(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 743 545 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
17.01.2007 Bulletin 2007/03

(51) Int Cl.:
A45D 40/00 *(2006.01)* ***A45D 40/26*** *(2006.01)*

(21) Application number: **05076608.8**

(22) Date of filing: **13.07.2005**

(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 NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(71) Applicants:
- **Molenaar, Albertus Simon Maria**
  1861 MA Bergen (NL)
- **Van Alpen, Bertus Johannes**
  1852 RM Heiloo (NL)

(72) Inventor: **van Alphen, Bertus Johannes**
1852 RM Heiloo (NL)

(74) Representative: **Barendregt, Frank**
Exter Polak & Charlouis B.V.,
P.O. Box 3241
2280 GE Rijswijk (NL)

(54) Applicator for applying a lip product to the lips

(57) Summary

Applicator for applying a lip product (4) to the lips, comprising a sheet-like flexible support (1) with a mouth end portion (2) and an opposite positioned holding end portion (3), carrying on at least one side thereof near the mouth end portion (2) an amount of lip product (4) such that a substantial part of at least one lip of a user can be brought into contact with said lip product (4) by taking the support (1) between the lips at the mouth end portion (2), said support (1) being dimensioned such that it can be grasped manually at the holding end portion (3), said support (1) further being designed such that it has an increasing flexibility from the mouth end portion (2) to the holding end portion (3) at least over the part of the support (1) carrying the lip product (4).

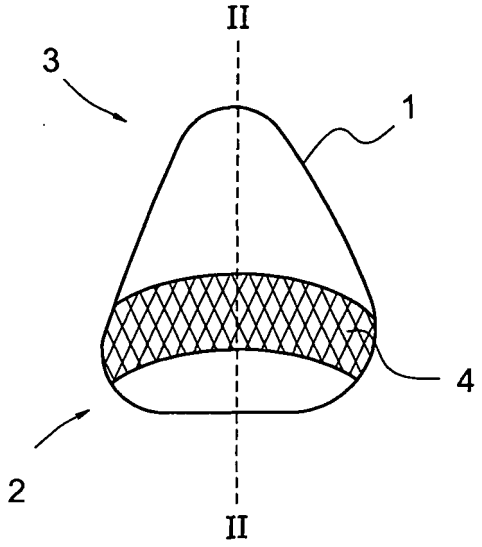


Fig. 1

EP 1 743 545 A1

Description

[0001] The present invention relates to an applicator for applying a lip product to the lips at least comprising a sheet-like flexible support with a mouth end portion and an opposite positioned holding end portion, said sheet-like flexible support carrying on at least one side thereof an amount of said lip product, said lip product being located on said support near the mouth end portion thereof in such a manner that at least a substantial part of at least one lip of a user can be brought into contact with said lip product by taking the support between the lips at the mouth end portion, said support being dimensioned such that it can be grasped manually at the holding end portion thereof which during use is located outside the mouth of the user.

[0002] Such an applicator is disclosed in US-A-5 020 553. The applicator described in this United States specification is composed of a sheet of paper being provided on opposite main faces with lipstick. The applicator is used by grasping the card between the lips of a user and pulling outwardly. This means that the lipstick is applied to the lips by a smearing action.

[0003] In practice this way of applying a lip product to the lips has proven to be not sufficiently accurate. Usually lumps of the lip product will be transferred which will have to be uniformly distributed afterwards. Also the corners of the mouth are apt to fouling.

[0004] In the cosmetics field already since the early 1930's attempts have been made to develop lip product applicators which comprise sheet-like material and are intended for single use. None of these products however was successful.

[0005] The main reason therefore was that in the cosmetics field lip products and especially lipstick have to be applied to the lips extremely accurately, which up till now has been impossible with the available sheet-like lipstick applicators according to the prior art. The only way to apply lipstick or other lip products to the lips sufficiently accurate is at the moment by using an ordinary lipstick or brush-like lipstick applicator.

