

OSTOMY POUCH

The invention relates to an ostomy pouch. US patent specifications Nos. such as 4,280,498 and 3,039,464 relate to urostomy or ileostomy appliances that may be worn by patients for extended periods (commonly four to seven days) and must therefore be drained periodically. Such an appliance typically lacks the gas vent and filter sometimes found in non-drainable short-term pouches (as disclosed, for example, in US patent specifications Nos. 3,804,091; 3,439,677; 3,759,260; and 4,203,445) because of the danger that in a long-term drainable pouch such a filter might become clogged by liquids, or solids, resulting in blockage of gas flow from the pouch and possible rupture of the wall thereof, or separation of the adhesive seal against the patient's skin, or leakage through or about the filter element. Therefore, the wearer of a conventional drainable pouch must periodically deflate the pouch, either by cracking open the discharge port, peeling away a portion of the adhesive patch sealing the pouch to the skin surface, or puncturing a hole in the pouch with a pin or other instrument. Such procedures are inconvenient and may lead to additional inconveniences and difficulties. If the pouch is deflated by opening the discharge port, the wearer must also be prepared to cope with the release of liquids from the pouch. Should the bag be deflated by peeling back a portion of the adhesive patch, secure reattachment of the detached portion may be difficult to achieve, and should the wall of the bag be punctured, the hole must then be sealed by tape or other suitable means. All of these procedures require an ostomate to interrupt normal activities and find seclusion to reach the pouch, relieve flatus

buildup, and then reseal the pouch to avoid discomfort and embarrassment from escaping odours, fluids and/or solids.

Other US patent specifications relating to
5 vented pouches and illustrative of the art are Nos.
3,055,368; 2,054,535; 2,555,086; 3,952,727; and
4,274,848.

The invention provides an ostomy pouch
having front and rear walls, and an intermediate
10 barrier wall therebetween, all formed of
thermoplastic film; said walls having edges sealed
together to provide said pouch with a pair of
adjacent chambers separated by said intermediate
barrier wall; said rear wall having a stoma opening
15 disposed along the vertical midline of said rear
wall; adhesive sealing means provided on said rear
wall for peristomal sealing engagement with a wearer;
a vent aperture in said intermediate wall at a point
spaced laterally from said stoma opening and disposed
20 at an elevation no lower than said stoma opening when
said pouch is supported vertically; a gas discharge
port in said front wall at a point spaced laterally
from said aperture; a filter element for filtering
gases and removing odours therefrom; and means
25 supporting said filter element at said discharge
port; at least one of said walls being embossed in
the area of said pouch in which said stoma-opening,
vent aperture, and discharge port are located to
prevent said walls from blocking together and
30 obstructing the flow of gases through said chambers.

Said embossed wall may be said intermediate
barrier wall, the embossing thereof comprising
patterns of surface undulations on opposite sides of

said intermediate barrier wall. Said means supporting said filter element at said discharge port may comprise a filter holder externally secured to said front wall about said port. Said filter holder
5 may include spacer means projecting rearwardly through said gas discharge port for engaging said intermediate barrier wall and for preventing said barrier wall from engaging said filter element and from blocking the flow of gases through said port and
10 filter element. Said spacer means may comprise a plurality of ribs provided by said filter holder and projecting rearwardly through said port beyond said front wall. Said filter holder may include a body section sealed to said front wall about said gas
15 discharge port and defining a forwardly-facing recess removably receiving said filter element; said body section having ribs defining a grid extending across said port for supporting said filter element; said spacer means comprising rearward extensions of at
20 least some of said ribs.

