

(19)



(11)

**EP 2 226 166 A1**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**08.09.2010 Bulletin 2010/36**

(51) Int Cl.:  
**B26B 21/44 (2006.01)**

(21) Application number: **09154120.1**

(22) Date of filing: **02.03.2009**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
 HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL  
 PT RO SE SI SK TR**  
 Designated Extension States:  
**AL BA RS**

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(54) **Shaving aid delivery system**

(57) A shaving aid delivery system (20) is provided for wet shaving. The shaving aid delivery system comprises an absorbent member (26) shaped to fit over a razor cartridge (2) and a fixing member (28, 30) that secures the absorbent member (26) to a razor cartridge (2).

A shaving aid is disposed in the absorbent member such that, during use, the shaving aid delivery system (20) can be secured to a razor cartridge (2) and a portion of the shaving aid dispensed from the shaving aid delivery system member as pressure is applied to the absorbent member (26).

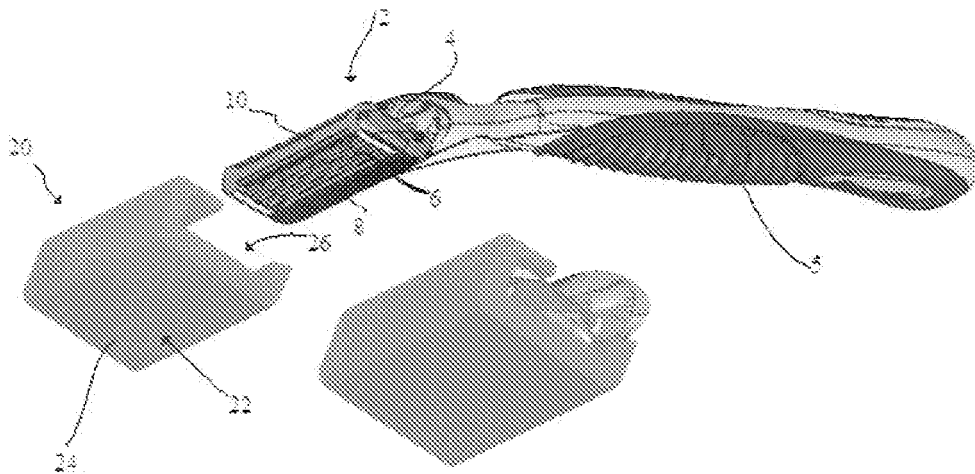


Figure 2

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## Description

### FIELD OF THE INVENTION

**[0001]** This invention relates to a shaving aid delivery system, a system for wet shaving and a method of using a shaving aid delivery system for wet shaving.

### BACKGROUND OF THE INVENTION

**[0002]** This invention relates to the field of wet shaving. As part of a wet shaving system, a user typically applies a skin preparation, e.g., shaving soap, shaving form, shaving gel, skin conditioning foam, etc., to their skin using a brush or their hands prior to actually shaving their hair. This can, however, be a messy and lengthy process and requires the use of multiple products/tools to enable a person to prepare their skin for shaving. For example, a user will typically need at least a tube/can of shave gel/foam and an applicator, in addition to a razor for performing the shave.

**[0003]** The requirement for a tube/can of shave gel/foam may also be problematic in situations where a user needs to carry the tube/can, for example, when travelling. Currently, strict airport policies regarding the amount of liquid that a person is allowed to carry onto a plane makes it difficult for people to carry traditional cans/tubes of shave gel/foam.

**[0004]** It is an object of the invention to provide an alternative system and method for applying shaving aid to a user's skin.

### SUMMARY OF THE INVENTION

**[0005]** According to a first aspect of the present invention, there is provided a shaving aid delivery system for wet shaving, the shaving aid delivery system comprising an absorbent member shaped to fit over a razor cartridge; a fixing member that secures the absorbent member to a razor cartridge, and a shaving aid disposed in said absorbent member, wherein, during use, the shaving aid delivery system is secured to a razor cartridge and a portion of said shaving aid is dispensed from the shaving aid delivery system as pressure is applied to the absorbent member.

