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(54) **Lipstick**

(57) A device for holding and utilizing an application stick (2), comprises a holder (1) which has a cavity in which the application stick is accommodated. The holder comprises a tube (3) surrounding the cavity in which tube the application stick can be axially adjusted between a storage position and an application position. The holder comprises at one end a manually detachable cap (4, 5) which closes the cavity at an open end of the tube. At an opposite end of the holder is provided an adjusting element (7) which is coupled via adjusting means (10, ..., 13) to the application stick for adjustment of the latter. The device is characterized in that the holder comprises a grip surface portion (6) between the adjusting element (7) and the cap (4, 5), which grip surface portion has a supporting face on an outside of the holder on which a user may rest at least a finger tip for adjusting the grip surface portion and the adjusting element relative to each other for an adjustment of the application stick.

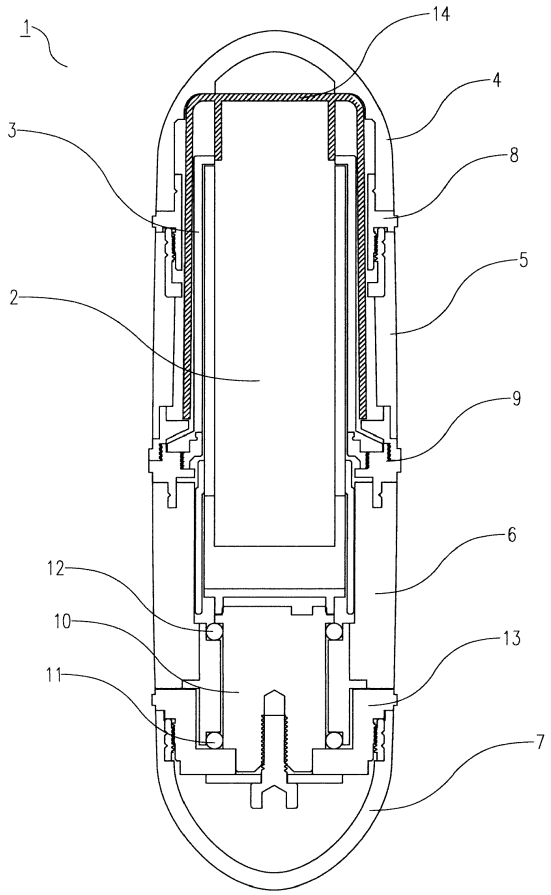

Fig.1

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Description

[0001] The present invention relates to a device for holding and utilizing an application stick, comprising a holder which has a cavity in which the application stick is accommodated, where the holder comprises a cavity-bounding tube within which the application stick can be axially adjusted between a storage position situated within the cavity and an application position at least partially released from the cavity, where the holder comprises at a first end a manually releasable cap which closes the cavity at an open end of the tube and at an opposite second end comprises an adjusting element which is coupled to adjusting means which are capable of and arranged for adjusting the application stick between the storage position and the application position.

[0002] A device of the type defined in the opening paragraph forms a handy article of use by which in a simple manner a quantity of substance can be transferred from an application stick contained therein to a desired surface. The device knows a multitude of different applications varying from, for example, a personal care product or make up product for caring for or making up a user's body surface, to marking means such as markers and glue sticks. Albeit all these and other applications form a device to which the present invention relates, a known application is that of a lipstick device.

[0003] For example, a lipstick device is known where the device comprises a holder containing a tube that surrounds a cavity in which an application stick is accommodated in the form of a stick of appliable lipstick substance either coloured or not. The stick can be moved from a storage position to an application position via adjusting means, where the stick is at least partially released through an opening at a first end of the tube for bringing this stick into contact with the user's lips. By subsequently moving the stick over the lips, part of the appliable lipstick substance will be left behind on the lips from the stick so as to form a layer that gives the user's lips a desired appeal. The stick can then be brought back to the storage position by means of the adjusting means, where the stick is accommodated at least substantially completely within the cavity of the holder. For keeping the application stick in perfect order for a fairly long period of time, for example, by counteracting the penetration of dust or other fouling particles, in the storage position of the application stick a cap is applied over the open end of the tube for closing the cavity. The cap is then manually detachable from a remaining part of the holder for rendering the cavity free at the open end when the application stick is to be transferred to the application position.

