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KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
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OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
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(54) Title: OSTOMY BAG WITH FILTER PROTECTING FLAP

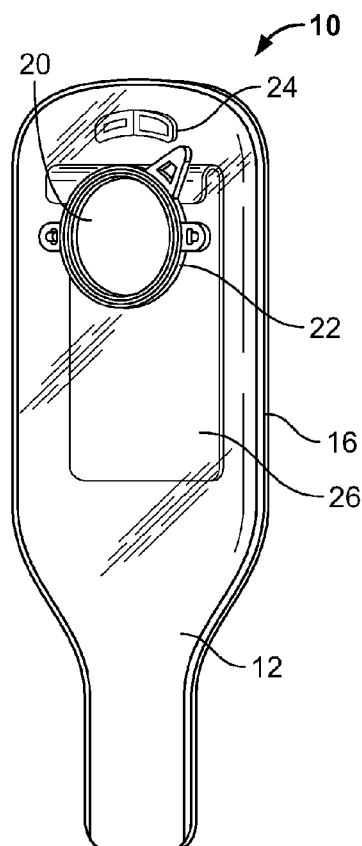


FIG. 3

(57) Abstract: An ostomy pouch includes a proximal pouch wall and a distal pouch wall connected together along an outer periphery to form a collection area between the proximal pouch wall and the distal pouch wall, an inlet in the proximal pouch wall for receiving waste into the pouch and a coupling ring disposed about the inlet. The ostomy pouch further includes a filter disposed on the distal pouch wall generally opposing the inlet and a flap disposed in the collection area. The flap includes a first, fixed end connected to the coupling ring and a second, free end spaced from the outer periphery of the proximate and distal pouch walls. The flap is configured to direct waste received through the inlet in a predetermined direction within the collection area, away from the filter.



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TITLE

OSTOMY BAG WITH FILTER PROTECTING FLAP

BACKGROUND

[0001] The following description relates to an ostomy appliance, and in particular, an ostomy bag or pouch having a flap that directs stool received in the pouch.

[0002] An ostomy appliance or system is a medical device or prosthetic that provides a means for collecting waste from a stoma typically created as a result of a surgical procedure to divert a portion of the colon or small intestine. One type of ostomy appliance is an ostomy pouch system that may be attached to a patient around the stoma or the peristomal area.

[0003] An ostomy bag or pouch includes an opening configured to receive the stoma so that stool discharged from the stoma may be collected within the pouch. The pouch also includes a coupling ring to allow the pouch to be secured the patient, for example, by way of a corresponding coupling ring adhered to the patient. Further still, conventional pouches include a filter disposed in a wall. The filter is typically located nearly opposite to the opening or coupling ring on the pouch. Thus, when waste, such as stool, is introduced into the pouch, the stool may come into contact with and potentially clog the filter.

[0004] Accordingly, it is desirable to provide an ostomy bag or pouch configured to direct stool away from a filter to limit or prevent clogging of the filter.

SUMMARY

[0005] In one embodiment, there is provided an ostomy pouch including a proximal pouch wall and a distal pouch wall connected together along an outer periphery to define a collection area between the proximal pouch wall and the distal pouch wall. The ostomy pouch also includes an inlet in the proximal pouch wall for receiving stool or waste into the pouch, a coupling ring disposed about the inlet, a filter disposed on the distal pouch wall generally opposing the inlet and a flap disposed in the collection area. The flap has a first, fixed end connected to the coupling ring and a second, free end, spaced from the periphery of the

proximate and distal pouch walls. The flap is configured to direct stool or waste received through the inlet in a predetermined direction within the collection area.

[0006] Other objects, features, and advantages of the disclosure will be apparent from the following description, taken in conjunction with the accompanying sheets of drawings, wherein like numerals refer to like parts, elements, components, steps, and processes.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a plan view of an ostomy pouch according to an embodiment described herein;

[0008] FIG. 2 is a side view of the ostomy pouch of FIG. 1;

[0009] FIG. 3 is a perspective view of the ostomy pouch of FIG. 1; and

[0010] FIG. 4 is an enlarged perspective view showing a portion of a proximal pouch wall of an ostomy pouch according to an embodiment described herein.

