



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
28.04.2004 Bulletin 2004/18

(51) Int Cl.7: **B43M 17/00, B42F 7/10**

(21) Application number: **03078367.4**

(22) Date of filing: **24.10.2003**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR
Designated Extension States:
AL LT LV MK

(72) Inventor: **Benn, Alexander**
Stuttgart 70192 (DE)

(74) Representative:
Prins, Adrianus Willem, Mr. Ir. et al
Vereenigde,
Nieuwe Parklaan 97
2587 BN Den Haag (NL)

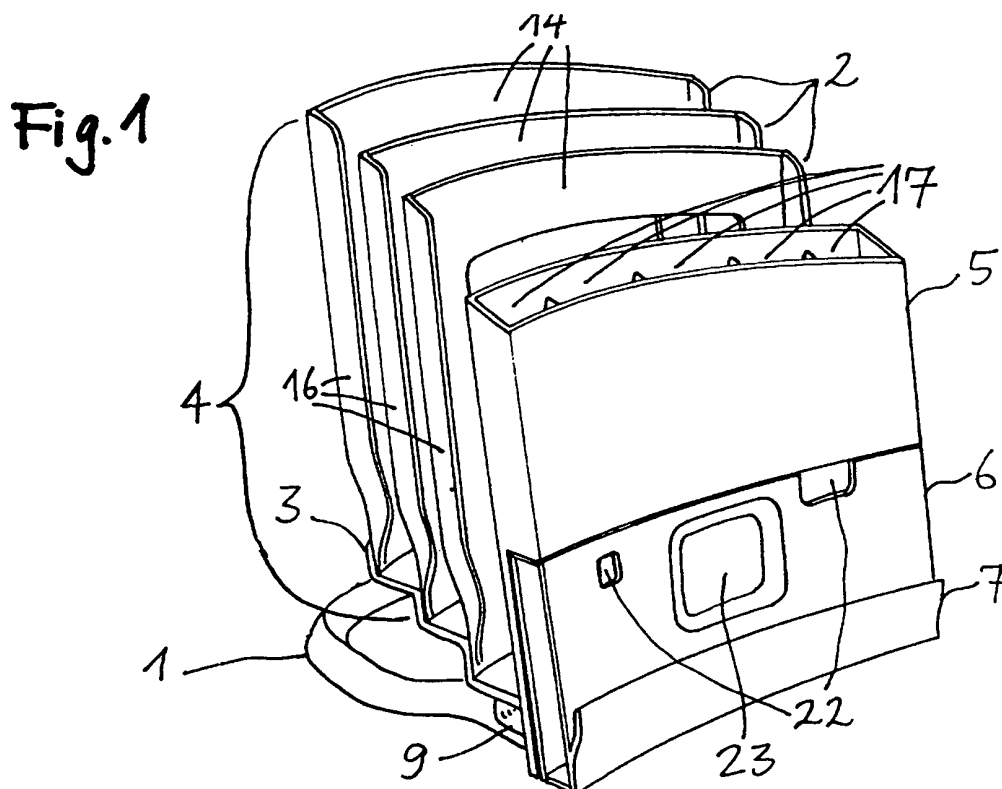
(30) Priority: **25.10.2002 DE 10250854**
21.04.2003 DE 10320642

(71) Applicant: **Smead Manufacturing Company**
Hastings, Minnesota 55033 (US)

(54) **Letter file**

(57) A letter file (31) for use in managing papers on a desktop is disclosed. The letter file has a foot element (1), a staircase base (3) located atop said foot, detachable paper file trays (2) extending generally vertically from at least some of stairs, a storage element (5) extending from the lowest of said stairs and in front of said

file trays, the storage element having a plurality of elongated compartments sized to receive writing instruments or the like, the lower section including a recess (8) and upper and lower rails, slideable storage unit (6) and a document ledge (7) extending from the lower of rails for holding a document upright in front of the letter file.



Description

Technical Field

[0001] This disclosure is in the filed of office desk or-
ganizer products.

Background

[0002] In order to do the various activities in this field
of work, equipment such as monitors, keyboard, porta-
ble computers of various sizes and telephones as well
as office articles such as letter files, pen-holders and
desk accessories together with office materials such as
writing paper, note pads, pens and pencils, paper clips,
etc. are normally needed.

[0003] The state of the art is using individual articles
for the various requirements. Vertical or horizontal letter
files are used to file paper, desk accessories are used
to keep pens and pencils, note sheets, calling cards, pa-
per clips etc., wires of telephones, computers and other
communication equipment lie on the desk or hang down
from the back edge of the table. The state of the art is
also office articles in which a number of areas of use are
combined. A detrimental effect in some of the known ap-
plications is the fact that the objects to be found on the
desk needed for the work block the working space avail-
able and thus make it smaller. A further detrimental ef-
fect is that the accumulation of a number of objects on
the desk affects the clarity and the easiness of cleaning.

Summary

[0004] The invention is disclosed with a combination
of elements but may also reside in single elements or
different groupings of elements.

