



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
30.04.2008 Bulletin 2008/18

(51) Int Cl.:
A45D 19/00 (2006.01)

(21) Application number: **07016976.8**

(22) Date of filing: **30.08.2007**

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

(72) Inventor: **Zaffignani, Fabio**
29100 Piacenza PC (IT)

(74) Representative: **La Ciura, Salvatore**
Via Francesco Sforza 3
20122 Milano (IT)

(30) Priority: **27.10.2006 IT PC20060023 U**

Remarks:

The references to figure 7 are deemed to be deleted (Rule 43 EPC 1973).

(71) Applicant: **Zaffignani, Fabio**
29100 Piacenza PC (IT)

(54) **Selective hair-dyeing tool**

(57) This invention relates to a selective hair dyeing accessory for streaking the hair, of the type comprising a container designed to enclose a lock of hair, which said container consists of a flat container consisting of a first base element (1) with a closed bottom and a perimeter edge (5) a few millimetres high, a second element (2) consisting of a grid wall (6) with an edge (7) designed to overlap with edge (5) of said base (1), which said first

and second elements are hinged at a common edge (3), and a lid (19), hinged to said second element, which is designed to move from an open position in which it allows free access to said grid wall to a closed position in which it hermetically closes said container.

The accessory is particularly useful and practical, as it makes the work faster and more convenient, and is therefore particularly useful for hairdressers and others performing hair treatments.

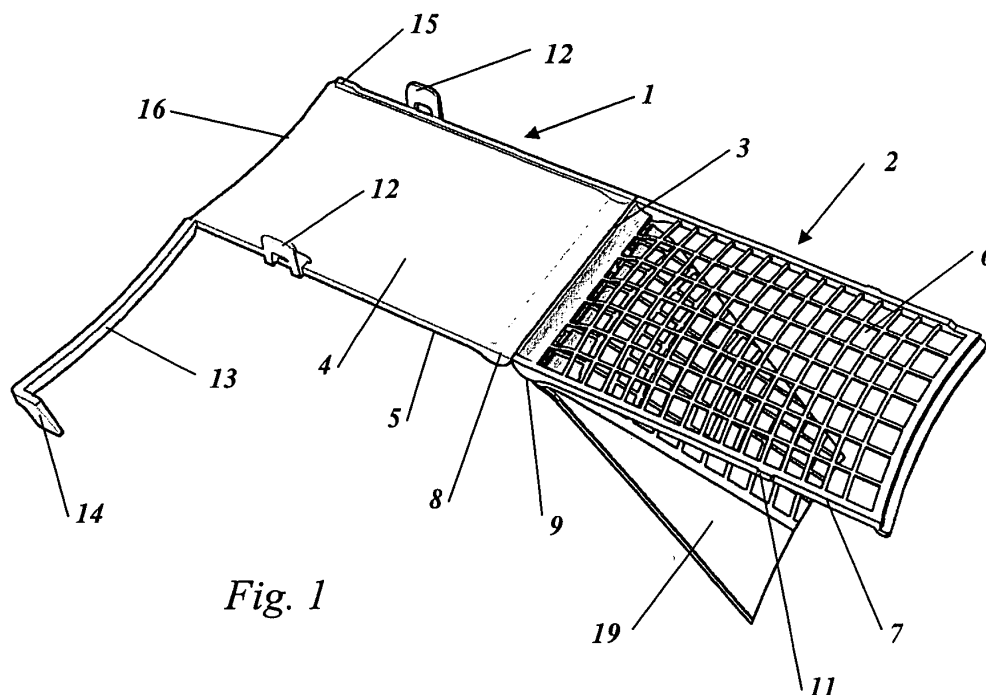


Fig. 1

Description

[0001] This invention relates to an accessory or tool designed to dye hair selectively in order to produce "streaks".

[0002] More particularly, said tool consists of a flat container, with a closed base wall, and an upper wall formed by a grid which is hinged to the preceding wall and fitted with a lid.