[0004] For adjusting the application stick between the application position and storage position, the adjusting means in the holder are coupled to an adjusting element which is provided at a tube portion located opposite to the open first end. By moving the adjusting element relative to the tube, in most cases in the form of a mutual rotary movement, the adjusting means are used for adjusting the application stick within the cavity. Albeit the known lipstick device offers an excellent adjustment of the application stick, there is nevertheless still a major disadvantage attached to it.

[0005] A user of the known device will generally manually touch both the adjusting element and the tube to enable their mutual adjustment. In a contact between the hand and the tube, dirt particles, grease, micro organisms and other contaminations present on the hand will be conveyed to an outside surface of the tube and stay behind on it. Since the cap is then applied to the tube for closing the cavity, the contaminations present on the tube will be conveyed to an inside of the cap. More particularly in the event of frequent use of the device the contaminations within the cap will increase as a result and come into contact with the application stick via the open side of the tube. As a result, with a lapse of time a certain initial quality of the application stick can no longer be guaranteed. In the case of a personal care product or make up product such residual contaminations remaining behind on the tube are highly undesirable in view of sanitary conditions. This is more particularly the case when the device is used over a long period of time, such as in the case of a refillable device, or when the device is exchanged among a plurality of users.

[0006] It is an object of the present invention *inter alia* to eliminate said disadvantage.

[0007] For achieving the intended object the device according to the invention of the type defined in the opening paragraph is characterized in that the holder has between the adjusting element and the cap a grip surface portion that has a support surface on an outside of the holder on which a user can lean at least with a finger tip for adjusting the grip surface portion and the adjusting element relative to each other for an adjustment of the application stick, and where the cap extends as far as the grip surface portion. By utilizing the grip surface portion between the cap and the adjusting element, a user of the device need no longer touch a part of the holder that is covered by the cap when the application stick is situated in the storage position. In this manner a contamination of this part of the holder is counteracted. Since the cap extends as far as the grip surface portion and not beyond, any possible contaminations staying behind on an outside of the grip surface portion will not end up on an inside of the cap and, as a result, not come into contact with the application stick either. A quality of the application stick, and more particularly a hygienic use of it, is therefore guaranteed for a much longer period of time.

[0008] In a first embodiment the device according to the invention is characterized in that the adjusting element, the grip surface portion and the cap with their respective outsides form an at least substantially flowing line and constitute an at least substantially completely closed outside of the holder. In the storage position a connection between the loose component parts of the holder on the outside is thus at least substantially completely closed and flat. Despite the utilization of the inter-

mediate grip surface portion, the device continues to have an aesthetically attractive outward appearance without openings or staggered parts on the outside.

[0009] Even though the invention can be applied well to a single-use device, the invention is pre-eminently suitable for use as a refillable device. In a further preferred embodiment the device according to the invention is therefore characterized in that the tube is coupled to the adjusting means via manually detachable coupling means and either or not filled with an application stick can be manually removed from the device. The tube with application stick can as a result be replaced, exchanged or refilled as desired and subsequently be placed back for use into the holder of the device.

[0010] A particular embodiment of the device according to the invention is characterized in that the application stick comprises an application substance and in that between the cap and the open end of the tube a barrier layer closed to the application substance is provided. The closed barrier layer prevents contact between the cap and the substance from the application stick, as a result of which no remainder of the substance can end up in the cap. This is more particularly of importance with a refillable device in the case where a new application stick is placed in the device and an undesired mixing of two or more different substances from different application sticks used is to be counteracted.

[0011] Even though the barrier layer may be realized in different ways, in an extremely practical embodiment of the device according to the invention this is a wall bounding the open end of the tube, which wall at least partially extends along the tube. The wall may be a simple cap mounted over the open end of the tube and which can be removed from this tube for shifting the application stick to the application position. In the event of an exchange of the application stick it is also possible for the simple cap, which can be manufactured at relatively low manufacturing costs, to be exchanged for a new simple cap so as to avoid cross-infection by substances from the different application sticks.