**[0006]** According to a further aspect of the present invention, there is provided a system for wet shaving, comprising a handle; a razor cartridge comprising one or more razor blades, said cartridge coupled to said handle; a detachable shaving aid delivery system secured to said cartridge, said delivery system comprising an absorbent member shaped to fit over said cartridge; a fixing member that secures the absorbent member to the razor cartridge, and a shaving aid disposed in said absorbent member, wherein, during use, at least a portion of said shaving aid is dispensed from the shaving aid delivery system as pressure is applied to the absorbent member.

**[0007]** The present invention further extends to a meth-

od of using a shaving aid delivery system for wet shaving, the method comprising the steps of: a) providing a shaving aid delivery system comprising an absorbent member shaped to fit over a razor cartridge, a fixing member that secures the absorbent member to a razor cartridge and a shaving aid disposed in said absorbent member, b) securing the shaving aid delivery system to a razor cartridge; and c) pressing the shaving aid delivery system against an area of skin and dispensing at least a portion of the shaving aid on the area of skin.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0008]** Embodiments of the present invention will hereinafter be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 shows a schematic illustration of an embodiment of the present invention;

Figure 2 shows a schematic illustration of a system for shaving using the embodiment shown in Figure 1; Figure 3 shows a perspective view of an alternative embodiment of the present invention;

Figure 4 shows a schematic illustration of the embodiment of Figure 3; and

Figure 5 shows an alternative view of the embodiment of Figure 3.

### DETAILED DESCRIPTION OF THE INVENTION

**[0009]** The invention is applicable to razor cartridges in general that are used in a wet shaving system. Referring to the drawings, Figure 1 shows components of a wet shaving system in accordance with the present invention. Specifically, Figure 1 shows a razor cartridge 2 and a shaving aid delivery system 20 that is secured to the razor cartridge 2 before or after a user shaves a surface of their skin. The razor cartridge 2 is formed of a housing 4, a plurality of blades 6, a guard 8 and a cap 10. The shaving aid delivery system 20 is formed of an absorbent member 22 with a shaving aid disposed therein.

**[0010]** In the embodiment shown in Figure 1 and Figure 2, the absorbent member 22 is shaped to fit over the razor cartridge 2 and has a skin contacting surface 24 and a blade contacting surface 26. It will be appreciated that the absorbent member 22 could be formed in any shape that enables it to be secured to a known razor cartridge. The razor cartridges may be of the detachable, replaceable type, or they may be cartridges that are more permanently fixed to a handle 5, for example, in the form of disposable razors. Generally, when the absorbent member 22 is secured to the razor cartridge 2, the absorbent member 22 covers a skin contacting surface 12 of the razor cartridge 2 such that the blades 6 do not contact the user's skin.

**[0011]** The absorbent member has an extended portion 28 that may be resilient and that is intended to be

clipped over the cap end 10 of a razor cartridge. The extended portion 28 of the absorbent member may be secured around a razor cartridge to prevent the absorbent member detaching itself while in use. The extended portion 28 may be formed of the same material as the absorbent member, or it may be formed of a substantially rigid material that is secured to the absorbent member.

**[0012]** The absorbent member effectively acts as a storage container and an applicator for the shaving aid. Shaving aid is disposed in the absorbent member 22 by impregnating the absorbent member with a shaving aid or by placing some shaving aid in or on the absorbent member 22. Multiple shaving aids with a range of different types of pre- or post-shave chemistry can be stored in one or more absorbent members and a user is able to choose whichever material(s) provide the skin and/or hair benefit that they require. Thus, a user should be able to apply a variety of shaving aids in or on the absorbent member. The shaving aid may include, but is not limited to pre-shaving aids, such as shave gels, shave foams, shave lotions, skin treatment compositions, conditioning aids, etc, that may be used to prepare the hair or the skin's surface prior to engagement of a blade with the skin. Alternatively, the shaving aid may include materials that are beneficial for skin and/or hair after engagement of a blade with the skin, for example materials that comprise effects such as exfoliation, cooling, cleansing, moisturizing, and conditioning. The shaving aid may be in the form selected from the group consisting of a liquid, a gel, a paste, a powder, a dehydrated liquid, or combinations thereof.