The invention also provides an ostomy pouch having front and rear walls, and an intermediate barrier wall therebetween, all formed of thermoplastic film; said walls having edges sealed
25 together to provide said pouch with a pair of adjacent chambers separated by said intermediate barrier wall; said rear wall having a stoma opening disposed along the vertical midline of said rear wall; adhesive sealing means provided on said rear
30 wall for peristomal sealing engagement with a wearer; a vent aperture in said intermediate wall at a point spaced laterally from said stoma opening and disposed at an elevation no lower than said stoma opening when

said pouch is supported vertically; a gas discharge port in said front wall at a point spaced laterally from said aperture; a filter element for filtering gases and removing odours therefrom; and a filter holder externally sealed to said front wall about said gas discharge port and removably supporting said filter element at said port.

Said filter holder may include spacer means projecting rearwardly through and beyond said gas discharge port for engaging said intermediate barrier wall and for preventing said barrier wall from engaging said filter element and from blocking the flow of gases through said port and filter element. Said spacer means may comprise a plurality of ribs provided by said filter holder and projecting rearwardly through said port beyond said front wall of said pouch. Said filter holder may include a body section sealed to said front wall about said gas discharge port and defining a forwardly-facing recess removably receiving said filter element; said body section having ribs arranged in groups extending at substantially right angles to each other to define a grid extending across said port; said spacer means comprising rearward extensions of the ribs of one of said groups. Said rearward extensions may provide rearwardly-facing smoothly-contoured arcuate surfaces.

The invention will now be described, by way of example, with reference to the accompanying diagrammatic drawings, in which:

Figure 1 is an exploded perspective view

showing the components of a drainable collection pouch and filter assembly embodying this invention,

Figure 2 is an elevational view of the front side of the pouch,

5 Figure 3 is an elevational view of the rear or patient-contacting side of the pouch,

Figure 4 is an elevational view taken along line 4-4 in Figure 3,

10 Figure 5 is an enlarged sectional view taken along line 5-5 in Figure 3,

Figure 6 is an enlarged fragmentary exploded perspective view depicting the components of the filter assembly, and

15 Figure 7 is an enlarged fragmentary perspective view showing features of the spacer rib construction of the filter holder.

Referring to the drawings, the numeral 10 generally designates a drainable collection pouch having an inner or rear wall 11, an outer or front wall 12, and an intermediate barrier wall 13, all formed of thermoplastic film. The walls may be of similar dimensions, are juxtaposed in the relationship shown in Figure 1, and have their side and top edges heat-sealed together as represented by numeral 14 in Figure 5. The lower end of the pouch is tapered and terminates in a discharge opening 15. The walls 11 and 12 are provided with notches or recesses 15a and 15b, and the wall 13 therebetween is left un-notched, to assist a user in spreading the walls for draining the pouch and, if necessary, for cleaning the inside surfaces at the pouch's lower end following a draining operation. In use, the pouch's lower end would be closed by a suitable clamping device such as the closure shown and described in US patent specification No. 3,523,534. Alternatively,

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the pouch might be provided at its lower end with a valved drain assembly, such as the assembly disclosed in US patent specification No. 4,280,498.

5 The film material for the ostomy pouch or bag 10 may be any effective gas and liquid impervious thermoplastic material such as, for example, a polyolefin film laminated with an appropriate barrier material. A particularly suitable commercial material comprises low density polyethylene
10 coextruded with a coextensive layer or core of polyvinylidene chloride. Such material is commercially available from Dow Chemical Company, Midland, Michigan.

The inner or rear wall 11 of the ostomy
15 pouch, in accordance with standard practice, is provided with a stoma-receiving opening 16 surrounded by a patch 17 coated with a conventional pressure-sensitive medical adhesive (not shown). The adhesive coating upon the rear surface of the patch 17 is
20 protected by removable backing sheets 18 which are stripped from the patch at the time of application. In the illustrated embodiment, a resilient gasket ring 19 is interposed between the attachment patch 17 and rear wall 11 of the pouch, the purpose of the
25 resilient gasket being to form an effective seal about the stoma. Details of the stoma-receiving opening, the adhesive attachment patch, and the gasket, as well as attachment means which may take the form of a belt, are well known and are disclosed,
30 for example, in co-owned US patents 4,213,458; 3,822,704; 3,804,091; 3,759,260; and 3,523,534, the disclosures of which are incorporated by reference herein. Since such features do not constitute a direct part of this invention, further discussion

herein is believed unnecessary.