[0006] The advantages of sheet-like lip product applicators are numerous. Sheet-like applicators can be used for promotional purposes as they because of their flat shape can be included in magazines and the like. Further they can be distributed at cosmetic stores, beauty salons and the like for sampling purposes as they are relatively cheap to manufacture. Persons using lip products, like women, make-up artists and the like, usually like to have more than one colour available as an easy-to-carry product. Ordinary lipsticks and lipstick brushes need to be carried in e.g. cosmetic boxes or purses. An important advantage of sheet-like applicators is that they can be easily carried in trouser pockets. Finally such lip product applicators are very hygienic. This is especially advantageous for for instance make-up artists and stylists who at present will use one lipstick or lip product applicator for several customers. This also goes for sampling lipsticks in a store where many customers will try the same sampler.

[0007] In the art of cosmetics therefore still exists an important demand for a sheet-like applicator which can apply lip products like lipstick accurately and reproducibly to the lips of a human being.

[0008] The present invention now provides such an applicator.

[0009] According to the invention an applicator is provided for applying a lip product to the lips, at least comprising a sheet-like flexible support with a mouth end portion and an opposite positioned holding end portion, said sheet-like flexible support carrying on at least one side thereof an amount of said lip product said lip product being located on said support near the mouth end portion thereof in such a manner that at least a substantial part of at least one lip of a user can be brought into contact with said lip product by taking the support between the lips at the mouth end portion, said support being dimensioned such that it can be grasped manually at the holding end portion thereof which during use is located outside the mouth of the user, said applicator being characterized in that said sheet-like flexible support is designed in such a manner that is has an increasing flexibility from the mouth end portion to the holding end portion at least over the part of the support carrying the lip product.

[0010] Studies showed that by providing the sheet-like flexible support with an increasing flexibility an applicator can be obtained which now can successfully apply various lip product to the lips accurately without smearing.

[0011] In use the applicator according to the invention has to be grasped between the lips at the mouth end portion, the holding end portion being grasped for example with two fingers. Then the holding end portion is moved up and down at least once without moving the sheet-like support relative to the lip surface. Because of the specific flexibility of the sheet-like support the applicator will bend with a very advantageous curvature. In the bent condition the applicator at least over the part carrying the lip product will have an decreasing curvature radius.

[0012] The advantage of the applicator according to the invention is further that the so called cupids of the upper lip can also be provided with lip product.

[0013] Further it is important to note that with the applicator according to the invention lip product is applied by simple pressure transfer instead of a smearing action, the latter being obviously very inaccurate.

[0014] Advantageously the sheet-like flexible support has an increasing flexibility over its entire length from the mouth end portion to the holding end portion. This means that in use the flexibility will increase from the mouth end portion to the holding end portion which provides an optimum application of lip product. This means that when bending the applicator in use the curvature radius will decrease over the entire sheet-like support from the mouth end portion to the holding end portion, providing an excellent lip product transfer.

[0015] How the applicator is provided with the increasing flexibility is not limited and can be realized in many ways.

[0016] Preferably the increasing flexibility is obtained by providing the sheet-like flexible support with a specific construction, for example a decreasing width, such as a triangular shape or the like.

[0017] It is also preferred when the increasing flexibility is obtained by providing the sheet-like flexible support with a decreasing thickness. In this case the thickness will decrease from the mouth end portion to the holding end portion.

[0018] The flexibility can also be changed constructional by providing the sheet-like support with for instance specifically designed ridges, grooves, holes etc.

[0019] Other possibilities for obtaining the increasing flexibility can be by altering the material properties of the sheet like support from the mouth end portion to the holding end portion, e.g. by specifically changing the content of a filler or the like, or by providing suitable reinforcement materials to the material of the sheet-like support such as fibres, threads or the like.

[0020] Although not specifically stated it will be clear that preferably the flexibility of the sheet-like support increases gradually and more preferably with a substantially constant rate.

[0021] In a preferred embodiment the sheet-like flexible support has a substantially triangular shape with rounded corners and has a substantially constant thickness, and the lip product is located in a curved band near a base of the triangular shape in order to approach the curvature of the lips of a user when used. This embodiment will be further illustrated in the drawings.

[0022] In a further preferred embodiment the sheet-like flexible support is substantially rectangular with rounded corners and has a relatively constant decreasing thickness from the mouth end portion to the holding end portion, and the lip product being located in a curve band near the mouth and portion in order to approach the curvature of the lips of a user when used. This embodiment will also in more detail be described with reference to the drawings.

