned from front to rear with respect to the orientation of the table; and wherein a respective cantilever arm (65) having front (66) and rear (67) ends, is mounted within each channel (55) wherein between the two rear ends (67) of arms (65) and passing through the apertures (63) of the wall plate (61) is horizontally 45
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mounted a vertically sliding rod (70), and wherein a further, intermediate, horizontal rod (71) is mounted between the cantilever arms (65) at a point intermediate their ends (66,67) with a compression strut (72) being mounted at an upper end thereof upon intermediate rod (71); and wherein strut (72) is mounted at the lower end thereof on a bottom rod (73), and is held horizontally between two projections (74) formed in the lower end of wall plate cover (62).



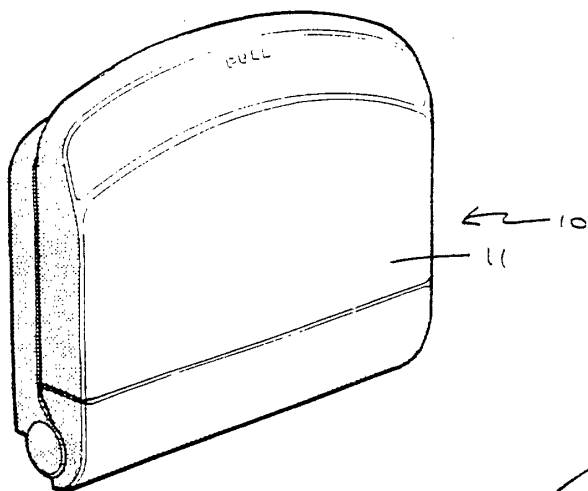


FIGURE 4

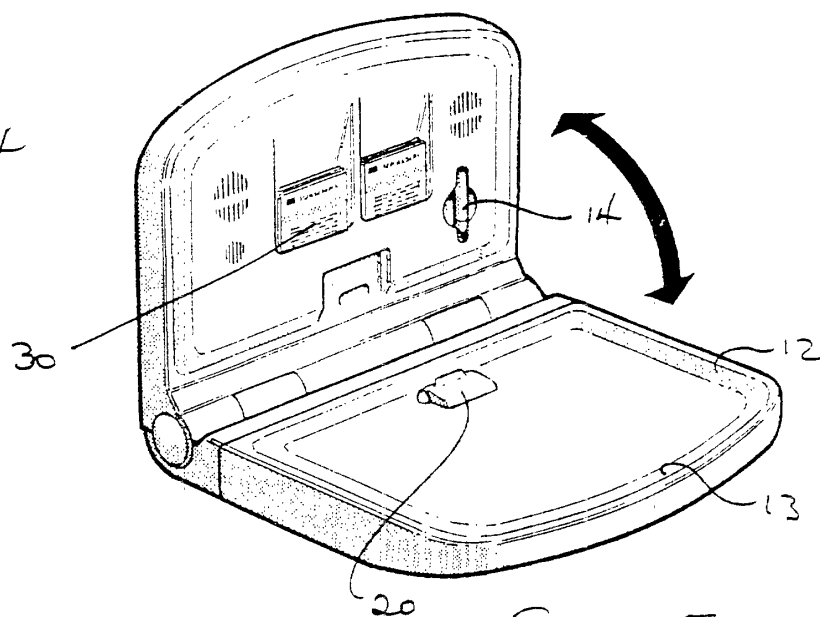


FIGURE 5

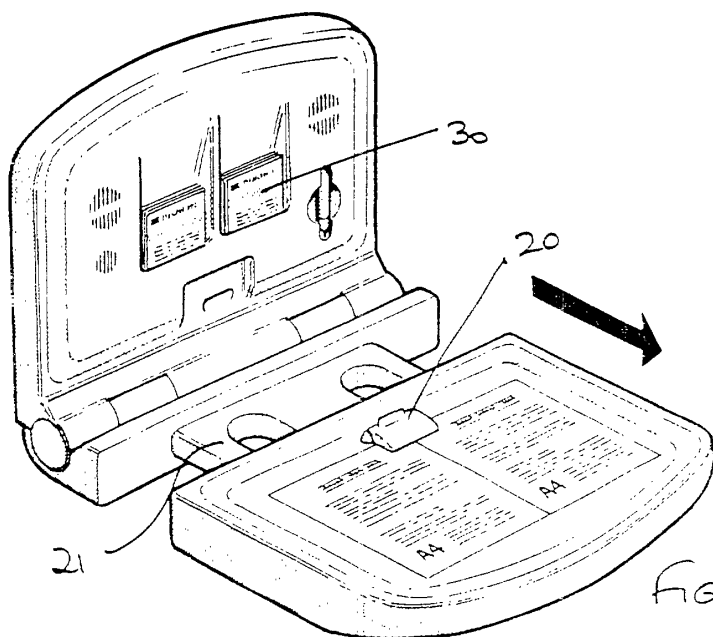


FIGURE 6

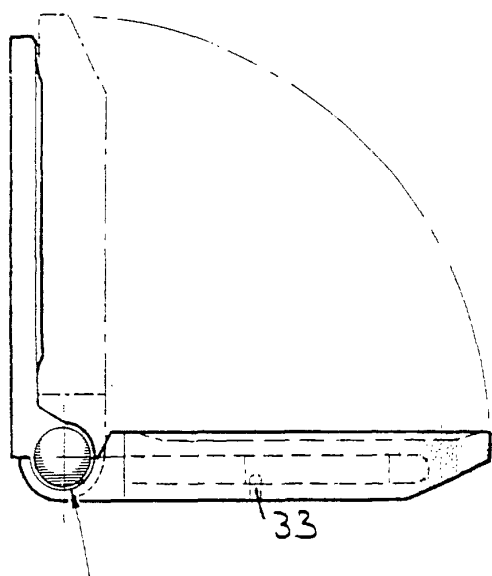


FIGURE 7

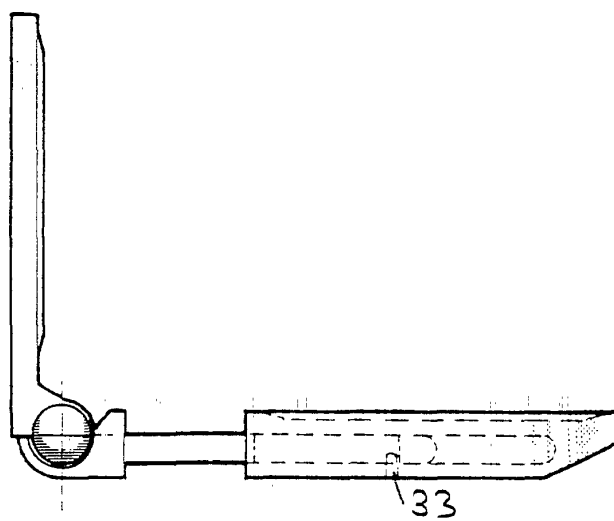


FIGURE 8

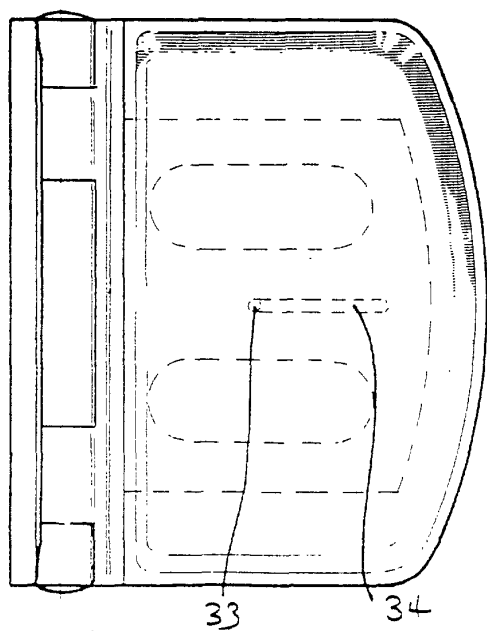


FIGURE 9