[0012] In a further particular embodiment of this the device according to the invention is characterized in that the barrier layer on an inside of the cap is coupled to the cap and can be manually removed from this cap. By detaching the cap from a remaining portion of the holder, the barrier layer thus coupled to the cap will automatically also be removed from the remaining portion of the holder. With a single action the open-end tube is thus released for bringing the application stick to the application position.

[0013] A further particular embodiment of the device according to the invention is characterized in that the cap comprises a sleeve portion that bounds the grip surface portion and surrounds the tube at least over part of a length and includes a top portion that extends over the open end of the tube, where the sleeve portion and top portion can be manually detached relative to each other for releasing the barrier layer. The execution of the cap in two mutually detachable parts offers a practical solution for removing from the cap the barrier layer coupled to the cap. The mutual detachment of the sleeve portion from the top portion renders the barrier layer free to be exchanged for a new barrier layer, whereas in a mutually coupled state of the sleeve portion and the top portion the barrier layer is coupled to the cap for releasing the cavity with the application stick in a single step.

[0014] The invention also relates to a refillable device for holding and utilizing an application stick, comprising a holder which has a cavity in which the application stick can be accommodated, where the holder comprises a cavity-bounding tube within which the application stick can be axially adjusted between a storage position situated completely within the cavity and an at least partially cavity-released application position, where the holder comprises a cap that closes the cavity at a first open end of the tube and includes an adjusting element that bounds the cavity at a second, opposite end of the tube and in which adjusting means are included which are capable of and arranged for adjusting the application stick between the storage position and the application position, which device according to the invention is characterized in that between the open end of the tube and the cap a barrier layer is provided which prevents direct contact between the application stick and an inside of the cap.

[0015] Since the barrier layer prevents contact between the cap and the application stick, it is not possible for a remainder of a substance from the application stick to end up in the cap. When a new application stick is placed in the refillable device, undesired mixing of various substances from different application sticks used is counteracted in this manner.

[0016] In a preferred embodiment of this the refillable device according to the invention is characterized in that the barrier layer is coupled to the cap. By detaching the cap from a remaining part of the holder the barrier layer thus coupled to the cap will also be detached from the remaining part of the holder. In a single action the open-end tube can thus be released for shifting the application stick to the application position.

[0017] In a preferred embodiment of this the refillable device according to the invention is characterized in that the cap comprises a sleeve portion that surrounds the tube over at least part of a length and includes a top portion that extends over the open end of the tube, where the sleeve portion and top portion are installed detachably relative to each other and where the barrier layer extends with an end beyond the sleeve portion as far as the top portion and can be detached when the sleeve portion and top portion have been detached from each other. The execution of the cap in two mutually detachable parts offers a practical solution for the replacement of the barrier layer coupled to the cap. The mutual detachment of the sleeve portion and top portion renders the end of the barrier layer free. This end of the barrier layer can be utilized by a user for removing the barrier layer from the device and exchanging it for a new barrier

layer, while in a mutually coupled state of the sleeve portion and top portion the barrier layer is coupled to the cap for releasing the cavity with the application stick in a single step.

[0018] The invention will be described below in more detail based on an example of embodiment while reference is made to a relevant drawing figure, in which:

Fig. 1 shows an axial cross section of an example of embodiment of a device according to the invention.

[0019] The drawing figure is purely schematic and not drawn to scale. More particularly some parts and dimensions are shown to a greater or less degree in exaggerated form for clarity of exposition.