[0023] Of course the sheet-like flexible support can carry a lip product on only one side near the mouth end portion, but preferably the sheet-like flexible support carries lip product on two sides near the mouth end portion. This provides the possibility of applying the lip product to both lips simultaneously.

[0024] The lip product which is applied to the sheet-like flexible support can be any lip product which has to be applied to the lip of a user. Examples thereof are products used in the field of lip cosmetics, such as lipstick, lip liniment, lip gloss etc.; in the field of lip care, such as lip emollient, lip balsam etc.; in the field of lip protection, such as lip sun protection agent etc.; and in the field of lip pharmaceuticals, such as anti herpes labialis agent, etc. The physical state of the lip product is also not specifically limited and can be solid, semi solid, powder or liquid etc.

[0025] Although the applicator according to the invention will predominantly be designed for single use only it can be advantageous to design said applicator for multiple use. In this case preferably the lip product is for example applied to the sheet-like flexible support in a layer manner such that the applicator can be used more than once. By layered in this case is meant that more than one layer of lip product is applied to the sheet-like support separated by e.g. separation layers, being layers e.g. having a higher viscosity or higher melting point. By using such an applicator only one layer of lip product will be transferred from the applicator to the lips of a user per application.

[0026] The sheet-like support of the applicator according to the invention is preferably made of a flexible plastic. Plastics generally used in the cosmetics field are advantageous, for example polypropylene, polyethylene, polystyrene.

[0027] Further it is noted that the dimensions of the applicator according to the invention are not critical. Of course the dimensions should be selected appropriately such that the mouth end portion can be grasped between the lips with the lip product accessible for the lips. Also the thickness can be selected depending on the intended use and the material of the sheet-like support. An example of a typical applicator made of polystyrene has the following estimated dimensions: a length of about 5-6 cm between the mouth end portion and the holding end portion, a maximum width near the mouth end portion of about 5 cm and a thickness of about 0.5 mm.

[0028] In the following the invention will be illustrated by reference to the drawings, wherein:

Fig. 1 shows a first embodiment of an applicator according to the invention in a substantially triangular shape;

Fig. 2 shows a cross-section of the applicator according to fig. 1 by line II-II;

Fig. 3 shows another embodiment of the applicator according to the invention in a substantially rectangular shape;

Fig. 4 shows a cross-section of the applicator according to fig. 3 by line IV-IV;

Fig. 5(a) and 5(b) show a package containing the applicator according to fig. 1;

Fig. 6(a)-(c) show the method of using the applicator according to the invention for transferring lipstick to the lips of a user; and

Fig. 7 is a schematic representation of the increasing flexibility of the applicator according to the invention by showing the decreasing radius of curvature.

[0029] In the following discussion as a lip product only lipstick is cited, which by no means should be interpreted as limiting the invention as the applicator according to the invention can be used for any lip product such as known for instance in the field of cosmetics, pharmaceu-

ticals etc, which is susceptible of being applied with the applicator according to the invention.

[0030] In fig. 1 an applicator according to the invention is shown, comprising a sheet-like support 1 with a mouth end portion 2 and a holding end portion 3. Near the mouth end portion 2 a band 4 of lipstick is present which is applied with a certain curvature. Said curvature is not critical, although it will substantially follow the curvature of the lips of a user.

[0031] Because of the substantially triangular shape of the applicator according to the invention the flexibility will increase from the mouth end portion 2 to the holding end portion 3. When the applicator 1 according to the invention is grasped between the lips of a user at the position of the band 4 of lipstick and the holding end portion 3 is grasped by two fingers and moved up and down (bent) during all stages of bending the radius of curvature of the applicator will decrease from the mouth end portion to the holding end portion.

[0032] According to the invention studies showed that it is essential that the flexibility increases at least over the part of the applicator comprising the band 4 of lipstick as this is the part contacting the lips during lipstick transfer, where the specific curvature obtained by the invention is critical for an accurate application of lipstick.

[0033] In fig. 2 a cross-section of the applicator according to fig. 1 by lines II-II is shown. In this cross-section it is clear that apart from the band 4 of lipstick also a second band 5 of lipstick is present on the opposite side of the applicator. In this way both lips can be provided with lipstick simultaneously.

[0034] In fig. 3 a second embodiment of the applicator according to the invention is shown in a substantially rectangular shape. Here also the mouth end portion 2 and the holding end portion 3 are shown including the band 4 of lipstick positioned in a curved manner near the mouth end portion 2.