The stoma-receiving opening 16 is located in the upper portion of the rear or inner wall 11 along the vertical midline of that wall. Referring to Figures 1 to 3, it will be observed that the intermediate barrier wall 13 has a relatively small aperture 20 located in the upper portion of that wall but displaced above and laterally with respect to the stoma opening 16. Because the opening 16 and the aperture 20 are not aligned, and also because of the relatively small size of the aperture 20 and its location above as well as to the side of the opening 16, fluids (and semi-solid materials) discharged into the pouch through the stoma opening 16 are not likely to pass through the aperture 20. Instead, such materials will tend to drop into the lower portion of a rear chamber or compartment 21 (Figure 5) between the rear wall 11 and intermediate barrier wall 13. However, gases may readily flow laterally and upwardly within the rear chamber 21, passing through the aperture 20 into a front chamber 22.

The front or outer wall 12 is provided with a gas discharge port 23 at approximately the same elevation as the aperture 20 in the barrier wall 13 but is located near the opposite side edge of the pouch. Gases passing through the aperture 20 must therefore travel laterally through the front chamber 22 to reach the outlet port 23. The serpentine path that gases entering stoma opening 16 must travel to pass through the aperture 20 and then through the port 23, and the size of the chambers 21 and 22 into which such gases expand before exiting through the port 23, prevent surges that might otherwise rupture or damage a filter assembly 24 mounted on the front wall 12 at the port 23 and, in general, promote

effective gas filtering and venting operations.

Moreover, should liquid or semi-solid matter happen to pass through the aperture 20 into the front chamber 22, the lateral spacing between the aperture

5 20 located in the barrier wall 13 near one side of the pouch and the discharge port 23 located in the front wall 12 near the opposite side edge of the pouch greatly reduces the possibility that such material will reach the port 23 and the filter
10 assembly 24. Such material would instead be expected to flow downwardly in the chambers 22 and 21, collecting in the lower portions of those chambers, where it may be drained from the double chambers of the pouch when the clamping means (not shown) is
15 removed from the pouch's opening lower end.

The filter assembly 24 is shown in Figure 1 to consist essentially of a holder 25 and a filter element 26. The holder 25 includes a body section 27 and a retaining ring section 28, the two sections
20 being operatively connected by a hinge strap 29. The body section 27 has a base wall 30 with a central opening 31 bridged by integral ribs 32 and 33 intersecting each other at substantially right angles in a grid pattern illustrated most clearly in Figures
25 6 and 7. It will be observed that the two sets of ribs do not extend in the same plane; specifically, that the ribs 32 are disposed in front of the ribs 33. The ribs 33 are therefore spaced behind the filter element 26 by the ribs 32 in contact with that
30 element. In addition, the ribs 33 have arcuate (and transversely rounded) rear surfaces 33a that project well behind the rear surface of the base wall 30 and the rear surface of the pouch wall 12 about the port 23 (Figures 5, 7). The longitudinal and transverse
35 curvatures of the rear surfaces of the ribs 33 keep

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the ribs from possibly damaging or adhering to the intermediate barrier wall 13 of the pouch. The ribs 32 and 33 therefore function as spacers for preventing the intermediate barrier wall 13 from engaging the filter element 26 and from sealing the port 23. The spacer ribs also function to support the filter element 26 and prevent it from being displaced rearwardly through the port 23. The ribs effectively prevent obstruction of the gas pathway through the discharge port 23 and filter assembly 24 and, at the same time, allow liquid and semi-solid material to drain downwardly within the front chamber 22 away from the gas discharge port 23 and filter element 26.