**[0013]** When required for use, the absorbent member 22 is secured to a razor cartridge and shaving aid is applied to a user's skin by applying pressure to the absorbent member 22. In embodiments the absorbent member is hydrated before use by, for example, dipping the absorbent member 22 and razor cartridge 2 into water or holding the absorbent member 22 under a running tap. The water combines with the shaving aid and when pressure is applied to the absorbent member 22, some of the shaving aid and water combination is released from the absorbent member. In each of the described embodiments, a handle 5 associated with the razor cartridge 2, can be used to press the absorbent member 22 against an area of skin to deposit some of the shaving aid on the area of skin.

**[0014]** In an embodiment where the shaving aid is a pre-shave material, for example, shave gel, the shaving aid delivery system is attached to a razor cartridge before using the razor cartridge to shave. The absorbent member 22 of the shaving aid delivery system 20 may then be hydrated and some of the shaving aid material sponged onto the user's skin. Where appropriate, for example when the shaving aid is a shave gel, the absorbent member 22 can be used to lather the shave gel on the user's skin. When the shave gel has been applied to the user's skin, the shaving aid delivery system is removed from the razor cartridge to once again expose the blades

6 and the user can continue to shave as normal.

**[0015]** In an alternative embodiment, where the shaving aid includes materials that may be beneficial for skin and/or hair after shaving, the user can shave as normal before attaching the shaving aid delivery system to the razor cartridge. A user can then secure the shaving aid delivery system to their razor cartridge and press the absorbent member 22 of the shaving aid delivery system 20 against their skin to release some of the shaving onto their skin.

**[0016]** As stated above, it is possible that a user may have multiple absorbent members impregnated with different shaving aids. Accordingly, a user may have one or more absorbent members impregnated with a pre-shave material and/or one or more absorbent members impregnated with a post-shave material. This provides a convenient way for a user to have and apply multiple products to their skin without the need for multiple bottles, cans or tubes of liquid.

**[0017]** To ensure that the absorbent member does not detach itself from a razor cartridge while in use, the shaving aid delivery system includes a fixing member. In the embodiment shown in Figure 3, the fixing member is a holder 30 that the absorbent member can be placed in before it is secured to a razor cartridge 2. As shown in Figures 4 and 5, the holder 30 has a blade contacting surface 32 and an opposing skin contacting surface 34. The holder 20 is further provided with an extended portion 36 that is typically resilient and that enables the holder to be clipped onto a razor cartridge. It will be appreciated that the holder 30 may be formed in any shape that enables it to be fit over a razor cartridge 2 with the absorbent member 22 in place between the holder 30 and razor cartridge 2. Orifices 38, through which the absorbent member 22 is intended to protrude, are provided in a skin contacting surface 34 of the holder 20. It will be appreciated that the holder 30 and its orifices 38 may be any shape that enables the absorbent member 22 to be held securely in place on the razor cartridge while allowing at least part of the skin contacting surface 24 of the absorbent member 22 to protrude beyond the holder 30. The holder 30 may be formed of any known substantially rigid material including but not limited to plastic, for example, polystyrene.

**[0018]** As discussed above, in the embodiment shown in Figures 1 and 2, the fixing member is in the form of the resilient extended portion 28. The resilient extended portion 28 could be formed of the same material as the absorbent member, or could be formed of a substantially rigid, for example a plastic material, that is fixed to the absorbent member 22. In an alternative embodiment, the shaving aid delivery system further comprises a magnetic material that is coupled to the absorbent member 22. For example, a strip of magnetic material may be affixed to a skin contacting surface 26 of the absorbent member, or a magnet may be located within the absorbent member 22. The magnetic material may be used to secure the absorbent member to a razor cartridge by forming a mag-

netic connection with a metallic element of a razor cartridge, for example, the blades or clips. As these embodiments use existing features of razor cartridges, the razor cartridges themselves do not need to be modified to permit the attachment of the shaving aid delivery system.