[0003] Said parts form a flat container into which the lock of hair to be treated is inserted, so that the products used, which may be bleaches, dyes or colorants in general, can be deposited on the whole of the lock of hair once, twice or more times with different shades, with no need to open the container fully and remove the hair.

[0004] The accessory is therefore particularly useful and practical, as it makes the work faster and more convenient, and is therefore particularly useful for hairdressers and others performing hair treatments.

[0005] Numerous customers ask their hairdressers to provide this treatment, which involves selecting some locks of hair and dyeing them a different colour, for example to obtain brown hair with some blonde or differently coloured streaks.

[0006] If the streaks are required to be darker than the natural hair colour, selective dyeing is used, whereas if the streaks are to be lighter, the locks of hair to be dyed must be selected, bleached with specific bleaching products, and then dyed to the desired colour.

[0007] This operation requires a certain skill and considerable attention, because the treatment needs to be extended as close as possible to the roots of the hair, without affecting the nearby hair.

[0008] A number of techniques are known for this purpose.

[0009] In some cases the hairdresser selects a lock of hair, wets it with dye and wraps it in tinfoil to ensure that the nearby hair is not dyed.

[0010] After the time required for the product to act (from 5-10 minutes to 1 hour) the tinfoil is removed and the hair is washed; however, in order to re-colour the same locks of hair without dyeing the nearby hair, all the locks would need to be selected again, which involves a great deal of time and difficulty and imprecision.

[0011] Another system is for the customer to wear a plastic cap containing a series of holes. The hairdresser uses a hook to pull the various locks of hair through the holes in the cap, then performs the treatment on those locks only.

[0012] This system is obviously not very precise, because the positions of the holes do not always correspond to the locks to be selected, and liquid products can very easily pass through these holes, and often partly colour other locks of hair.

[0013] Containers consisting of pouches which open like a wallet are also known; the locks of hair are introduced into said containers with the dye for the time required for the product to take effect.

[0014] Said pouches basically perform the same function of isolating the lock of hair as tinfoil, with the difference that they are more practical, and reusable.

[0015] However, despite these advantages, pouches have not proved to be the ideal solution, especially when, as occurs most often, the hair to be streaked must be dyed with two separate applications.

[0016] Before the dye is applied, the lock of hair must be thoroughly washed to remove all trace of the bleach or dye just used, and this requires the pouches to be opened, removed to wash the lock of hair and then re-applied to continue the dyeing process, with the inevitable difficulties encountered by the hairdresser, who has to insert the same lock of hair in the container without included the untreated nearby hair.

[0017] The present invention, which falls into this sector, relates to a selective hair dyeing accessory that eliminates all the drawbacks described above.

[0018] In particular, the tool according to the invention consists of a box-shaped container that opens like wallet, one wall of which takes the form of a grid, which can be closed with an outer lid.

[0019] With this configuration the lid can be lifted to access the lock of hair with the products, and the lock of hair remains clamped between the base of the container and the grid wall; there is no need to open or remove the accessory, and the lock of hair consequently remains isolated from the surrounding hair.

[0020] This invention will now be described in detail, by way of example but not of limitation, by reference to the annexed drawings wherein:

- figure 1 shows the accessory according to the invention in the open position, ready for the introduction of a lock of hair;
- figure 2 is a perspective view of the accessory shown in figure 1, seen from the opposite side;
- figures 3 and 4 are two perspective views of the accessory according to the invention, in the closed position and with the lid raised, for washing the lock of hair or for the application of a dye or the like;
- figure 6 is a perspective view of the closed accessory;
- figure 7 is a side view of the closed accessory.

[0021] As shown in figures 3 and 4, the accessory according to the invention substantially comprises a flat container, consisting of two elements shown as 1 and 2, which are hinged to one another at a common edge 3.

[0022] Element or base 1 comprises a closed end wall 4, with an edge 5 a few millimetres high all round it; the second element 2 consists of a grid wall 6, also with side edges 7 a few millimetres high, which perfectly overlap with edges 5 of element 1 when the container is in the closing position.