Such drainage is promoted because the two sets of ribs 32 and 33 extend along adjacent parallel planes rather than in the same plane, and because ribs of one of the sets have arcuate longitudinal rear surfaces 33a that for their full length are spaced well behind the inner surface of pouch wall 12 about the port 23. Flowable effluent that might otherwise become trapped in the openings or windows of the grid is free to escape in generally horizontal or vertical directions when the ribs are oriented as shown in Figure 7. It is to be noted, however, that the ribs need not be oriented as depicted for such draining to occur; it has been found that effective draining will take place if the grid is so oriented that the ribs 33 extend vertically, or horizontally, or at some angle between horizontal and vertical, and that therefore it is unnecessary to select a particular rib orientation; at the time the filter holder 25 is secured to the front wall 12 of the pouch.

The base wall 30 of the body section 27 of

the holder 25 is secured to the front wall 12 by an annular heat seal line or zone 34 (Figure 5).

Therefore, to escape from front chamber 22 through the port 23 in the pouch's front wall, gases must pass through the central opening 31 in the body section 27 of the filter holder 25.

Referring to Figure 7, it will be seen that ends 33b of the arcuate ribs 33 terminate short of the narrow surface of the base wall 30 defining the opening 31. Only the transverse ribs 32 completely bridge that opening. Such a construction not only promotes drainage of effluent from within the opening 31, but also allows limited forward and rearward flexing of the grid within that opening. Such flexing is useful in manually ejecting a filter element from the holder 25, as described hereinafter.

The body section 27 of the holder 25 also includes an annular flange 35 that projects forwardly and outwardly from the base wall 30 and, together with that base wall, defines a chamber or recess 36 for receiving the disc-shaped filter element 26. As depicted in Figure 5, the rearwardly and radially-outwardly projecting flange 35 is receivable in an annular channel 37 formed in the retaining ring section 28. In its closed position, the ring section 28 has a front wall portion 38 and a pair of concentric inner and outer side wall portions 39 and 40, respectively. The annular channel 37 defined by these wall portions extends forwardly and radially-outwardly when the retaining ring section 28 is in its clamped or closed position (Figure 5). Detachment of the ring section 28 from the flange 35 requires deformation of the flange 35 and wall portion 40; hence, a snap-fit is provided between the

ring and body sections, and separation of such sections is accomplished only by forces substantial enough to cause deformation of the plastics sections. While the resistance to such forces is easily enough to prevent unintentional separation of the sections, intentional separation may be readily achieved by gripping tab 41 and tab 43 and exerting an outwardly and forwardly directed force on outer wall portion 40 of the ring section 28, while bracing the body section against movement, to peel the ring section 28 away from the locking flange of the body section 27.

In the embodiment illustrated, the filter holder 25 is formed in two parts that are joined together after the base wall 30 has been heat sealed to the front wall 12 of the pouch about the discharge port 23. The construction is shown most clearly in Figure 6. The hinge strap 29 is connected to a narrow snap ring 42 dimensioned to fit tightly about the flange 35 immediately adjacent the base wall 30 (Figure 5). The ring must be stretched slightly, or the flange 35 must be deformed, or both, in order to snap the ring into its final position. Such attachment is facilitated by the radial tab 43 formed integrally with snap ring 42.

The two-part construction not only simplifies manufacture but also permits the snap ring 42 to be rotated with respect to the flange 35 and base wall 30 (in the directions indicated by arrow 44 in Figure 6) after the parts are fully assembled. Such rotation is achieved by urging the tab 43 circumferentially in one direction or the other. The snap ring 42, and the retaining ring section 28 formed integrally with it, may therefore be rotated in a position that the user finds most convenient for performing the actions of opening and closing the

filter holder. It will be observed from Figure 2 that tabs 41 and 43 do not bear the same angular orientation when the filter holder 25 is closed; consequently, a user may easily grip each of the tabs at the same time to shift the retaining ring 28 between its open and closed positions.