DETAILED DESCRIPTION

[0011] While the present disclosure is susceptible of embodiment in various forms, there is shown in the drawings and will hereinafter be described one or more embodiments with the understanding that the present disclosure is to be considered illustrative only and is not intended to limit the disclosure to any specific embodiment described or illustrated.

[0012] With reference to FIGS. 1-3, an ostomy pouch 10, according to the embodiments described herein, generally includes a proximal pouch wall 12 and a distal pouch wall 14 forming an outer periphery 16 to define a collection area 18 between the pouch walls 12, 14, an inlet 20 formed in the proximal pouch wall 12, a coupling ring 22 disposed at the inlet 20, a filter 24 disposed on one of the pouch walls 12, 14, and a flap 26 disposed in the collection area 18. The flap 26 is configured to direct waste, such as stool, received through the inlet 20 in a predetermined direction within the collection area 18.

[0013] In one embodiment, the ostomy pouch 10 may be a two-piece pouch. The proximal pouch wall 12 and the distal pouch wall 14 may be connected or joined at their respective peripheries, for example, by heat sealing, to form the outer periphery 16. However, it is understood that the present description is not limited to this embodiment. For example, the respective peripheries of the proximal pouch wall 12 and the distal pouch wall 14 may be joined together using other suitable, known sealing or joining methods, such as adhesive bonding. Alternatively, the ostomy pouch 10 may be a one-piece pouch having integrally and continuously formed proximal and distal pouch walls 12, 14 connected along the outer periphery 16.

[0014] The inlet 20 may be formed as an opening in the proximal pouch wall 12. The inlet 20 is configured to receive, for example, a portion of a stoma (not shown) so that waste, such as stool, discharged from the stoma may be received in the collection area 18 of the pouch.

[0015] The coupling ring 22 is positioned at the inlet 20 and may substantially surround the inlet 20. In one embodiment, the coupling ring 22 includes a coupling face configured to matingly engage a coupling face of a corresponding coupling ring (not shown) that is adhered to the patient, for example, via an ostomy faceplate (not shown). The coupling face may include, for example, a coupling flange. Accordingly, the ostomy pouch 10 may be releasably coupled to the patient via the corresponding coupling rings. The coupling ring 22 may extend either to or into the collection area 18 of the pouch. In one embodiment, the coupling ring 22 may be secured to the proximal pouch wall 12 by, for example, heat sealing, adhesive or other similar, suitable fastening mechanism.

[0016] The filter 24 may be disposed on either the proximal pouch wall 12 or the distal pouch wall 14. In one embodiment described herein, the filter 24 is positioned on the distal pouch wall 14. The filter 24 may be an odor filter, for example, a charcoal odor filter. Other suitable types of filters are envisioned as well. The filter 24 may be secured to an inner side of the distal pouch wall 14 so as to be disposed in the collection area 18. Preferably, the filter 24 is disposed at an upper end or portion of the pouch 10 where waste or stool is less likely to collect during normal use of the pouch 10 as understood in the art.

[0017] The flap 26 is connected to the coupling ring 22 and extends within the collection area 18. The flap 26 includes a first, fixed end 28 connected to the coupling ring 22

and a second, free end 30 spaced from the outer periphery 16 of the proximal and distal pouch walls 12, 14. In one embodiment, the proximal pouch wall 12 may be connected to the coupling ring 22 and the fixed end 28 of the flap 26 may be connected to the proximal wall 12 at the coupling ring 22, such that the proximal wall 12 and the fixed end 28 of the flap 26 are secured together in overlapping relationship at the coupling ring 22. Alternatively, the flap 26 may be connected directly to the coupling ring 22.