[0005] In one configuration, a letter file is made up of:
a foot element, a staircase base located atop said foot,
said base having a plurality of stairs, a detachable paper
file trays extending generally vertically from at least
some of stairs, a storage element extending from the
lowest of said stairs and in front of said file trays, said
storage element having an upper section and lower sec-
tion, the upper section including a plurality of elongated
compartments sized to receive writing instruments or
the like, said lower section including a recess and upper
and lower rails, slideable storage unit sized to be re-
ceived within said recess in said lower section and slide-
able laterally along said rails; the slideable storage unit
having generally vertically oriented compartments and
a front face forming a front wall to the compartments,
the front wall including apertures for allowing visual in-
spection of the contents of said compartments; a mag-
netic element on said front face for maintain magneti-
cally attracted objects; and a document ledge extending
from the lower of rails for holding a document upright in
front of the letter file.

[0006] An object of the invention has the benefit that

it combines the filing of a number of piles of paper, stor-
age of small articles such as paper clips, staples, calling
cards and similar, a number of pen-holders and a docu-
ment holder with one another, simultaneously organ-
izing the wires needed at the workplace, e.g. telephone
wires, network wires etc., also preventing them from
sliding back over the edge of the table. All the functions
described are provided by the object of the invention on
a surface, the area of which is smaller than the DIN A4
format; in the embodiment in the example, the surface
area is only 70% of a DIN A4 format.

[0007] A further advantage of the invention is that all
the functions are available simultaneously and do not
block one another.

[0008] An object of the invention is that a number of
individual parts which are put together to form a unit,
each fulfilling its own specific function. This is done in a
modular way. These individual modules can optionally
be used in various finishes. In this way, an individual
combination of the required functions is enabled.

[0009] The invention proves itself to be versatile and
space-saving in combination with an attractive and clear
design.

Brief description of the drawings

[0010]

Figure 1 is a side perspective view of an embodi-
ment of the invention;

Figure 2 is a view similar to Fig. 1 with office sup-
plies shown in place;

Figure 3 is a view similar to Fig. 1 with a sheet in
the document holder;

Figure 4 is a rear-side perspective view;

Figure 5 is a view like Fig. 1 with supplies in the
storage unit and the unit slid laterally;

Figure 6 is a close up partial perspective of the stor-
age unit and rails;

Figure 7 is a perspective view of the foot (1), from
the front, with channel-like recesses (9) and wires
(10) therein as well as coupling devices (12 and 28)
for paper file unit (4) and storage element for pens
and pencils (5);

Fig. 8 is a view like figure 7 except from the rear
with no wires shown;

Fig. 9 is a view like figure 7 of the foot (1), from the
front;

Fig. 10 is a bottom perspective view of the step-
shaped base (3) with coupling devices (13 and 26);

Fig. 11 is a bottom perspective view of paper files
(2) with tongue-shaped coupling device (27)

Fig. 12 is a bottom perspective view of storage el-
ement for pens and pencils, mobile telephone and
other objects (5) with dovetail-shaped coupling de-
vice (29); and

Fig. 13 is a top perspective view of the storage unit
for small parts with integrated document holder (6).

Detailed Description

[0011] The letter file (31) comprises a foot (1), a staircase/stair-step-shaped base (3) with a number of paper files (2), together forming a paper file unit (4), a storage element for pens, mobile telephone or similar objects (5) and an extendible storage unit for small objects (6) with an integrated document holder (7). The foot (1) provides a passageway from the back to the sides (either or both) so that cables to a device adjacent the letter file (like a PDA) can be used without wire clutter.

[0012] In accordance with one embodiment, there are two recesses (8) Figure 8, on the bottom of the foot, which are large enough for a number of communication wires to be guided under it next to one another. In accordance with another embodiment there is a channel-like recess (9) in each of the left and right front areas of the foot, on the top of the same, via which recess the wires guided through from the back (10) can be distributed laterally. The lateral distribution of the wires has the effect that they can be guided to the equipment in question on the side provided for. In addition, the lateral recesses (9) are beneficially designed wide and low, with the result that a number of wires (10) can also be arranged next to one another in this area. As a result of the guidance firstly through the lower recesses and then via the channel-like lateral recesses, a bend (11) results in the wire. Beneficially, this bend results in the wire touching the foot at a number of places. The friction occurring as a result of this prevents an undesired slipping back of the wire to a great extent.

[0013] According to a further embodiment, there is a coupling device (12) (Fig. 7) on the top side of the foot, into which the base (3) can be pushed through a corresponding coupling device tab (13) and connected detachably. Further, there is a recess having dovetail walls on the front of the foot, which acts as a coupling device (28) and into which the storage element (5) for pens and pencils can be pushed and connected detachably. The storage element for supplies like pens and pencils also contains a corresponding coupling device (29), which is preferably shaped dovetailed in the embodiment.

[0014] A further benefit of the invention is the step-shaped design of the base (3) of the paper file unit (4), which has the effect that the papers or piles of paper inserted can be staggered step-shaped behind one another of different vertical extents or staggered. In this way, the upper area of each pile of paper is easily visible.

[0015] A further benefit of the invention is a number of (or at least one) paper files (2), which can be pushed into the base (3) and connected with it detachably through matching coupling devices (26 and 27). In the embodiment, this is designed in such a way that a tongue (27) on the paper file is inserted into the matching slot/receivers (26) on the base.

[0016] The paper files preferably are bowed with a slightly curved back (14) inclined to the rear, which has the advantage that papers (15) deposited or placed in

these files can be put into a stable shape and thus made to stand thanks to the curvature and the inclination. This curvature is a shape, which causes sheets to stiffen along their vertical extent so that they will not fold over.