[0023] Said container basically consists of two parts which open like a wallet, the interior of which forms a chamber a few millimetres thick, which can contain a lock

of hair.

[0024] At one edge, in particular the edge of hinge 3, elements 1 and 2 present facing tabs 8 and 9 respectively. A lid 19 which, in the closing position of the accessory, illustrated in figures 5 and 6, is inserted hermetically into edge 7 of element 2 to close grid wall 6, is hinged to a pair of supports 10 which are integral with edge 7 of upper element 2.

[0025] The edge of element 2 presents a pair of teeth 11 (figures 1 and 2), while a pair of tabs 9, with a cavity into which teeth 11 are inserted when upper element 2 closes onto element 1 to lock it in this position, are integral with base 1.

[0026] An arm 13, hinged to base 1 at the edge opposite to the edge of hinge 3, presents a tooth 14 which engages with a corresponding tab 15, on the opposite side of base 1, when arm 13 closes on the wall of the base.

[0027] Similar retaining systems, not illustrated in the figures, allow lid 19 to be locked in the closing position in edge 7 of element 2 with grid wall 6.

[0028] The accessory operates as follows.

[0029] At the start of the treatment, with the accessory open as shown in figure 1, a lock of hair is taken up and placed on elements 1 and 2, and free edge 16 of base 1 is placed close to the root of the hair.

[0030] Arm 13 is then closed and secured with tooth 14, so as to clamp the hair at the root against base 1; element 2 is then rotated and closed against base 1.

[0031] During this stage the lock of hair is folded over, with the fold positioned at the enlarged part 8, 9 of the container.

[0032] Upper wall 2 is closed against base 1, and teeth 11 engage with tabs 12 and the lock of hair, which remains clamped between base 1 and grid wall 6.

[0033] Next, the lock of hair is wet with the treatment product and lid 19 is hermetically closed; the liquid remains inside the container, wetting the lock of hair, and the accessory hangs from the hair, the whole length of which remains inside the accessory, as far as the root.

[0034] The hairdresser continues in the same way with the other locks of hair; when the accessory containing the treatment liquids has been applied for the necessary time s/he opens lid 19, allowing the product to flow out, and rinses the lock of hair.

[0035] The hairdresser continues the treatment by wetting the lock of hair with the dye, which passes through grid 6 and wets the hair in the container.

[0036] Lid 19 is then closed again, and the accessory is left closed for as long as necessary for the product to complete the desired treatment.

[0037] At the end of the treatment the lid is opened, the product is emptied out, and the lock of hair is rinsed. The accessory can then be opened by widening tabs 12, and the accessory is ready for reuse.

[0038] As will appear clearly from the above description, the accessory according to the invention is particularly practical and useful, because it allows a number of successive treatments to be performed on the same lock

of hair which remains enclosed in the container, allowing the treatment liquid to reach the entire lock of hair without affecting the nearby hair.

[0039] It is also faster and more precise than known devices, does not crimp the hair, and allows only part of the lock to be coloured.

[0040] Unlike other systems it allows the same lock of hair to be treated again, which is practically impossible with perforated caps, for example. Moreover, due to its compact size, more locks of hair can be selected than with other devices, and a smaller amount of product is required.

[0041] Finally, due to its particular configuration, it is possible to colour only half the length of the lock, or only part of the hair.

[0042] The accessory could easily be manufactured by plastic moulding, although the invention does not exclude the use of different materials or manufacturing techniques.

[0043] The dimensions can obviously vary, depending on the required use.