[0018] In one embodiment, the flap 26 extends between the inlet 20 and the distal pouch wall 14 so that stool or waste entering the collection area 18 through the inlet 20, may be directed away from the filter 24 by the flap 26. The flap 26 may be connected to the coupling ring 22 continuously or intermittently along at least a portion of a perimeter of the coupling ring 22. The flap 26 may be connected to the coupling ring 22 or the proximal wall 12, for example, by heat sealing, adhesive, or other suitable fastening mechanism.

[0019] In one embodiment, the flap 26 includes a first portion 32 and a second portion 34. The first portion 32 extends from the first end 28 at the coupling ring 22 generally in a first direction D1. The second portion 34 may be continuous and integral with the first portion 32 and extends generally in a second direction D2 to the free end 30. The second direction D2 may be substantially opposite to the first direction D1.

[0020] FIG. 4 is an enlarged view of the proximal pouch wall 12 showing the flap 26 connected to the coupling ring 22, according to an embodiment described herein. Referring to FIGS. 1-4, the first portion 32 of the flap 26 coextends with a portion of the coupling ring 22 in the first direction D1. Thus, the coupling ring 22 may support the first portion 32 extending in the first direction D1. The first portion 32, and in particular, the first end 28 generally matches a profile of the perimeter of the coupling ring 22 and is connected to the coupling ring 22 along the perimeter or a perimeter section of the coupling ring.

[0021] The coupling ring 22 extends to a first height h1 generally in the first direction D1 and a second height h2 generally in the second direction D2. The first and second heights h1, h2 may be measured from a reference line L extending across a width of the coupling ring 22.

[0022] The flap 26 may be made from a relatively thin, flexible material, such as a plastic or other suitable polymer. For example, in one embodiment, the flap 26 may be made

from the same material as the proximal and distal pouch walls 12, 14. However, other suitable materials may be used as well. The first portion 32 of the flap 26 may extend to the first height h1, or beyond, in the first direction D1 and roll or fold over on itself, to extend in the second direction D2 to the free end 30. Accordingly, the second portion 34 may hang freely from the fixed end 28. The second portion 34 may extend in the second direction D2 beyond the second height h2. That is, the second portion 34 may extend further in the second direction D2 than the coupling ring 22.

[0023] A width 'w' of the flap 26, in one embodiment, may be greater than a width of the coupling ring 22. In one embodiment, the flap 26 extends one inch or less from opposite sides of the coupling ring 22. However, the present description is not limited to this configuration. For example, the width 'w' of the flap may be substantially the same as, or less than a width of the coupling ring 22.

[0024] With further reference to FIGS. 1-4, in one embodiment, the coupling ring 22 may be substantially circular in shape and include an upper portion 36 and a lower portion 38. The first portion 32 of the flap 26 may coextend with the upper portion 36. The upper and lower portions 36, 38 may lie, for example on opposite sides the reference line L. The reference line L may be, for example, a diameter extending across the width of the coupling ring 22. The upper portion 36 extends to the first height h1 and the lower portion extends to the second height h2. The first portion 32 of the flap 26, and in particular, the fixed end 28, may be sized and shaped to correspond to a portion of the circumference of the of the coupling ring 22 such that the first portion 32 is connected to and supported by the coupling ring 22 in the first direction D1 to the first height h1.

[0025] In one embodiment, the first direction D1 extends generally upward and the second direction D2 extends generally downward. The inlet 20 and coupling ring 22 are disposed at an upper portion of the ostomy pouch 10. Accordingly, stool received in the collection area 18 from the inlet 20 may flow, for example, under gravity, to a lower portion of the collection area 18 in the ostomy pouch 10. The filter 24 may also be disposed in an upper portion of the ostomy pouch 10 on the distal pouch wall 14, generally opposite to, or slightly above, the inlet 20 and the coupling ring 22. The first portion 32 extends generally upward from the coupling ring 22 within the collection area 18 and the second portion 34 extends generally

downward from the first portion 32 to the free end 30. The free end 30 is positioned below the coupling ring 22 in a lower portion of the collection area 18 and ostomy pouch 10. In one embodiment, the first portion 32 may be connected to the coupling ring 22 at or above a midline or diameter extending across the width of the coupling ring 22, without extending to a lower portion of the coupling ring 22 below the midline. However, the present disclosure is not limited to this configuration.