[0035] With this embodiment the increasing flexibility of the sheet-like support is obtained by providing the sheet-like support 1 with a decreasing thickness starting from the mouth end portion 2 towards the holding end portion 3. This is more clearly shown in fig. 4, which shows a cross-section of fig. 3 by lines IV-IV.

[0036] Also in this case the applicator is provided with a second band 5 of lipstick located on the surface opposite to the surface carrying the band 4 of lipstick.

[0037] The bands of lip product can be provided with different colours of lip stick or even each band can be provided with different colours. Also multi-component products which can be the case with certain pharmaceutical lip products can be applied with the applicator according to the invention by providing one component on one side of the applicator and another on the other side. In this way the components will only come into contact with each other after transfer to the lips of a user.

[0038] Fig. 5 shows a package 6 for packaging an applicator according to fig. 1 with a substantially triangular shape. Said package 6 comprises two film-like members being sealed in a releasable manner at a peripheral edge 7. The film-like members will on the side contacting the applicator be provided with a specific release coating to prevent lipstick from adhering thereto.

[0039] The film members are not sealed at the position of the lips 8 and 9. By grasping the lips 8 and 9 the film members can be separated and the package 6 opened. After opening the applicator 1 can be removed from the package 6. Obviously the seals can be designed in such a way that after use the applicator can be put back into the package and the seals closed again by pressure. Specific resealable sealing materials are well known in the field.

[0040] Fig. 6(a)-(c) show the different steps of using the applicator according to the invention for applying lipstick to the lips of a user.

[0041] In fig. 6(a) the applicator is brought into the mouth of a user by grasping the applicator at the holding end portion with two fingers.

[0042] Thereafter the mouth is closed whereby the lips are brought into contact with the bands of lip product, as shown in fig. 6(b). Then the applicator is bent up and down at least once. The mouth is opened again and the applicator is removed as shown in fig. 6(c), where after the lips can be pressed together to more evenly distribute the lipstick. This will however sometimes only be necessary to more evenly distribute the lipstick but not to better position the lipstick as the use of the applicator according to the invention already provides an accurate transfer of lipstick to the lips without smearing over the edges of the lips or transferring lumps of lipstick.

[0043] In a specific embodiment the applicator according to the invention is provided with signalling means which indicate to the user that the lip product is applied correctly. These means can for instance comprise a specific construction measure which will provide an audible signal when the applicator according to the invention is bent sufficiently. This construction measure can for instance comprise a suitable combination of grooves and/or ridges which will provide a snap with a sound when a certain force threshold is passed i.e. when the applicator is bent sufficiently and lip product has been provided correctly.

[0044] Fig. 7 finally shows an example of a bent applicator according to the invention having an increasing flexibility. Here it can be clearly seen that when bent the radius of curvature of the applicator decreases from the mouth end portion to the holding end portion, which is an essential characteristic of the applicator according to the invention.

[0045] Numerous modifications of the applicator according to the invention are possible in view of the above description. An example thereof is the following. Advantageously the sheet-like support can, instead of carrying a band of lip product adhered thereto, be provided with e.g. a band of absorbent material, or material having such specific characteristics that a lip product adheres better thereto than to the remainder of the support. Further a

package is in that case provided which contains a certain amount of lip product which will be transferred to this specially designed band of material in order to be applied to the lips of a user as described earlier. In this way the disposable character of the applicator is altered and it is made suitable for more than one application.

[0046] Also the applicator can be designed as a sheet like casing with specifically designed lip product apertures whereby the lip product present on a film can be slid in said casing aligning the lip product with the lip product apertures. The sheet like casing can be used for applying different kinds of lip products and will of course present the specific characteristics of the applicator according to the invention i.e. the flexibility increasing from the mouth end portion to the holding end portion.