Claims

1. Selective hair dyeing accessory for streaking the hair, of the type comprising a container designed to enclose a lock of hair, which said container consists of two parts (1, 2), hinged on one side (3) to allow "wallet" opening, and is fitted with closing means (11, 12) designed to keep the two parts clamped together, **characterised in that** one of said parts presents a grid wall (6) hermetically closed with a lid (11).
2. Selective hair dyeing accessory as claimed in claim 1, **characterised in that** it consists of a flat container consisting of a first base element (1) with a closed bottom and a perimeter edge (5) a few millimetres high, a second element (2) consisting of a grid wall (6) with an edge (7) designed to overlap with edge (5) of said base (1), which said first and second elements are hinged at a common edge (3), and a lid (19), hinged to said second element, which is designed to move from an open position in which it allows free access to said grid wall to a closed position in which it hermetically closes said container.
3. Accessory as claimed in claim 1 or 2, **characterised in that** it includes, at edge (16) opposite hinged edge (3), an arm (13) designed to clamp a lock of hair against said base element, which said arm is equipped with a tooth (14) designed to engage with a corresponding tab (15) present on said base (1) to retain said arm in the lock clamping position.
4. Accessory as claimed in any of the preceding claims, **characterised in that** it includes, on said base (1), a pair of tabs (12) fitted with seatings designed to

house corresponding teeth (11) fitted to second element (2), to keep said grid wall (6) clamped against said base (1).

5. Accessory as claimed in any of the preceding claims, **characterised in that** it includes, at hinged edge (5) between said two walls of the container, a tab designed to allow the lock of hair to be folded back when the container is closed.