**[0019]** The absorbent member 22 may be formed of any material that is able to absorb or store a shaving aid and dispel some of the shaving aid when pressure is applied. The absorbent member may be formed of a material that requires hydration before pressure can be applied to release some of the shaving aid. In an embodiment, the absorbent member 22 is a foam pad that has a soft sponge-like, form when hydrated. The foam pad 22 may be formed of a hydrophilic material. An advantage of using a hydrophilic material is that the shaving aid may be gradually released according to a user's requirements. Furthermore, in a dry state, hydrophilic material typically has a substantially rigid and robust form that enables it to be easily transported without the risk of damage or deformation.

**[0020]** To impregnate an absorbent member 22 with a shaving aid, the absorbent member 22 is placed in a liquid, for example, a liquid gel, and is left to absorb the liquid. When the liquid has been absorbed, the absorbent member 22 is left to dry. When rehydrated, water combines with the gel to result in a liquid material that can be dispensed from the absorbent member as pressure is applied. When hydrated, the absorbent member may be used as a conventional sponge or cloth to lather the shaving aid onto a user's skin to replace the need for more traditional shaving foam brushes. Thus the combination of water and shaving aid may easily be applied to a user's skin using the absorbent member 22.

**[0021]** Where the absorbent member requires hydration for use, once the user has completed their wet shave, the absorbent member 22 can be left to dry. When required for use again, the user may once more have to hydrate the absorbent member 22. It is anticipated that a user will continue to use the absorbent member 22 in this manner until it no longer releases shaving aid.

**[0022]** When the shaving aid delivery system no longer functions properly, for example, when there is no longer any shaving aid material held in the absorbent member 22, the absorbent member 22 may be discarded and replaced with an alternative. Alternatively, additional shaving aid may be disposed in the absorbent member, for example, by placing the absorbent member in a liquid gel to reabsorb a shaving aid. In the embodiment with a holder, the same holder can be used and only the absorbent members replaced. In all embodiments, the shaving aid delivery system can be replaced/replenished independently of the razor cartridge.

**[0023]** The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension dis-

closed as "40 mm" is intended to mean "about 40 mm."

## Claims

1. A shaving aid delivery system (20) for wet shaving, **characterized in that** the system comprises:
  - an absorbent member (26) shaped to fit over a razor cartridge (2);
  - a fixing member (28,30) that secures the absorbent member (26) to a razor cartridge (2);
  - and a shaving aid disposed in said absorbent member (26), wherein, during use, the shaving aid delivery system (20) is secured to a razor cartridge (2) and a portion of said shaving aid is dispensed from the shaving aid delivery system as pressure is applied to said absorbent member (26).
2. A shaving aid delivery system as claimed in claim 1, wherein the absorbent member (26) is a foam pad.
3. A shaving aid delivery system as claimed in claim 2, wherein the foam pad is formed of a hydrophilic material.
4. A shaving aid delivery system as claimed in any preceding claim, wherein the fixing member comprises a resilient extended portion (28) of the absorbent member.
5. A shaving aid delivery system as claimed in any of claims 1 to 3, wherein the fixing member comprises a holder (30) that receives the absorbent member (26).
6. A shaving aid delivery system as claimed in claim 5, wherein the holder (30) has one or more orifices (38) through which a portion of the absorbent member (26) protrudes.
7. A shaving aid delivery system as claimed in any of claims 1 to 3, wherein the fixing member comprises a magnetic material coupled to the absorbent member.
8. A shaving aid delivery system as claimed in any preceding claim, wherein said shaving aid is in a form selected from the group consisting of a liquid, a gel, a paste, a powder, a dehydrated liquid, or combinations thereof.
9. A shaving aid delivery system as claimed in any preceding claim, wherein the absorbent member (26) is hydrated prior to use.
10. A shaving aid delivery system as claimed in any pre-

ceding claim, wherein the shaving aid is selected from a group consisting of shave gels, shave foams, shave lotions, exfoliating material, skin coolants, skin cleansers, skin moisturizers, skin conditioners, and combinations thereof.