The filter holder 25 may be formed of any suitable polymeric material having the requirements of flexibility, toughness, and durability.

Polyethylene has been found effective, but other thermoplastic materials such as polypropylene or polyvinyl chloride may be used.

The disc-shaped filter element 26 is porous and may either be fibrous in construction or may be in the form of an open-celled plastics foam. In the preferred embodiment, the disc, in addition to venting and filtering, contains an adsorbent such as activated carbon to deodorize gases passing through the filter element. Reference may be had to co-owned US patent 4,274,848 for details on the construction of a filter element formed of thermoplastic fibres (fibrillated polyethylene) coated with finely-divided activated carbon by means of a latex binder. Ideally, the filter element 26 has its opposite faces covered by layers 45 and 46 of a suitable gas-permeable but water-resistant barrier material of the type described in the aforementioned patent, the disclosure of which is incorporated herein by reference.

The deformable and resilient filter element 26 is dimensioned so that in an uncompressed or undeformed state its diameter is slightly greater than the smallest diameter of the recess or chamber 36 of the filter holder 25. As shown in Figure 5, the inner surface 35a of the flange 35 at the mouth

of chambers 36 tapers inwardly and rearwardly. The diameter of the element 26 is less than the maximum diameter of that chamber but greater than the generally cylindrical portion of the chamber immediately adjacent the base wall 30. Consequently, a user may easily insert a filter element into the enlarged mouth of the chamber. As the retaining ring section 28 is then shifted into its closed position, the inner wall portion 39 of that ring forceably engages the peripheral portion of the resilient filter element 26 and urges the element into the reduced portion of the chamber. Radially inward compressive forces are exerted on the filter element to produce an effective seal between the periphery of that element and the reduced inner surface of flange 35.

When removal of a filter element 26 is desired, the user simply disengages the retaining ring 28 from the flange of the body section 27, swings the retaining ring 28 into its open position, and then by finger (usually thumb) pressure applied in a forward direction against rear wall 11 of the pouch, flexes the grid of ribs 32-33 forwardly within the opening 31 to displace the filter element 26 forwardly within the chamber 35. The edge of the filter element 26 may then be easily gripped between the fingers and the element extracted from the chamber of the holder.

Referring to Figures 1 and 5, the intermediate barrier wall 13 is shown to have embossed areas 13a and 13b along its inner and outer surfaces. The embossed areas surround the aperture 20 and extend well beyond the limits of the stoma opening 16 and discharge port 23. The ridges and depressions of the geometric pattern ensure that

surface contact between the upper portion of the barrier film and the upper portions of rear and front walls 11 and 12, respectively, will not prevent gases from traveling through the pouch from the stoma

5 opening 16 to the gas discharge port 23. It will be noted that the embossed surface areas terminate short of the outer limits of the intermediate wall 13 to leave a narrow planar border zone 49 for heat sealing to the front and rear walls of the pouch.

10 In the embodiment illustrated in the drawings, the areas of pattern embossing are located on the front and rear surfaces of the intermediate barrier wall 13. If desired, similar areas of embossing may be provided on the inner surface of the
15 front wall 12, in which case the embossing of the intermediate barrier layer might even be eliminated.

In any event, one of the opposing surfaces of the respective walls 12 and 13 in the upper portion of chamber 22 should be embossed to prevent such

20 surfaces from sealing or sticking together and thereby blocking the flow of gases from the aperture 20 to the discharge port 23. Also, in the form shown in the drawings, the intermediate barrier wall 13 is substantially coextensive in length (height) with the

25 rear and front walls 11 and 12; however, if desired, the lower portion of the barrier wall may terminate well above the discharge opening 15. While such a construction may have the disadvantage of allowing some exudate to pass beneath the barrier wall 13 from

30 the chamber 21 to the chamber 22, that disadvantage may be avoided, if it is deemed necessary to do so, by heat sealing or otherwise sealing the lower edge of the barrier wall 13 directly to the wall

35 supporting the filter assembly 24 (i.e. the front wall 12 in the embodiment depicted) so that the only

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(or at least primary) communication between the
chambers 21 and 22 is through the upper aperture 20.