[0026] It is understood that the relative directions described above, e.g., “upward,” “downward,” “upper,” “lower,” “above,” “below,” are used for illustrative purposes only and may change depending on an orientation of the ostomy pouch and/or the patient. Accordingly, this terminology is non-limiting in nature.

[0027] In the embodiments above, the flap 26, and in particular, the second portion of the flap may shield the filter 24 from incoming stool or waste received through the inlet 20 and direct the incoming stool or waste to a lower portion of the collection area 18 away from the filter 24. Because the flap 26 does not extend to, and is not connected to an outer periphery 16 of the ostomy pouch 10, a seal formed along the outer periphery 16 of the ostomy pouch 10 is not affected by the flap 26. In addition, because the flap 26 is loose, i.e., hangs freely from the coupling ring, the flap 26 may float freely and not irritate the stoma. Further still, with the fixed end 28 of flap 26 having a size and shape substantially matching that of an outer profile of the coupling ring 22, the fixed end 28 does not extend across the inlet 20 or opening to the pouch 10. Thus, a fixed end 28 of the flap 26 does not interfere with the stoma or incoming stool or waste.

[0028] The ostomy pouch 10 described in the embodiments above may be part of an ostomy pouch system (not shown). The ostomy pouch system may include a barrier layer and faceplate adhered to a patient. The faceplate may include an opening configured to receive the stoma therethrough. The faceplate may also include a corresponding coupling ring configured for mating and releasable engagement with the coupling ring 22 of the ostomy pouch 10. Accordingly, the ostomy pouch 10 may be releasably coupled to the patient via the faceplate.

[0029] All patents referred to herein, are hereby incorporated herein in their entirety, by reference, whether or not specifically indicated as such within the text of this disclosure.

[0030] In the present disclosure, the words “a” or “an” are to be taken to include both the singular and the plural. Conversely, any reference to plural items shall, where appropriate, include the singular.

[0031] From the foregoing it will be observed that numerous modifications and variations can be effectuated without departing from the true spirit and scope of the novel concepts of the present invention. It is to be understood that no limitation with respect to the specific embodiments illustrated is intended or should be inferred. The disclosure is intended to cover by the appended claims all such modifications as fall within the scope of the claims.

CLAIMS

1. An ostomy pouch comprising:
 - a proximal pouch wall and a distal pouch wall connected together along an outer periphery to form a collection area between the proximal pouch wall and the distal pouch wall;
 - an inlet in the proximal pouch wall for receiving waste into the pouch;
 - a coupling ring disposed about the inlet;
 - a filter disposed on the distal pouch wall generally opposing the inlet; and
 - a flap disposed in the collection area, the flap having a first end connected to the coupling ring and a second, free end, spaced from the periphery of the proximate and distal pouch walls, wherein the flap is configured to direct waste received through the inlet in a predetermined direction within the collection area, away from the filter.
2. The ostomy pouch of claim 1, wherein the flap has a first portion extending from the first end at the coupling ring generally in a first direction and a second portion, continuous with and extending from the first portion generally in a second direction, the second portion terminating at a free end spaced from the periphery of the proximate and distal pouch walls.
3. The ostomy pouch of claim 2, wherein the first portion is connected to and coextends with at least a portion of the ring in the first direction.
4. The ostomy pouch of claim 2, wherein the second portion extends between the coupling ring and the distal pouch wall.
5. The ostomy pouch of claim 1, wherein the coupling ring includes an upper portion and a lower portion, and the first end of the flap is connected to the upper portion of the ring.
6. The ostomy pouch of claim 5, wherein the second end of the flap is positioned below the lower portion of the ring.