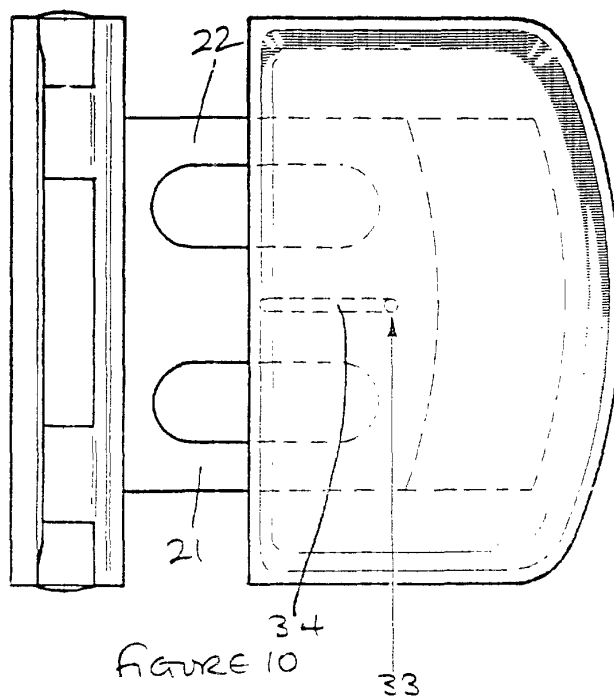


FIGURE 10

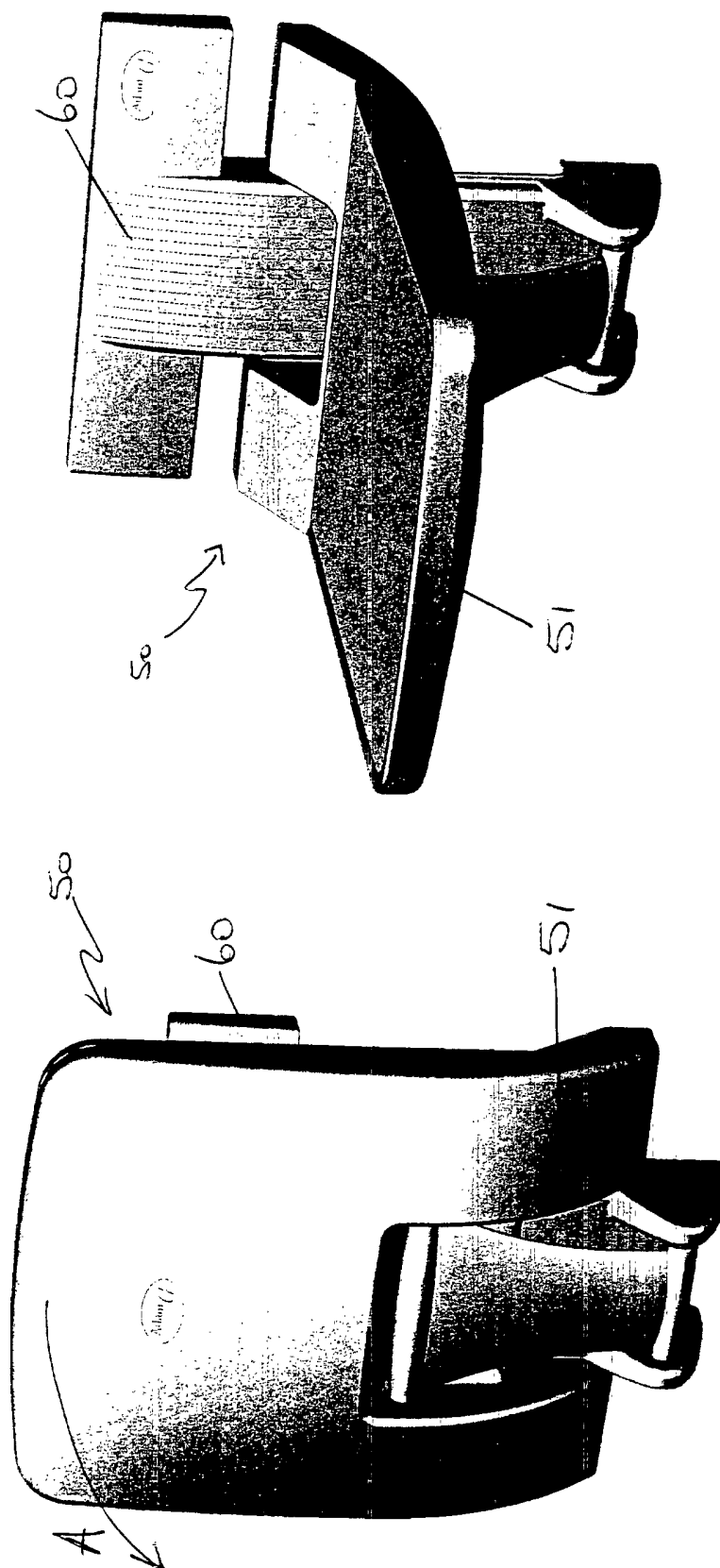


Figure 11

Figure 12

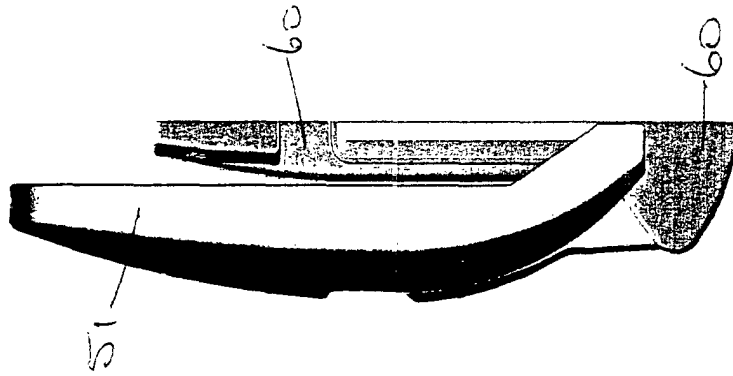


FIGURE 14

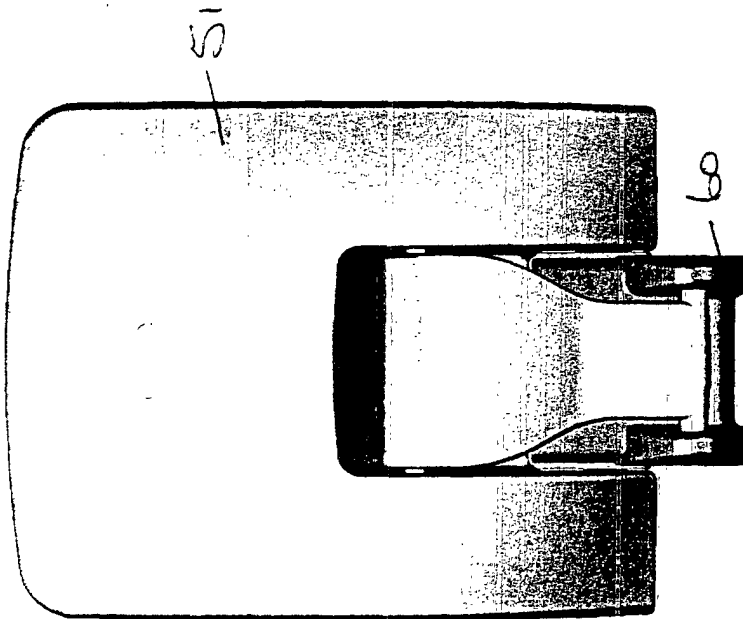


FIGURE 13

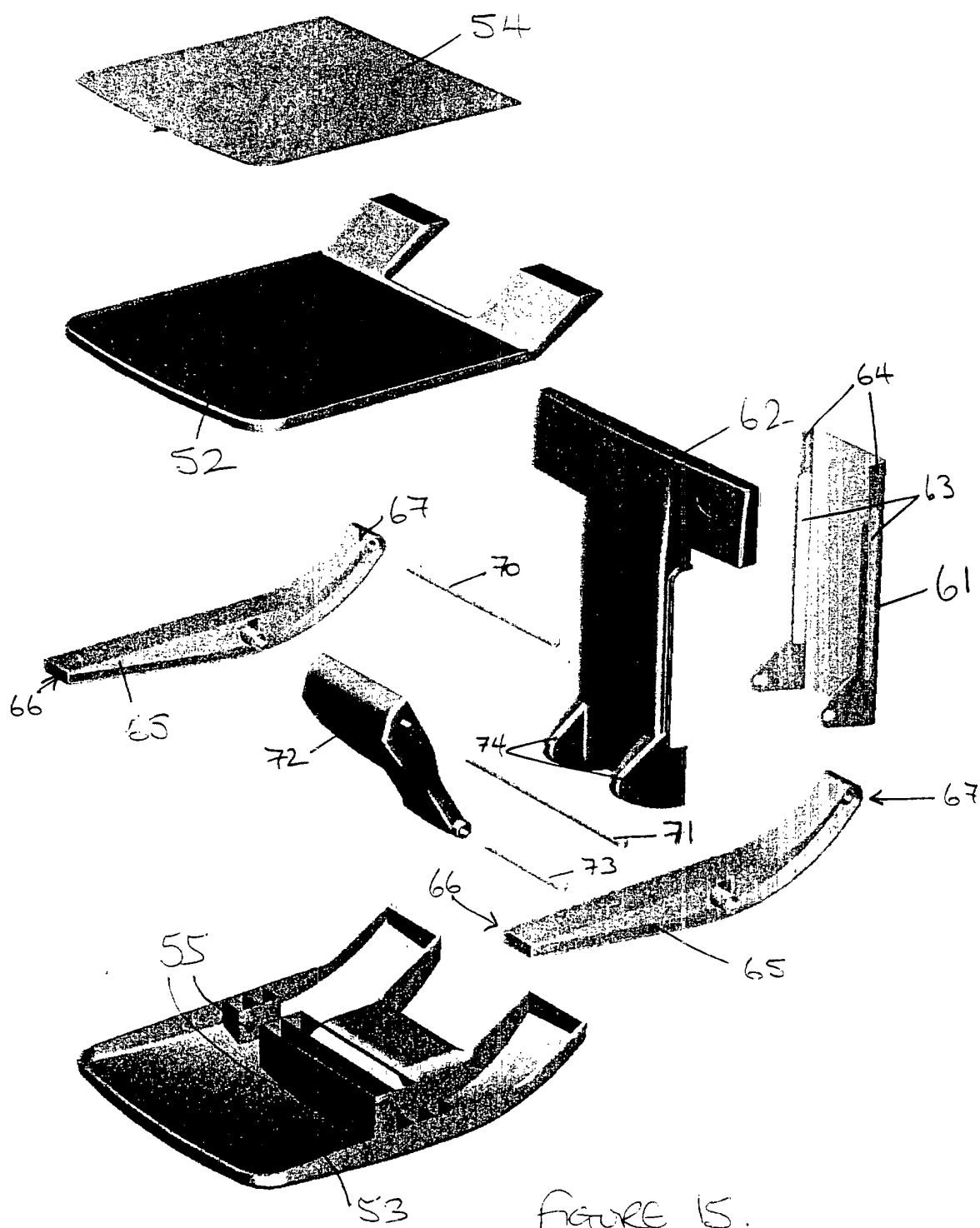


FIGURE 15.



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 30 8607

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.7)
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A	US 4 366 999 A (KONCELIK) 4 January 1983 (1983-01-04) * figures 1-6 *	1	
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A47B
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 January 2002	Noesen, R
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 30 8607

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