[0020] The device shown in Fig. 1 relates to a refillable lipstick device comprising a lipstick holder 1 in which a lipstick 2 is provided in a cavity bounded by a tube 3 of the holder. One end of the tube is open for releasing through it at least a part of the lipstick 2. In a storage position the opening is closed by a cap 4, 5 which is located at a first end of the holder 1. The cap comprises a top portion 4 and a sleeve portion 5. The top portion 4 and the sleeve portion 5 are mutually attached via fastening means 8 which are comprised of complementary threads in the walls of the top portion 4 and sleeve portion 5. The sleeve portion 5 is fastened to a grip surface portion 6 via fastening means 9. The fastening means 9 may form a screw fastening similar to fastening means 8, or alternatively, for example realize a snap or click fastening. In any event the fastening means 9 provide a relatively simple detachable fastening of the cap 4, 5 to a remaining part of the holder 1. As a result, the cap 4, 5 can be detached from the remaining part of the holder 1 in a single action for thus releasing the open end of the tube 3 so that the application stick can be moved to the application position where at least part of the application stick projects from the tube 3.

[0021] The grip surface portion 6 is coupled to an adjusting element 7 which is located at an opposite second end of the holder 1. An outside surface of the adjusting element 7, the grip surface portion 6, the sleeve portion 5 and the top portion 4 jointly form a total outside surface of the holder 1. The outside surfaces of the adjusting element 7, the grip surface portion 6, the sleeve portion 5 and the top portion 4 are then adjoining in line so that the total outside surface of the holder is continuous, without any openings, and flat.

[0022] The application stick 2 can be adjusted between the storage position and application position by a rotation of the adjusting element 7 and the grip surface portion 6 relative to each other. This may be effected both by starting from a fixed grip surface portion 6 relative to which the adjusting element 7 is rotated around an axial axis of the holder 1, and as in this example of embodiment, by starting from a fixed adjusting element 7 relative to which the grip surface portion 6 is rotated around the axial axis of the holder 1. In either case adjusting means 10 ... 13 are used to have the application stick moved axially. For this purpose the adjusting means comprise a bearing element 13 which is provided to rotate, via a plurality of bearings 11, 12, around a central shaft body 6 which drives the application stick.

[0023] The central shaft body 6 comprises an axial base portion having at one end a radial ring of teeth axially leaving the base portion for moving into engagement with the tube 3. For this purpose, at a second end situated opposite to the open end, the tube 3 is provided with engagement openings complementary to the teeth. The connection between the shaft body 6 and the tube 3 by means of communication between the teeth and their respective engagement openings offers a rapid, reliable exchange possibility of the tube 3 either filled or not with an application stick.

[0024] By utilizing the grip surface portion 6 between the cap 4, 5 and the adjusting element 7, a user of the device can touch this for rotating the adjusting element and the grip surface portion relative to each other. As a result, the user only contacts an outside surface of the holder 1, so that a contamination of the application stick 2, the tube 3 and an inside of the cap 4, 5 is counteracted as a result of a lack of contact of these elements.

[0025] Since the installed cap 4, 5 extends as far as the grip surface portion 6, the tube and thus the application stick is completely protected from an outside environment. In consequence, also any possible contamination of the tube or application stick caused in another way is excluded. By utilizing this device a quality of the application stick, and more particularly a hygienic use of it, can consequently continue to be guaranteed for a fairly long period of time.

[0026] For additional protection of the application stick 2 a barrier layer 14 is provided between the open end of the tube 3 and the cap 4, 5, which barrier layer has the form of a lightweight plastic cap installed over the end of the tube. The plastic cap 14 counteracts a contact between the cap 4, 5 and a substance from the application stick, so that no remainder of a substance can end up in the cap. When refilling the device in that a new lipstick is inserted therein, also the relatively simple plastic cap 14 can be substituted in a simple manner. This avoids contamination of the newly inserted lipstick 2 as a result of the mixing of a quantity of lipstick 2 with a remaining quantity of lipstick from an earlier lipstick used in the device. The plastic cap 14 is coupled to the inside of the cap 4, 5 so that the plastic cap, when the cap 4, 5 is removed from the grip surface portion 6, is taken along away from the tube 3. In this way, in a single action both the cap and the plastic cap can be removed from a further part of the holder to render the open end of the tube 3 free and shift the lipstick 2 to the application position. The fastening means 8 allow of disengaging the top portion 4 from the sleeve portion 5. As a result, the top portion 4 can be disengaged from the sleeve portion 5, while the sleeve portion 5 is fastened to the grip surface portion 6.