Claims

1. Applicator for applying a lip product (4, 5) to the lips, at least comprising a sheet-like flexible support (1) with a mouth end portion (2) and an opposite positioned holding end portion (3), said sheet-like flexible support (1) carrying on at least one side thereof an amount of said lip product (4, 5), said lip product (4, 5) being located on said support (1) near the mouth end portion (2) thereof in such a manner that at least a substantial part of at least one lip of a user can be brought into contact with said lip product (4, 5) by taking the support (1) between the lips at the mouth end portion (2), said support (1) being dimensioned such that it can be grasped manually at the holding end portion (3) thereof which during use is located outside the mouth of the user,
   characterized in that
   said sheet-like flexible support (1) is designed in such a manner that it has an increasing flexibility from the mouth end portion (2) to the holding end portion (3) at least over the part of the support (1) carrying the lip product (4, 5).

2. Applicator according to claim 1, **characterized in that** said sheet-like flexible support (1) has an increasing flexibility over its entire length from the mouth end portion (2) to the holding end portion (3).

3. Applicator according to claim 1 or 2, **characterized in that** the increasing flexibility is obtained by providing the sheet-like flexible support (1) with a decreasing width.

4. Applicator according to claim 1 or 2, **characterized in that** the increasing flexibility is obtained by providing the sheet-like flexible support (1) with a decreasing thickness.

5. Applicator according to one or more of claims 1-3, **characterized in that** said sheet-like flexible support (1) has a substantially triangular shape with rounded corners and has a substantially constant thickness, and that the lip product (4, 5) is located in a curved band near a base of the triangular shape in order to approach the curvature of the lips of a user when used.

6. Applicator according to one or more of claims 1, 2 and 4, **characterized in that** said sheet-like flexible support (1) is substantially rectangular with rounded corners and has a relatively constant decreasing thickness from the mouth end portion (2) to the holding end portion (3), and that that the lip product (4, 5) is located in a curved band near the mouth end portion (2) in order to approach the curvature of the lips of a user when used.

7. Applicator according to one or more of the preceding claims, **characterized in that** said sheet-like flexible support (1) carries lip product (4, 5) on two sides near the mouth end portion (2).

8. Applicator according to one or more of the preceding claims, **characterized in that** said lip product (1) is applied to the sheet-like flexible support in a layered manner such that the applicator can be used more than once.