A slight curvature is defined as sufficient to create resistance in a sheet to prevent it from falling over if vertically oriented (i.e. remain erect). By creating a slight longitudinal (vertical) arcuate curvature in the sheet, such as paper, the entire sheet will be stiffened.

[0017] In order to fulfil this purpose, the curvature and the inclination are preferably both present. In the preferred embodiment, the curvature has a radius of 450 mm and the inclination is 12 degrees to the back against vertical. Other ratios between inclination and curvature can also prove to be purposeful. A slight inclination is generally between 1 and 12 degrees off vertical.

[0018] Beneficially, the paper files (2) are fitted in a vertical alignment (with inclination). The vertical alignment of the paper files results in a more effective utilization of space than would be the case with a horizontal file. In addition, the paper can beneficially be inserted in the direction of reading. The slight inclination to the back results in the paper being supported from behind.

[0019] In the embodiment, the paper files are sensibly dimensioned for DIN A4 or for American Letter format (8.5x11) and accordingly provided with lateral edges (16) which put the piles of paper into an ordered shape.

[0020] One embodiment contains paper files without lateral edges, into which piles of paper or folders can be inserted both upright and also transverse (landscape).

[0021] Further embodiments are paper files with straight backs and/or a horizontal alignment, which is sensible if folders, bound documents and similar are to be inserted.

[0022] According to one beneficial design, the storage element (5) for pens and pencils contains compartments accessible from above (17), into which writing apparatus (18) and other objects can be inserted. These compartments (17) are dimensioned in such a way that they prevent the writing apparatus from falling to the side. In other words, the maximum cross section of the opening of the compartments is small enough, that, when the depth of the compartment is taken into consideration, a portion of the contents of the compartments will always extend over the top of the compartment, even if tipped to the side.

[0023] In a further beneficial design, the storage element (5) for pens and pencils is designed with a front face, with the same curvature as the paper files, thus adapting in its construction and its design to the foot and the paper files. This will come into play with respect to copy holder 7 (by creating the same tensioning via curvature as mentioned above).

[0024] A further beneficial design of the storage element for pens and pencils (5) contains a guide (19) (Figure 6) underneath the pen compartments, into which a further module can be inserted. In the embodiment, the further module is a storage unit for small objects (6). The

guide (19) surrounds the storage unit for small objects (6) like a bracket on three sides and has been provided with guidance grooves (30), in which the storage unit for small objects, which is equipped with corresponding grooves (30), slides along the side and can thus be pushed in and out. Preferably, the front face of the storage unit (6) will have the same arcuate curvature as mentioned above for the storage element (5).

[0025] In an embodiment, the storage element for pens and pencils is beneficially equipped with a lip-shaped ledge element on the front bottom edge, fulfilling the function of a document or copy holder (7).

[0026] A further beneficial embodiment of the object of the invention contains a storage unit for small objects (6) with an integrated document holder (7), the unit (7) which can be pushed into and out of the guide (19, Figure 6) of the storage element for pens and pencils in both directions along guides or rails 30. Two compartments (20) (Figure 5) accessible from above are integrated into this storage unit for small objects (6) and are provided for calling cards/business (21) and note sheets and other small-sized objects. Purposefully these compartments are provided with a viewing means, such as window-like access ports, apertures or recesses (22) from the front, through which what is currently inside can be seen.

[0027] A further purposeful design is a hollow-like recess (23) accessible from the front, which is backed by magnets. For example, paper clips (24) can be kept in this hollow-like recess and kept inside it by the magnetic effect. Small objects attracted by magnets can also be kept in it.

[0028] According to a further beneficial design there is a lip-shaped compartment /document holder (7) extending evenly along the entire width on the front bottom edge of the storage unit for small objects (6). This compartment acts as a document holder (7), into which current, important or other documents (25) can be placed vertically. The document is inserted behind the lip-shaped element and then leant onto the two storage units, also preferably curved for the tensioning effect. As the document holder is on the front side of the object of the letter file (31), the entire surface of the inserted sheet of paper is visible. The lip-shaped compartment also functions in this way with the storage unit (6) pushed out to the side. The slightly curved shape of the front sides of the two elements (5 and 6), which put the inserted document into a stable shape so that it can remain standing without further aids, proves to be sensible for the function of a document holder.

Diagrams:

List of reference numbers:

[0029]

1 foot

2 paper files
3 step-shaped base
4 paper file unit
5 storage element
5 6 storage unit / storage element
7 lip-shaped fitting element, document holder
8 recesses on the base of the foot
9 lateral recesses on the top of the foot
10 wire
10 11 bend in wire
12 coupling device on the top of the foot for base
13 coupling device on the underside of the base
14 back of a paper file
15 paper
15 16 lateral edge of a paper file
17 compartments for writing apparatus and similar writing apparatus
18 guide on storage element for pens and pencils
19 compartments
20 21 calling card, note sheet
22 window-like recess
23 hollow-like recess
24 paper dips
25 26 document or paper in DIN A4 or a similar format
25 26 slot-shaped coupling device on the base for paper file
27 tongue-shaped coupling device on the paper file
28 coupling device on the foot for storage element for pens and pencils
30 29 coupling device on the storage element for pens and pencils
30 guide groove, guide element
31 paper file with additional functions

Claims

1. A letter file comprising:

- a) a foot element;
- b) a base located atop said foot,
- c) paper file trays having a front and back faces, said trays extending generally vertically from said base and being inclined off the vertical axis so that the back face is closer to the base.