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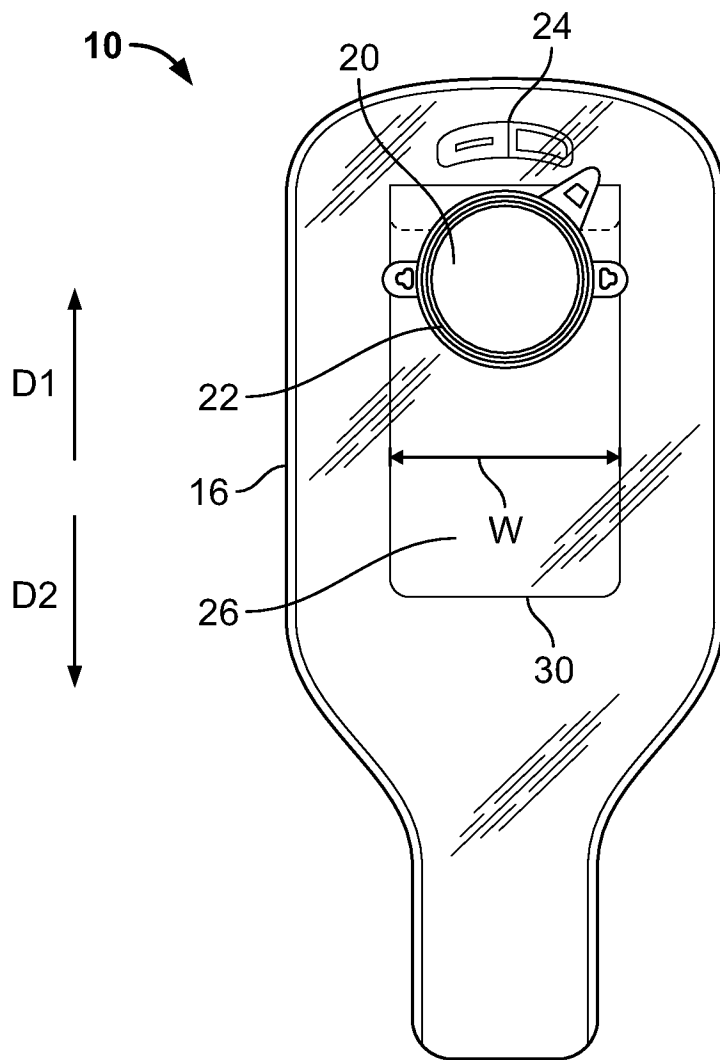