10

15

20

25

30

35

40

45

50

55

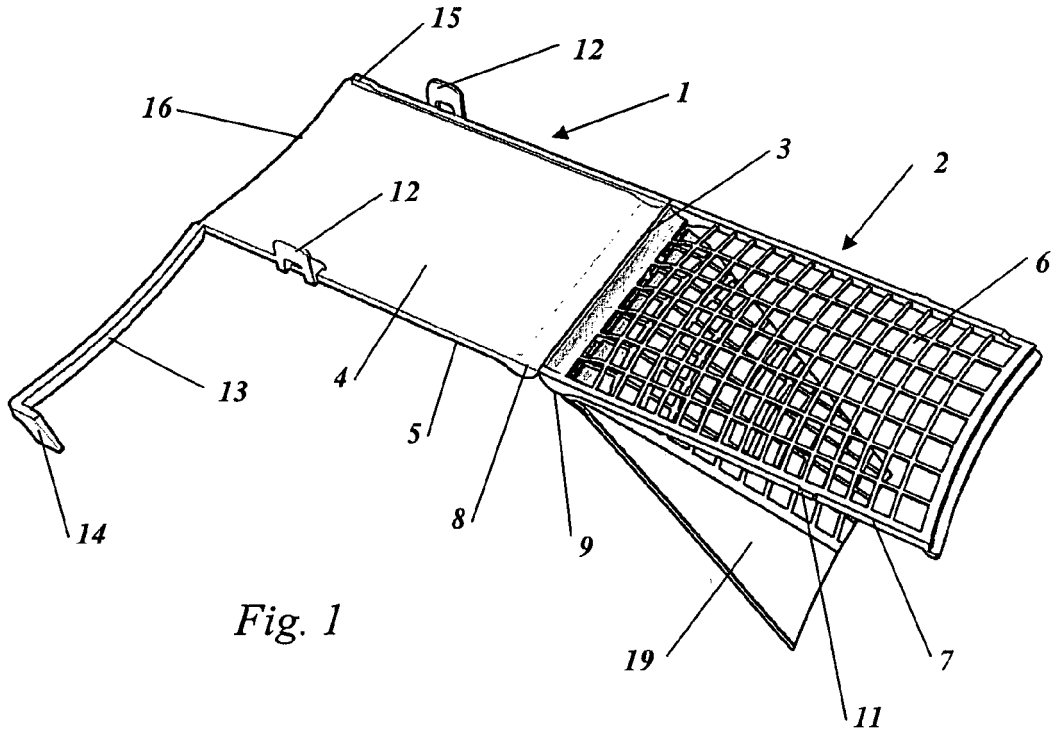


Fig. 1

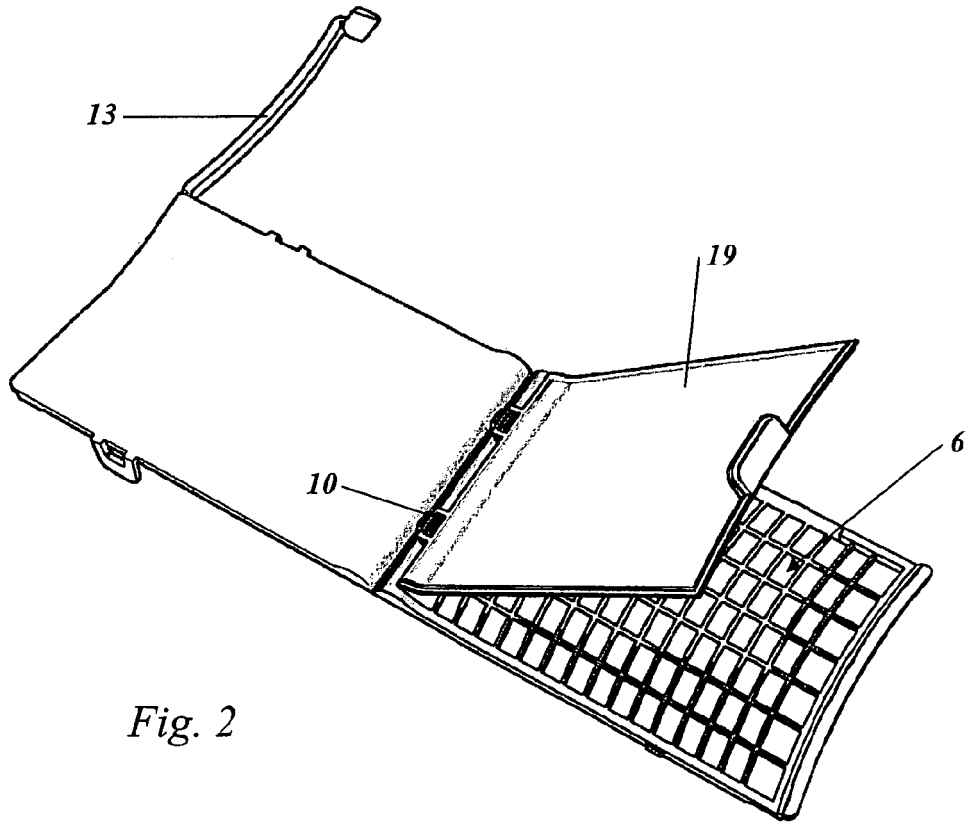