2. A letter file according to claim 1 wherein said front face is concave so that papers in the tray are tensioned against folding over.

3. A letter file according to claim 1 wherein said base includes is stair-step and wherein said paper trays sit atop adjacent stairs of the base so that they are vertically distinguishable.

4. A letter file according to claim 1, where said foot includes a passageway for cabling.

5. A letter file according to claim 4 wherein said passageways include paths extending from the back of said foot and exiting on either side thereof.
6. A letter file according to claim 5 wherein said paths exit on both sides of said foot 5
7. A letter file according to claim 1 wherein said base includes a stair-step and at least one of said steps includes a receiver, and wherein at least one of said trays includes a flange to be received into said receiver for removably mounting said tray. 10
8. A letter file according to claim 1 wherein said letter file includes a document holder extending from said base, said holder being arcuate along its length, so that a paper received therein will be arcuately tensioned to prevent folding over of the paper. 15
9. A letter file according to claim 8 wherein paper trays are formed in a like arcuate shape. 20
10. A letter file according to claim 8 further including a pair of spaced apart rails connected to said foot, and a slidable storage unit locatable between said rails and capable of lateral movement therealong. 25
11. A letter file according to claim 10 wherein said storage unit has a front face and further includes at least one compartment therein and at least one viewing means in said front face for viewing the contents of said compartment. 30
12. A letter file according to claim 10 including a second storage unit, having a front face, is located above said rails, and wherein said front faces on said storage units are arcuately shaped, to maintain the curvature of a sheet inserted into said copy holder, said copy holder being spaced from said front faces and having a like arcuate curvature. 35
40