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CLAIMS

1. An ostomy pouch having front and rear walls, and an intermediate barrier wall therebetween, all formed of thermoplastic film; said walls having
5 edges sealed together to provide said pouch with a pair of adjacent chambers separated by said intermediate barrier wall; said rear wall having a stoma opening disposed along the vertical midline of said rear wall; adhesive sealing means provided on
10 said rear wall for peristomal sealing engagement with a wearer; a vent aperture in said intermediate wall at a point spaced laterally from said stoma opening and disposed at an elevation no lower than said stoma opening when said pouch is supported vertically; a
15 gas discharge port in said front wall at a point spaced laterally from said aperture; a filter element for filtering gases and removing odours therefrom; and means supporting said filter element at said discharge port; at least one of said walls
20 being embossed in the area of said pouch in which said stoma-opening, vent aperture, and discharge port are located to prevent said walls from blocking together and obstructing the flow of gases through said chambers.
- 25 2. A pouch according to Claim 1, in which said embossed wall is said intermediate barrier wall, the embossing thereof comprising patterns of surface undulations on opposite sides of said intermediate barrier wall.
- 30 3. A pouch according to Claim 1 or 2, in which said means supporting said filter element at said discharge port comprises a filter holder externally secured to said front wall about said port.
4. A pouch according to Claim 3, in which said
35 filter holder includes spacer means projecting rearwardly through said gas discharge port for



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engaging said intermediate barrier wall and for preventing said barrier wall from engaging said filter element and from blocking the flow of gases through said port and filter element.

5 5. A pouch according to Claim 4, in which said spacer means comprises a plurality of ribs provided by said filter holder and projecting rearwardly through said port beyond said front wall.

10 6. A pouch according to Claim 4, in which said filter holder includes a body section sealed to said front wall about said gas discharge port and defining a forwardly-facing recess removably receiving said filter element; said body section having ribs defining a grid extending across said port for
15 supporting said filter element; said spacer means comprising rearward extensions of at least some of said ribs.

7. A pouch according to Claim 6, in which said rearward extensions of said ribs are arcuate.

20 8. A pouch according to Claim 7, in which the ribs of said grid are arranged in groups extending at substantially right angles to each other; said ribs of only one of said groups having said arcuate rearward extensions.

25 9. A pouch according to Claim 8, in which the ribs of said one of said groups have their opposite ends freely spaced from the perimeter of said port, said filter holder being formed of flexible plastic material, whereby, said grid may be flexed forwardly
30 and rearwardly within said port upon the application of forces causing flexure of the other of said ribs.

10. A pouch according to Claim 8 or 9, in which said arcuate rearward extensions of the ribs of said one group define rear surfaces spaced behind that
35 portion of the rear surface of the front wall of said

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pouch immediately about said port.

- 11. A pouch according to Claim 8 or 9, in which said ribs of the respective groups extend along adjacent parallel planes with the ribs of said one group providing rear surfaces spaced substantially behind the rear surfaces of the ribs of the other group, and said ribs of said other group having front surfaces spaced substantially in front of the front surfaces of said ribs of said one group.
- 12. A pouch according to Claim 6 or any claim appended thereto, in which said filter holder also includes a flexible retaining ring section engageable with said body section to retain a filter element within said recess.
- 13. A pouch according to Claim 12, in which said retaining ring section and said body section are hingedly connected to each other.
- 14. A pouch according to Claim 13, in which said body section is provided with a forwardly-projecting annular flange extending about said filter element and said ring section is provided with an annular channel tightly but releasably receiving said flange.
- 15. A pouch according to Claim 14, in which said filter element is resilient and circular in outline; said filter element in an undeformed state having a diameter slightly larger than the smallest diameter of said recess of said body section, whereby, said filter element is in a state of radial compression when secured within said filter holder.
- 16. A pouch according to Claim 15, in which said retaining ring section includes an integral tab projecting radially therefrom for shifting said hinged retaining ring section into and out of its closed position.