Fig. 2

Fig. 3

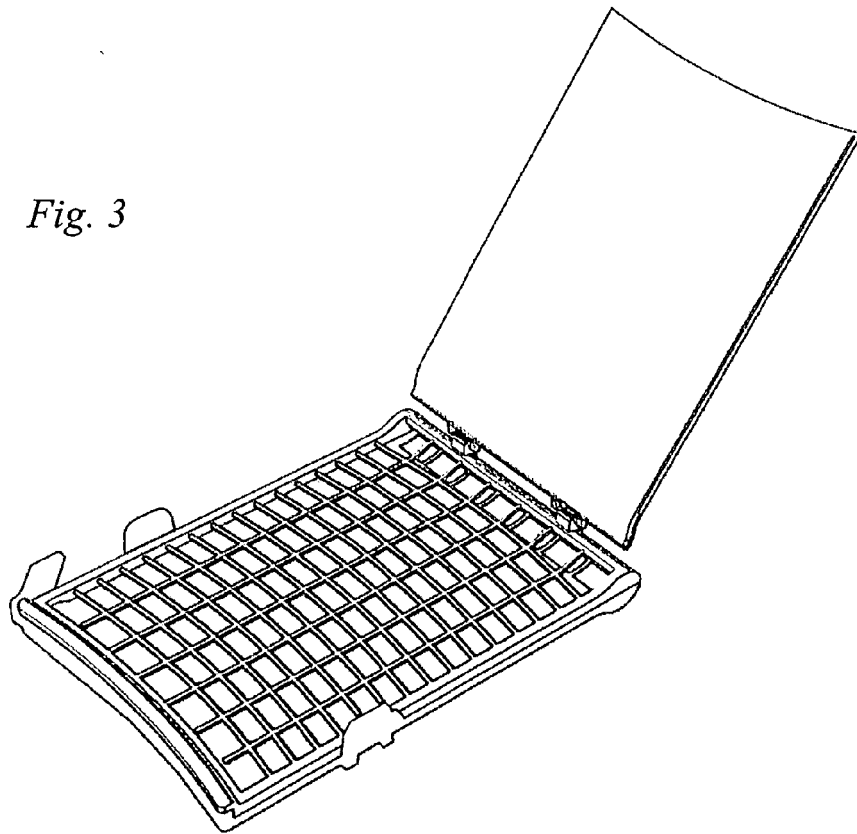
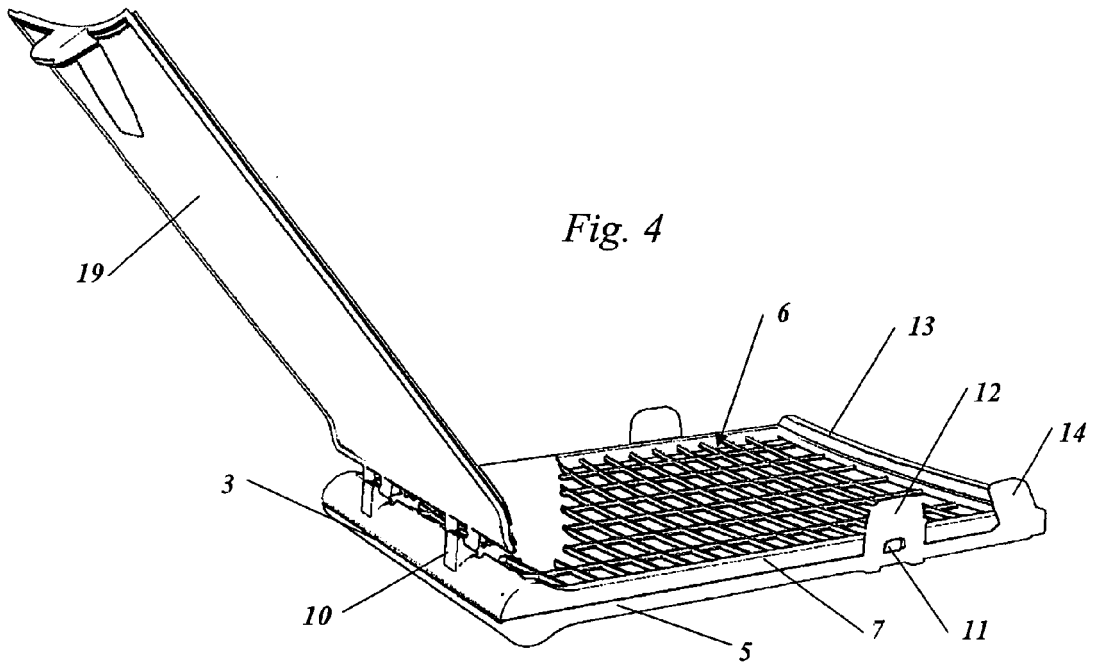