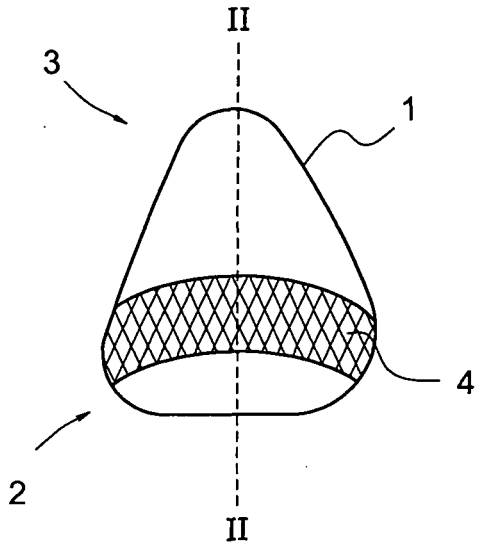


Fig. 1

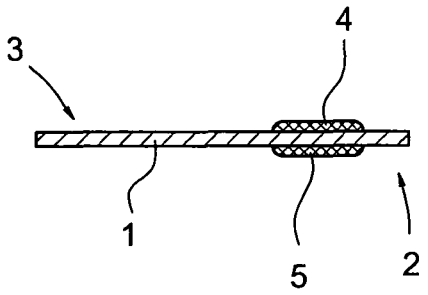


Fig. 2

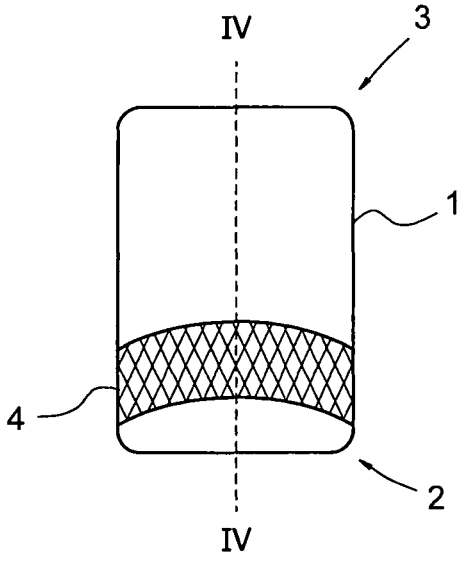


Fig. 3

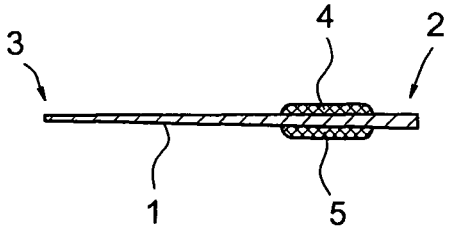


Fig. 4

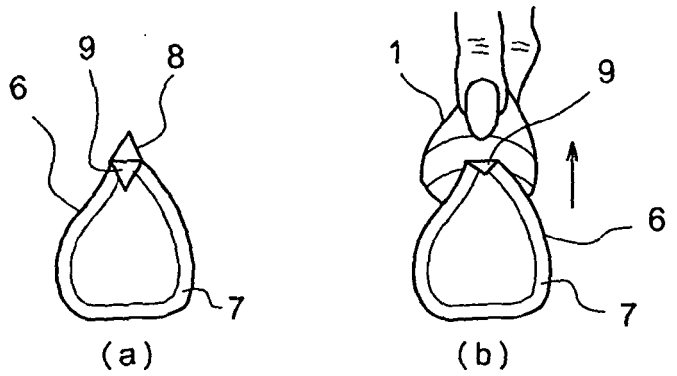


Fig. 5

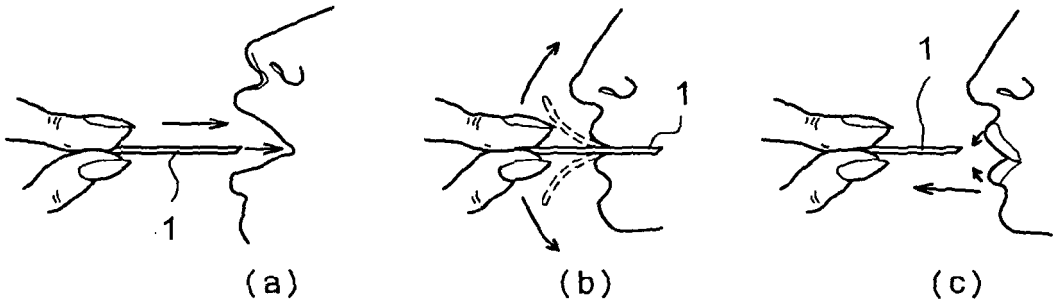


Fig. 6

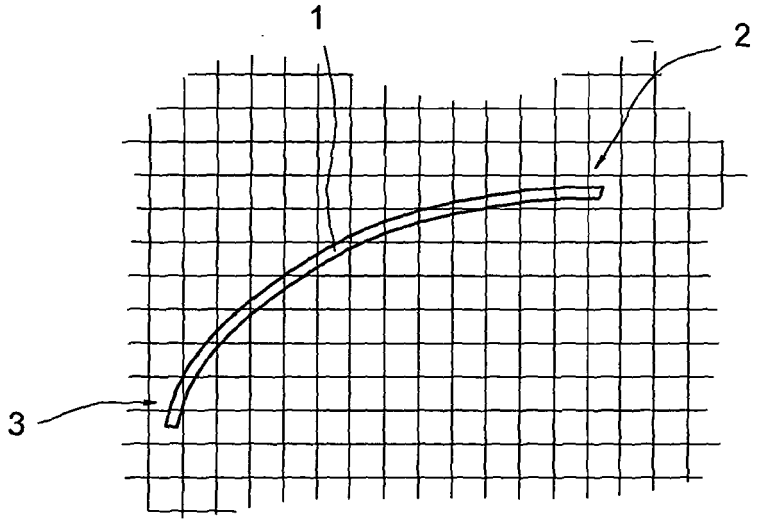


Fig. 7

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 07 6608

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2 606 565 A (SR. HERBERT R. SAGE,) 12 August 1952 (1952-08-12) * figures 1-3 * * column 1, line 46 - column 2, line 33 * * claim 1 * -----	1	A45D40/00 A45D40/26
			TECHNICAL FIELDS SEARCHED (IPC)
			A45D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	30 January 2006	Zetzsche, B

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 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 07 6608

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.

30-01-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2606565 A	12-08-1952	NONE	

EPO FORM P0459

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

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- US 5020553 A **[0002]**