By removing the top portion 4, an end of the plastic cap 14, which protrudes relative to the sleeve portion 5, is set free. In consequence, the plastic cap can be simply taken from the protruding part for removing it from the holder and insert a new plastic cap.

[0027] Albeit the invention has been further described in the foregoing based on a single example of embodiment, it may be evident that the invention is not by any manner or means restricted to the described embodiment. On the contrary, without departing from the spirit and scope of the invention, those skilled in the art will be able to design many variations and embodiments.

Claims

1. A device for holding and utilizing an application stick, comprising a holder which has a cavity in which the application stick is accommodated, where the holder comprises a cavity-bounding tube within which the application stick can be axially adjusted between a storage position situated within the cavity and an application position at least partially released from the cavity, where the holder comprises at a first end a manually releasable cap which closes the cavity at an open end of the tube and at an opposite second end comprises an adjusting element which is coupled to adjusting means which are capable of and arranged for adjusting the application stick between the storage position and the application position, **characterized in that** the holder has between the adjusting element and the cap a grip surface portion that has a support surface on an outside of the holder on which a user can lean at least with a finger tip for adjusting the grip surface portion and the adjusting element relative to each other for an adjustment of the application stick, and where the cap extends as far as the grip surface portion.

2. A device as claimed in claim 1, **characterized in that** the adjusting element, the grip surface portion and the cap with their respective outsides at least substantially form a flowing line and constitute an outside of the holder.

3. A device as claimed in claim 1 or 2, **characterized in that** the tube is coupled to the adjusting means via manually detachable coupling means and either or not filled with an application stick can be manually removed from the device.

4. A device as claimed in any one of the preceding claims, **characterized in that** the application stick comprises an application substance and **in that** between the cap and the open end of the tube a barrier layer closed to the application substance is provided.

5. A device as claimed in claim 4, **characterized in that** the barrier layer comprises a wall bounding the open end of the tube which wall at least partially extends along the tube.

6. A device as claimed in claim 4 or 5, **characterized in that** the barrier layer on an inside of the cap is coupled to the cap and can be manually removed from this cap.

7. A device as claimed in any one of the claims 4 to 6, **characterized in that** the cap comprises a sleeve portion that bounds the grip surface portion and surrounds the tube at least over part of a length and includes a top portion that extends over the open end of the tube, where the sleeve portion and top portion can be manually detached relative to each other for releasing the barrier layer.

8. A refillable device for holding and utilizing an application stick, comprising a holder which has a cavity in which the application stick can be accommodated, where the holder comprises a cavity-bounding tube within which the application stick can be axially adjusted between a storage position situated completely within the cavity and an at least partially cavity-released application position, where the holder at a first end comprises a cap that closes the cavity at a first open end of the tube and at a second, opposite end includes an adjusting element that is coupled to adjusting means which are capable of and arranged for adjusting the application stick between the storage position and the application position, **characterized in that** between the open end of the tube and the cap a barrier layer is provided which prevents direct contact between the application stick and an inside of the cap.

9. A refillable device as claimed in claim 8, **characterized in that** the barrier layer is coupled to the cap.

10. A refillable device as claimed in claim 9, **characterized in that** the cap comprises a sleeve portion that surrounds the tube at least over part of a length and includes a top portion that extends over the open end of the tube, where the sleeve portion and top portion are installed detachable relative to each other and where the barrier layer extends with an end beyond the sleeve portion as far as the top portion and can be detached when the sleeve portion and top portion have been mutually detached.