45

50

55

Fig. 1

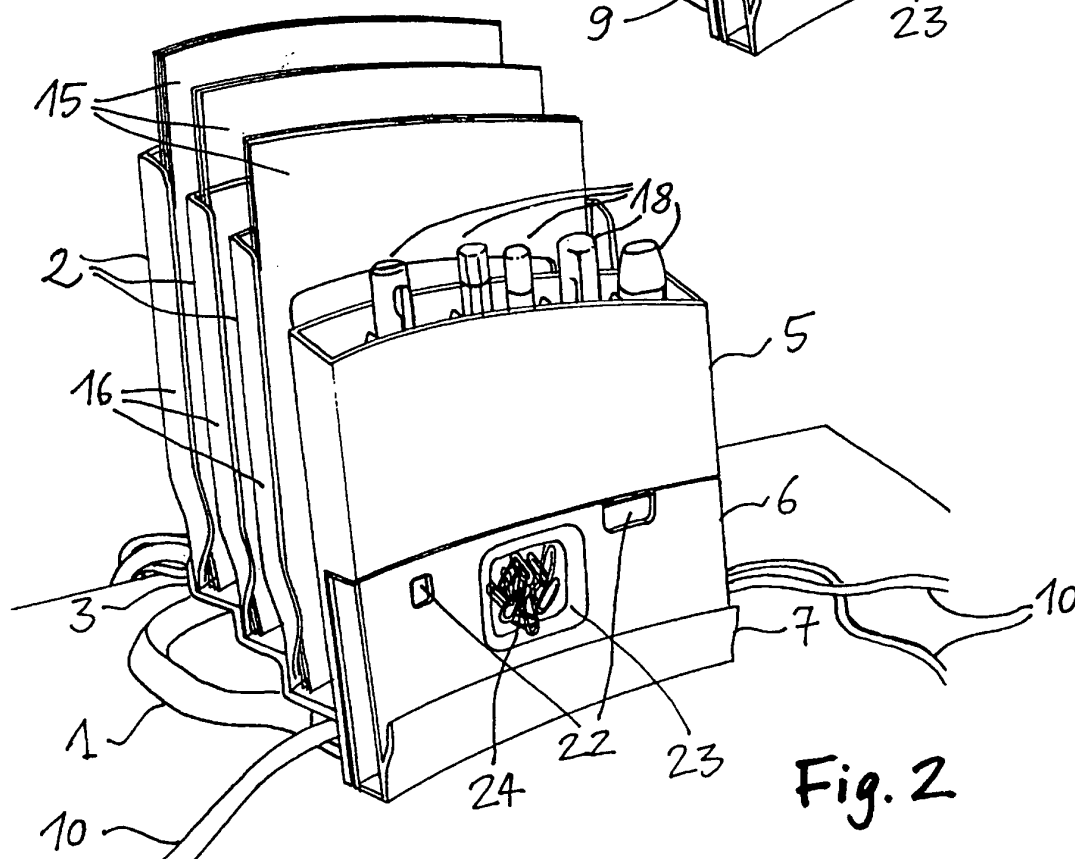
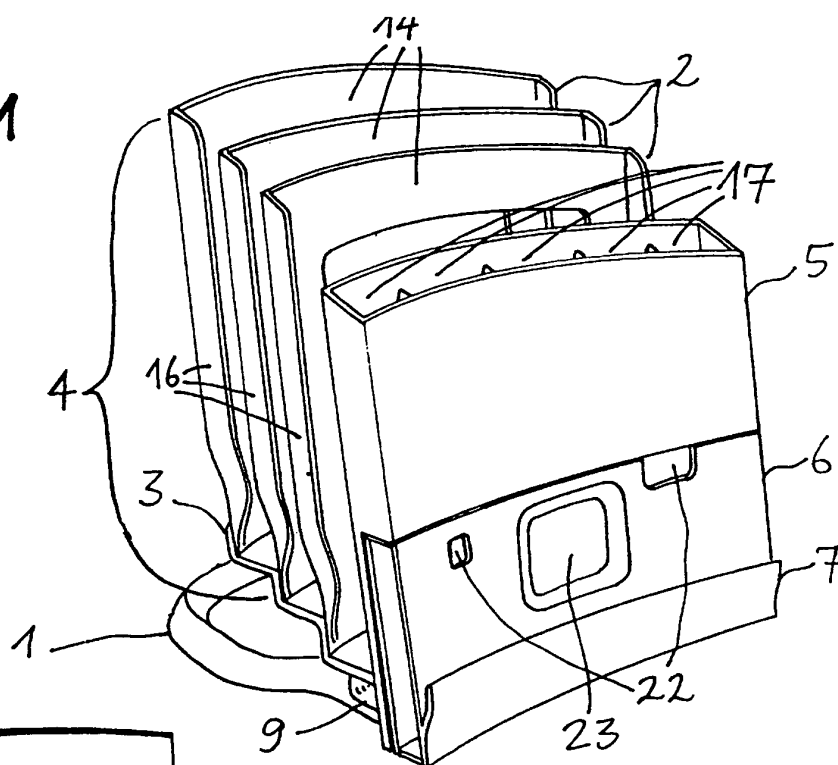
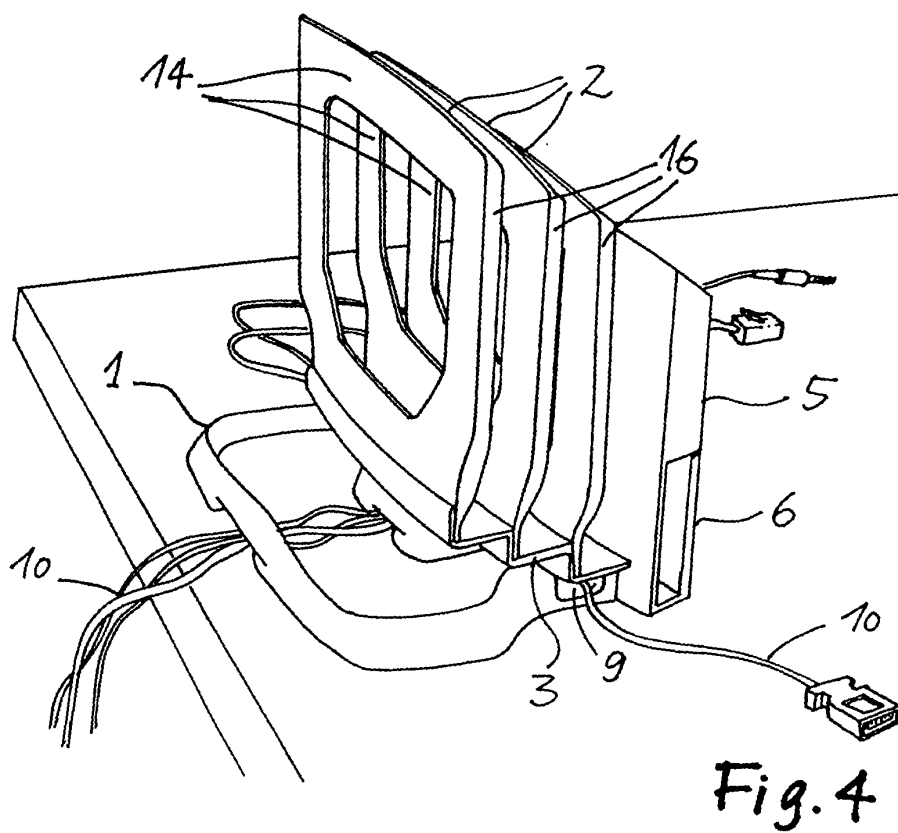
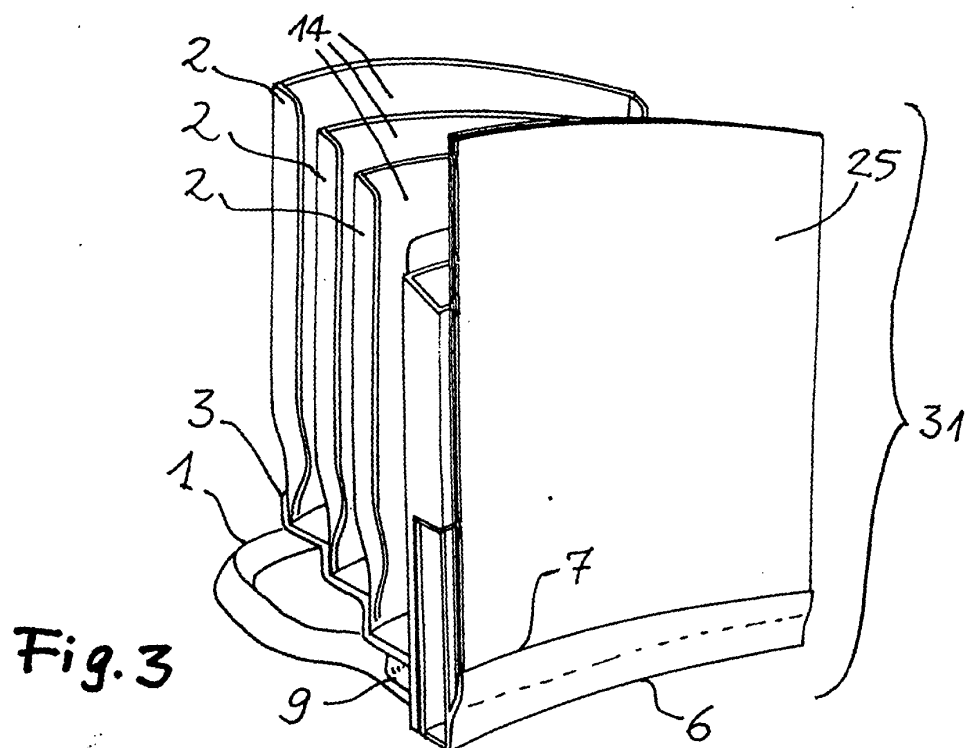
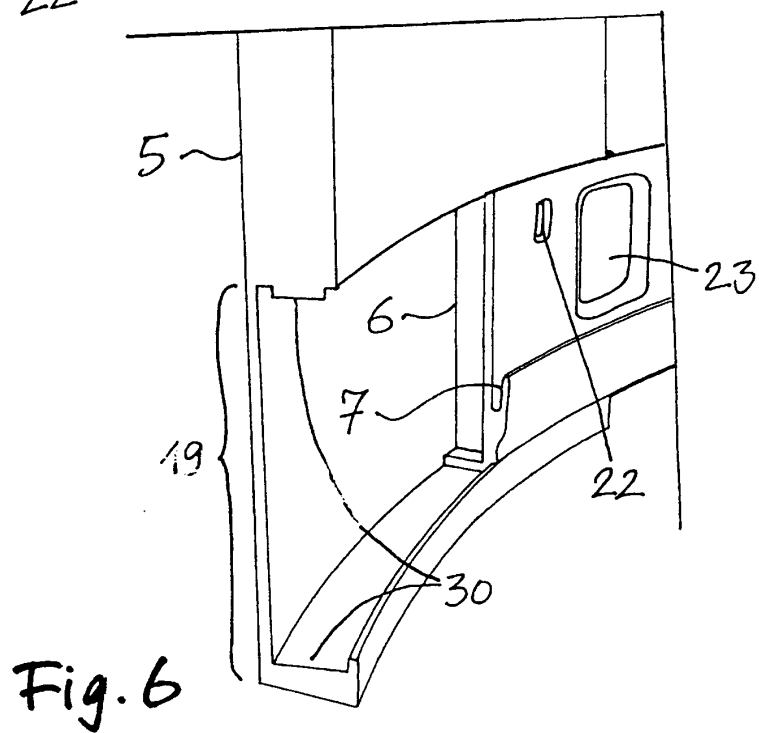
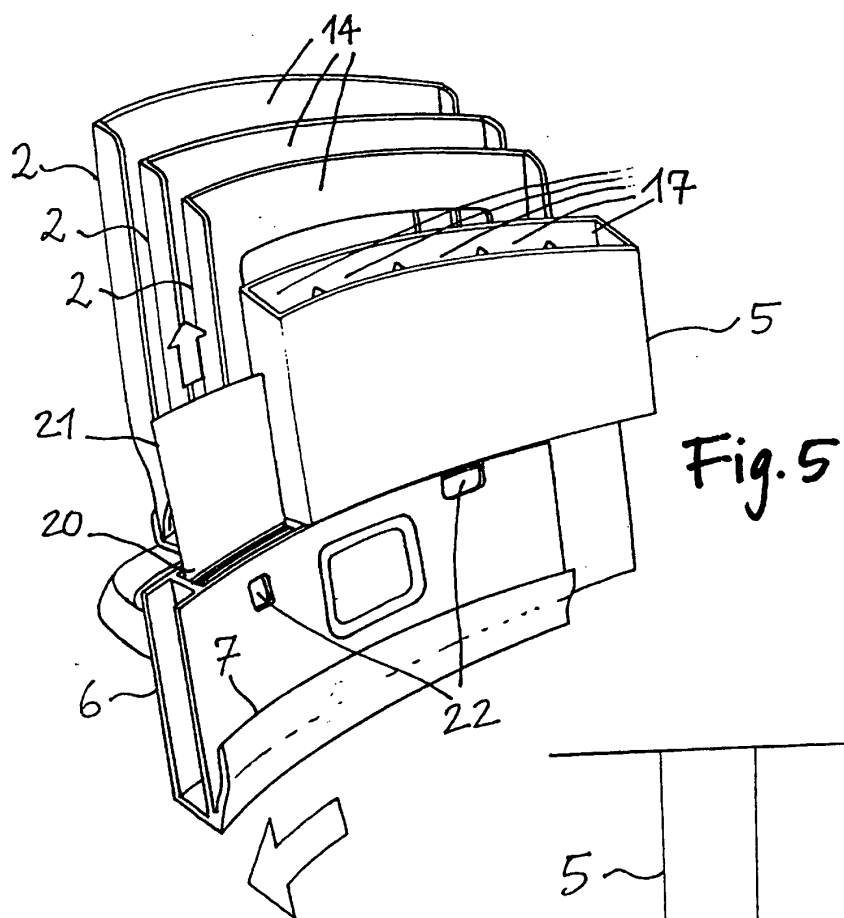
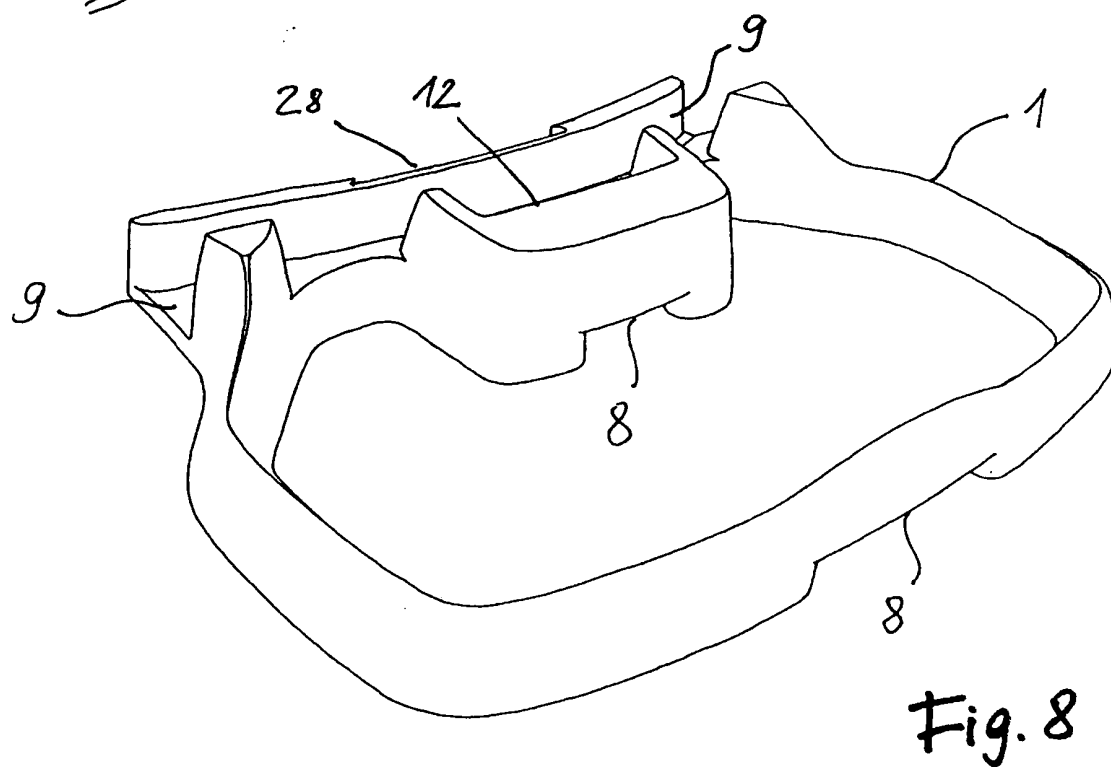
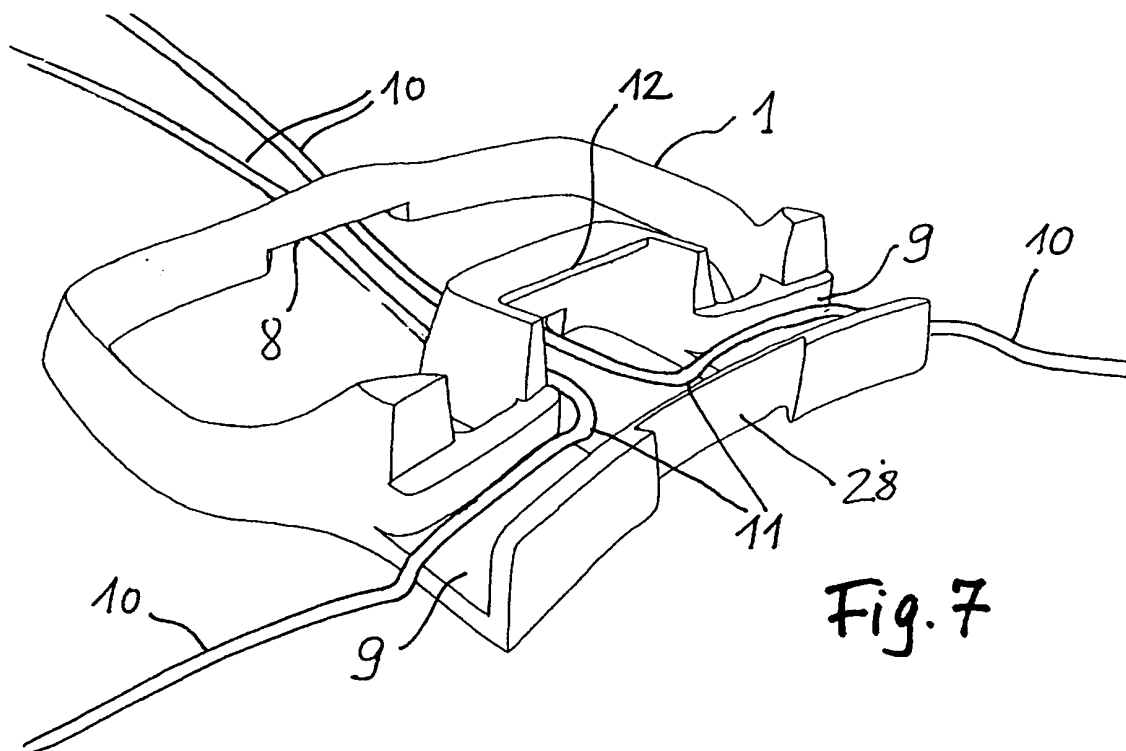
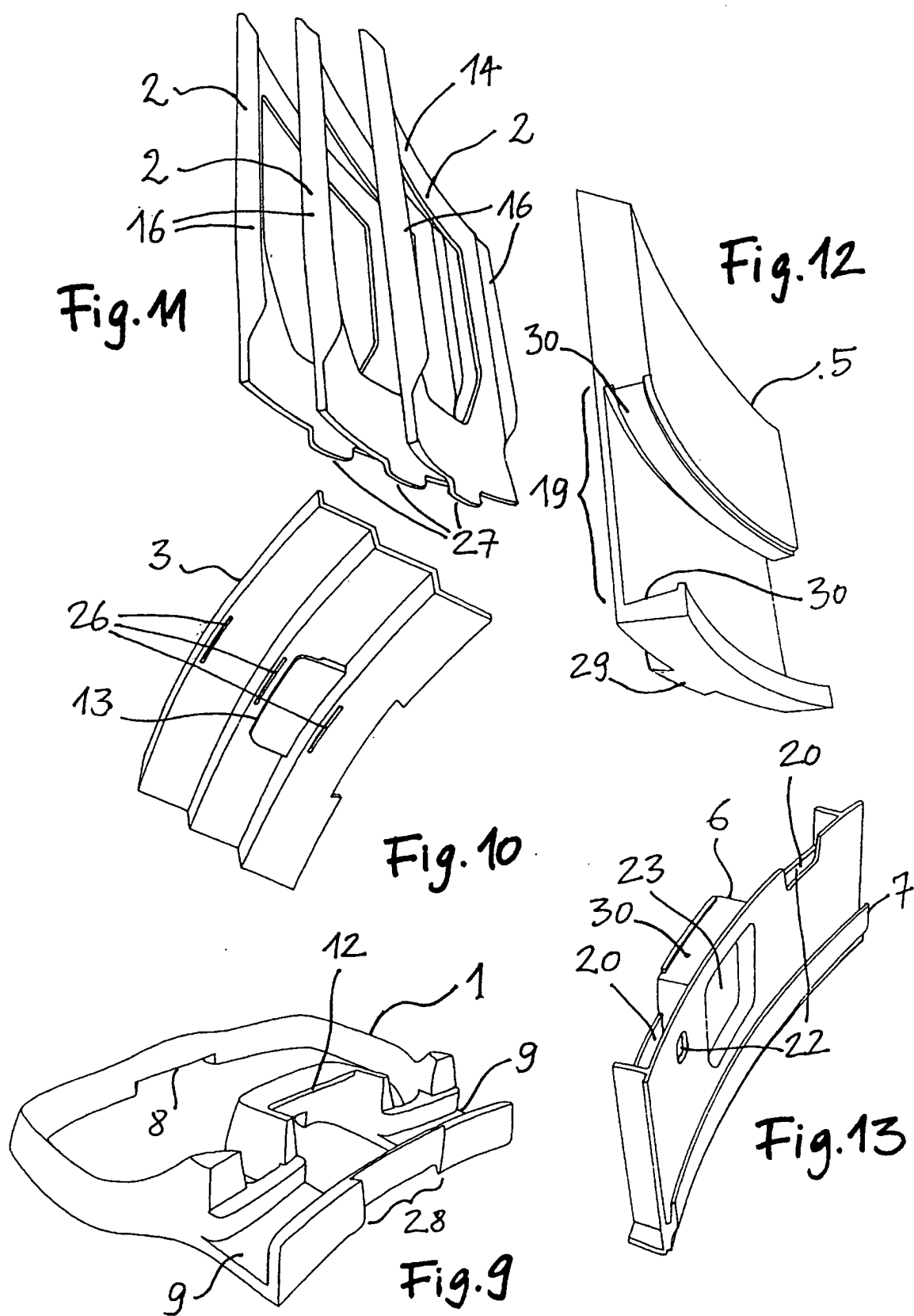


Fig. 2











European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 07 8367

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)
X	DE 44 02 250 A (STUDIENZENTRUM FUER PERSOENLIC) 14 September 1995 (1995-09-14)	1,3,7	B43M17/00 B42F7/10
Y	* column 3, line 46 - column 5, line 67; figures 1-3 *	2,8,9	

X	US 4 974 733 A (EVANS DALE M) 4 December 1990 (1990-12-04)	1,3,7	
Y	* column 2, line 32 - column 4, line 4; figures *	2,8,9	

Y	US 5 971 171 A (HIMEBAUGH DOUGLAS R ET AL) 26 October 1999 (1999-10-26)	2,8,9	
	* column 2, line 25 - column 5, line 67; figures *		

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) B43M B42F A47B
Place of search MUNICH		Date of completion of the search 6 February 2004	Examiner Klintebäck, D
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			

EPO FORM 1503 03.82 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 07 8367

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-02-2004

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
DE 4402250	A	14-09-1995	DE	4402250 A1	14-09-1995

US 4974733	A	04-12-1990	CA	2019372 A1	11-02-1991
			MX	167549 B	29-03-1993

US 5971171	A	26-10-1999	WO	9962376 A2	09-12-1999

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82