FIG. 1

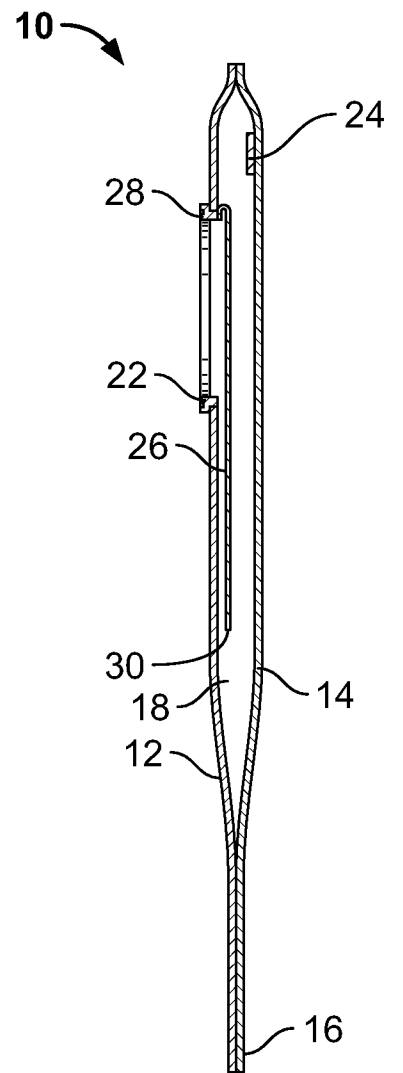
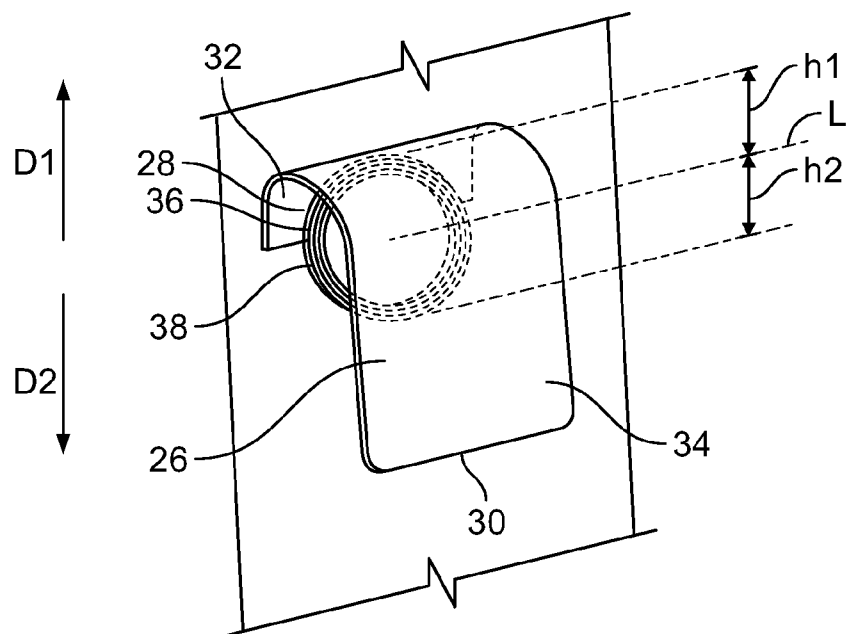
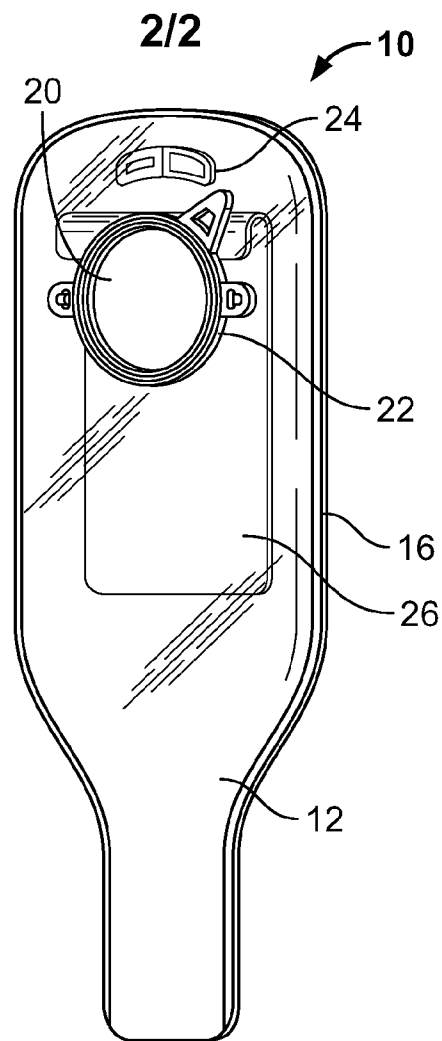


FIG. 2



INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
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 ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	DE 10 2008 056761 A1 (LURA FRANZ [DE]) 12 May 2010 (2010-05-12) abstract; figure 1 paragraphs [0001] - [0005] -----	1-6
X	GB 2 265 832 A (BETTISON RONALD FREDERICK [GB]; BETTISON RICHARD MARK [GB]) 13 October 1993 (1993-10-13) pages 1-11; figures 1-28 -----	1-6
X	US 5 423 782 A (WOLRICH DOUGLAS H [CA]) 13 June 1995 (1995-06-13) column 5, lines 48-55; figure 1 -----	1-6

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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