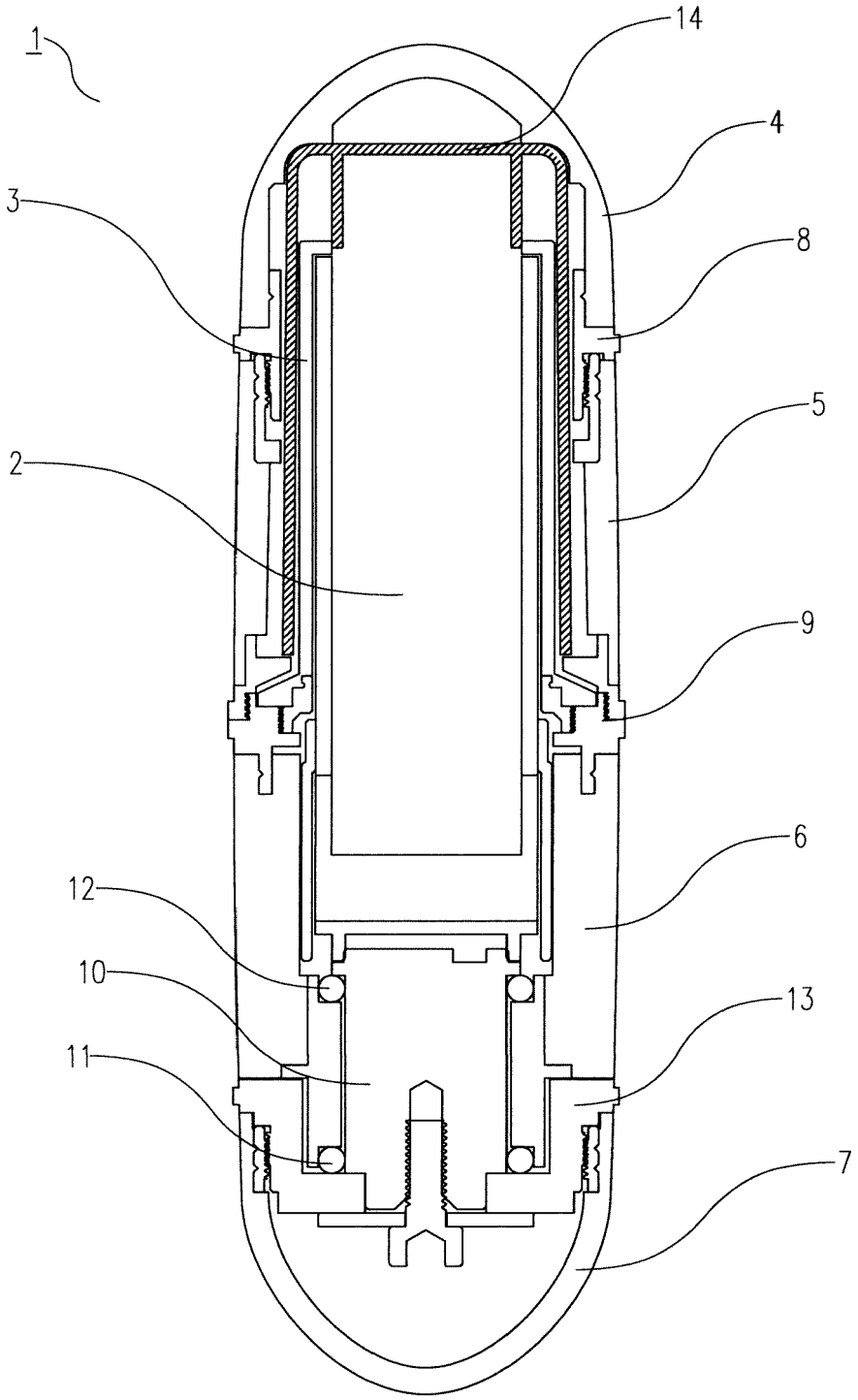

Fig.1

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EUROPEAN SEARCH REPORT

Application Number
EP 14 07 5004

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	FR 2 653 643 A1 (SOMATER CONDITIONNEMENTS [FR]) 3 May 1991 (1991-05-03) * the whole document *	1,2,4,6, 8,9	INV. A45D40/04 A45D40/02 A45D40/06
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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	16 July 2014	Nicolás, Carlos

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 07 5004

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
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16-07-2014

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