11. A system for wet shaving, comprising:

a handle; a razor cartridge comprising one or more razor blades, said cartridge coupled to said handle; a detachable shaving aid delivery system secured to said cartridge, the system being **characterized in that** it further comprises:

an absorbent member shaped to fit over said cartridge; a fixing member that secures the absorbent member to the razor cartridge; and a shaving aid disposed in said absorbent member, wherein, during use, at least a portion of said shaving aid is dispensed from the shaving aid delivery system as pressure is applied to the absorbent member.

12. A method of using a shaving aid delivery system for wet shaving, the method being **characterized in that** it comprises the steps of:

a) providing a shaving aid delivery system comprising an absorbent member shaped to fit over a razor cartridge, a fixing member that secures the absorbent member to a razor cartridge and a shaving aid disposed in said absorbent member;

b) securing the shaving aid delivery system to a razor cartridge; and

c) pressing the shaving aid delivery system against an area of skin and dispensing at least a portion of the shaving aid material on the area of skin.

13. A method as claimed in claim 12, wherein, prior to step c), the method further comprises the step of hydrating the absorbent member.

14. A method as claimed in claim 13, wherein the method further comprises an additional step of: using the hydrated absorbent member to lather at least a portion of the shaving aid on the area of skin, wherein the shaving aid material is a shave preparation material selected from a group consisting of shave gels, shave foams, shave lotions, skin treatment compositions, skin conditioning aids, and combinations thereof or a skin treatment composition selected from a group consisting of exfoliating materials, skin coolants, skin cleansers, skin moisturizers, skin conditioners, and combinations thereof.

15. A method as claimed in claim 13 or claim 14, wherein the fixing member comprises a holder that receives the absorbent member, the holder having one or more orifices through which a portion of the absorbent member protrudes, the method further comprising the steps of: placing the absorbent member in said holder; and fixing the holder to a razor cartridge.