Fig. 4



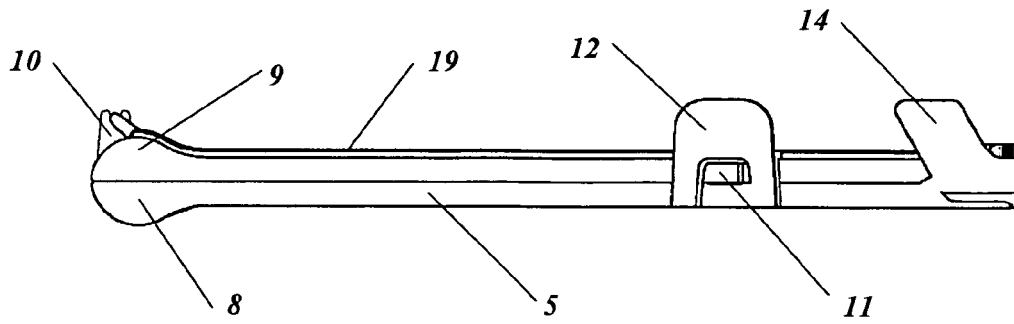


Fig. 5

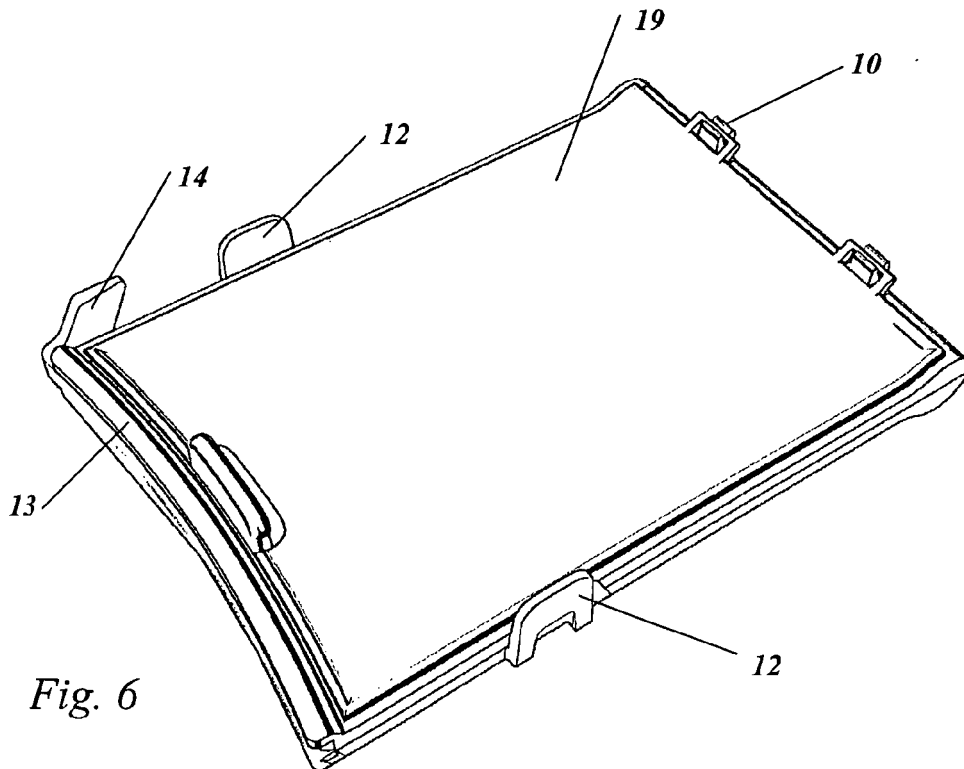


Fig. 6



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 469 873 A (GUTH ROUVEN [DE]) 28 November 1995 (1995-11-28)	1-5	INV. A45D19/00
Y	* column 2, line 53 - column 4, line 18; figures 3-8 *	1-5	
Y	----- US 4 398 549 A (THOMAS LOUIS N [US]) 16 August 1983 (1983-08-16)	1-5	
A	* column 2, lines 6-54; figure 2 * * column 3, lines 10-23 * ----- GB 2 203 645 A (DIXON ROBERT DEREK) 26 October 1988 (1988-10-26)	1-5	
	* page 3, line 1 - page 4, line 7; figures 5-8 * * page 7, line 1 - page 9, line 8 * -----		
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 February 2008	Examiner Escudero, Raquel
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	

1
EPO FORM 1503 03.82 (P04C01)

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

EP 07 01 6976

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.

19-02-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5469873	A	28-11-1995	EP 0615709 A1	21-09-1994
US 4398549	A	16-08-1983	NONE	
GB 2203645	A	26-10-1988	NONE	

EPO FORM P0459

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