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17. A pouch according to Claim 16, in which said body section includes an integral tab portion projecting radially therefrom for bracing said body section when said retaining ring section is shifted
5 between closed and open positions; said tabs of said ring and body sections being out of angular alignment with respect to each other when said ring section is in its closed position.

18. A pouch according to Claim 14 and any claim
10 appended thereto, in which said body section of said filter holder includes a snap ring extending about and retained by said flange; said snap ring being integrally formed with said retaining ring section and being connected thereto by an integral hinge
15 strap extending therebetween.

19. An ostomy pouch having front and rear walls, and an intermediate barrier wall therebetween, all formed of thermoplastic film; said walls having edges sealed together to provide said pouch with a
20 pair of adjacent chambers separated by said intermediate barrier wall; said rear wall having a stoma opening disposed along the vertical midline of said rear wall; adhesive sealing means provided on said rear wall for peristomal sealing engagement with
25 a wearer; a vent aperture in said intermediate wall at a point spaced laterally from said stoma opening and disposed at an elevation no lower than said stoma opening when said pouch is supported vertically; a gas discharge port in said front wall at a point
30 spaced laterally from said aperture; a filter element for filtering gases and removing odours therefrom; and a filter holder externally sealed to said front wall about said gas discharge port and removably supporting said filter element at said
35 port.



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20. A pouch according to Claim 19, in which said filter holder includes spacer means projecting rearwardly through and beyond said gas discharge port for engaging said intermediate barrier wall and for preventing said barrier wall from engaging said filter element and from blocking the flow of gases through said port and filter element.

21. A pouch according to Claim 20, in which said spacer means comprises a plurality of ribs provided by said filter holder and projecting rearwardly through said port beyond said front wall of said pouch.

22. A pouch according to Claim 20, in which said filter holder includes a body section sealed to said front wall about said gas discharge port and defining a forwardly-facing recess removably receiving said filter element; said body section having ribs arranged in groups extending at substantially right angles to each other to define a grid extending across said port; said spacer means comprising rearward extensions of the ribs of one of said groups.

23. A pouch according to Claim 22, in which said rearward extensions provide rearwardly-facing smoothly-contoured arcuate surfaces.

24. A pouch according to Claim 23, in which the rear limits of said arcuate surfaces along the full length of each rib of said one group are spaced behind the inner surface of the front wall of said bag about said port.

25. A pouch according to Claim 24, in which said ribs of said one group are supported by the ribs of the other group and have end surfaces freely spaced from the periphery of said port; said body section being formed of flexible polymeric material,



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whereby, said grid is capable of being flexed forwardly and rearwardly with respect to said port upon the application of forces causing flexure of the ribs of said other group.

5 26. A pouch according to Claim 24 or 25, in which said ribs of said other group are disposed in front of said ribs of said one group; said ribs of said other group having front surfaces engageable with said filter element for supporting said element
10 and spacing the same from the front surfaces of the ribs of said one group.

27. A pouch according to Claim 22 or any claim appended thereto, in which said filter holder also includes a flexible retaining ring section engageable
15 with said body section to retain said filter element within said recess.

28. A pouch according to Claim 27, in which said retaining ring section and said body section are hingedly connected to each other.

20 29. A pouch according to Claim 28, in which said body section is provided with a forwardly-projecting annular flange extending about said filter element and said retaining ring section is provided with an annular channel tightly but releasably
25 receiving said flange.

30. An ostomy pouch constructed, arranged and adapted to operate substantially as herein described with reference to, and as shown in, the accompanying drawings.