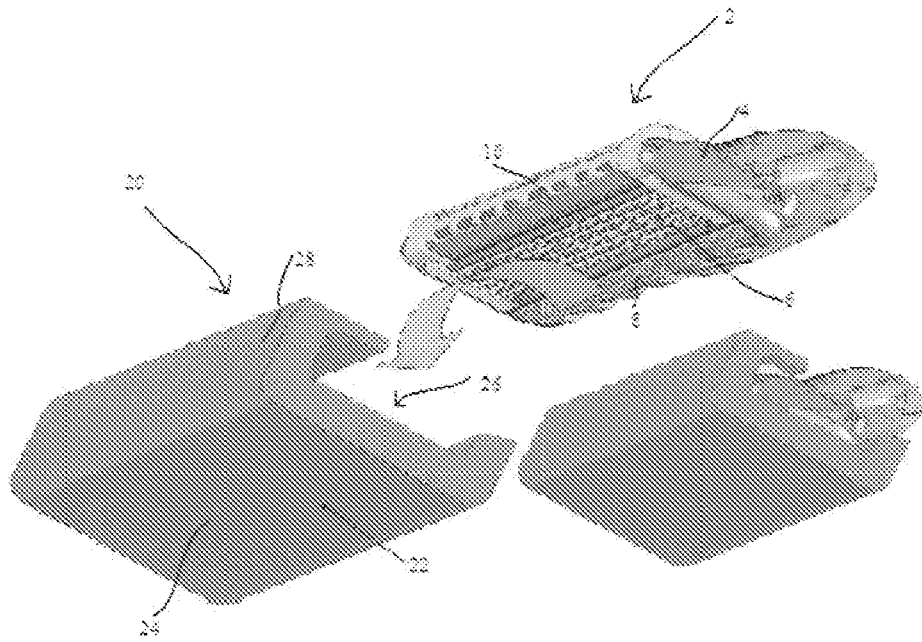


Figure 1

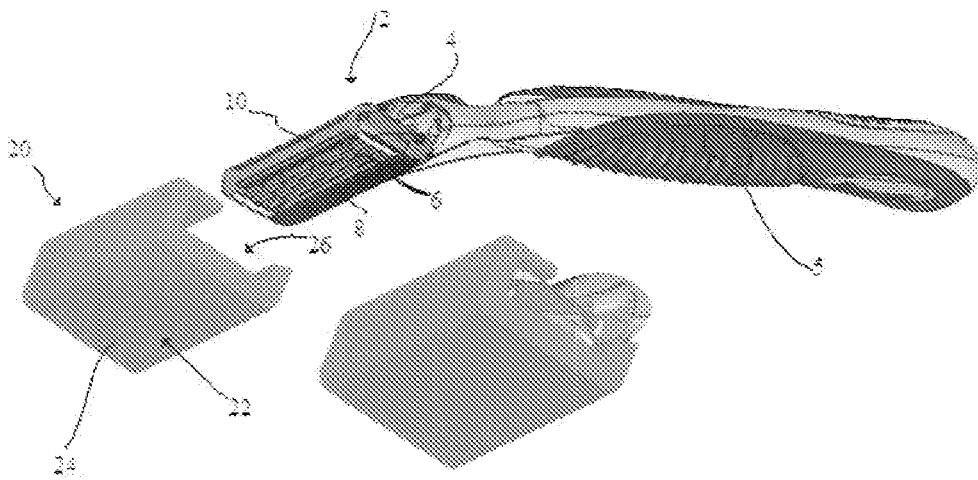


Figure 2

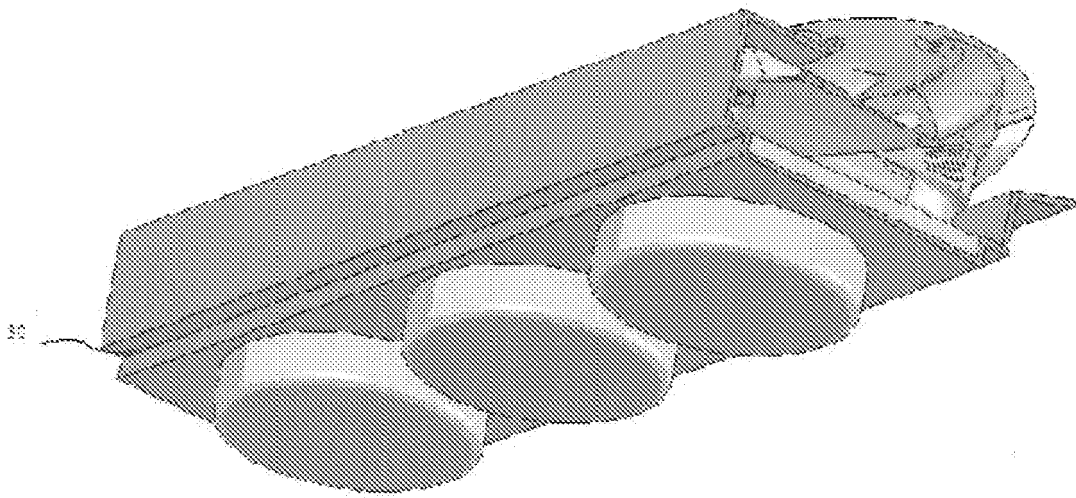


Figure 3

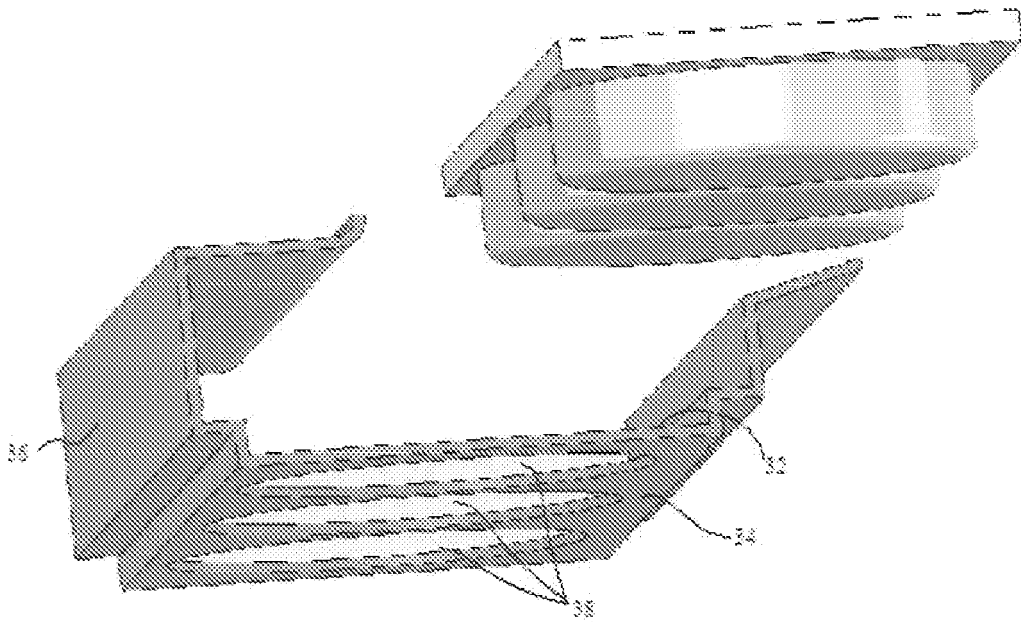


Figure 4



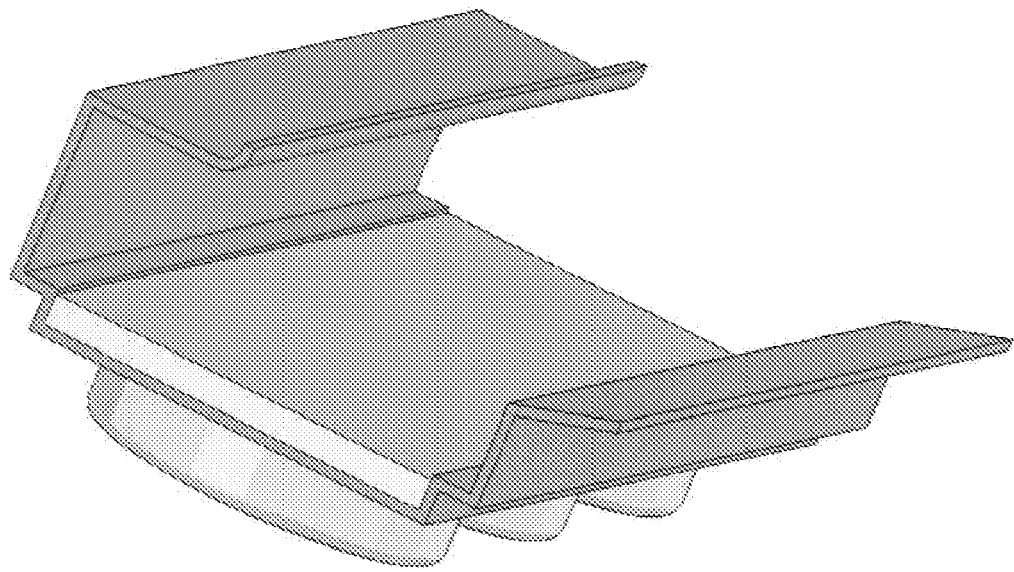


Figure 5



EUROPEAN SEARCH REPORT

Application Number  
EP 09 15 4120

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The present search report has been drawn up for all claims				
Place of search Munich		Date of completion of the search 8 July 2009	Examiner Rattenberger, 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		

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 09 15 4120

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.

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