

CLAIMS

1. A wound dressing apparatus comprising:
a wound dressing configured to be positioned over a wound site, the wound dressing comprising:
a wound contact layer configured to be positioned in contact with a wound;
a first area and a second area positioned adjacent to the first area, wherein the first area comprises an absorbent material and the second area is configured to receive a negative pressure source; and
a cover layer configured to cover and form a seal over the wound contact layer, the first area, and the second area;
a pump disposed on or positioned within the second area of the wound dressing, the pump comprising an inlet and an outlet and being operable to apply negative pressure to the wound site; and
a component in fluid communication with the inlet, the component defining a plurality of flow paths between an interior of the wound dressing and the inlet such that occlusion of the inlet is inhibited;
wherein the component is in fluid communication with the absorbent material and configured to inhibit flow of wound exudate from the wound site into the inlet; and wherein the component comprises a port coupled to the pump inlet.
2. The wound dressing apparatus of Claim 1, wherein the component comprises a hydrophobic material configured to repel wound exudate.
3. The wound dressing apparatus of any of Claims 1 to 2, wherein the component comprises a material having a pore size configured to resist ingress of wound exudate due to capillary action.
4. The wound dressing apparatus of any of Claims 1 to 3, wherein the component comprises one or more porous polymer molded components.
5. The wound dressing apparatus of Claim 4, wherein the polymer comprising the one or more porous polymer molded components is hydrophobic and has a pore size in the range of 20 microns to 40 microns.

6. The wound dressing apparatus of Claim 5, wherein the pore size is 30 microns.

7. The wound dressing apparatus of Claim 4, wherein the polymer comprising the one or more porous polymer molded components is hydrophobic and has a pore size in the range of 5 microns to 40 microns.

8. The wound dressing apparatus of Claim 7, wherein the pore size is 10 microns.

9. The wound dressing apparatus of Claims 4 to 8, wherein the polymer is one of hydrophobic polyethylene or hydrophobic polypropylene.

10. The wound dressing apparatus of any of Claims 4 to 9, wherein each of the one or more porous polymer molded components is configured to increase the contact area between the pump inlet and the interior of the wound dressing.

11. The wound dressing apparatus of any of Claims 4 to 10, wherein the one or more porous polymer components is one of crescent-shaped, thimble-shaped, or cuboid or generally cuboid shaped.

12. The wound dressing apparatus of any of Claims 4 to 11, wherein the one or more porous components comprise curved or beveled corners and/or edges.

13. The wound dressing apparatus of any of Claims 4 to 12, wherein the one or more porous polymer components is configured to attach to at least one of the inlet and an end of a tubular extension in fluid communication with the inlet and the interior of the wound dressing.

14. The wound dressing apparatus of any of Claims 1 to 3, wherein the component comprises one or more micro porous membranes attached to the inlet.

15. The wound dressing apparatus of Claim 14, further comprising a spacer material disposed within the membrane, the spacer material configured to inhibit the membrane from collapsing.

16. The wound dressing apparatus of Claims 14 or 15, wherein the micro porous membrane comprises Versapore having a 0.2 micron pore size (Pall).

17. The wound dressing apparatus of any of Claims 1 to 16, wherein the pump is a micro pump.

18. The wound dressing apparatus of Claim 17, further comprising a controller configured to control the operation of the micro pump to apply negative pressure to the wound site.

19. The wound dressing apparatus of Claims 1 to 18, wherein the absorbent material is configured to absorb wound exudate.

20. The wound dressing apparatus of Claims 1 to 19, wherein the component is attached to the inlet.

21. The wound dressing apparatus of Claims 1 to 20, wherein the component is fitted to the inlet.

22. The wound dressing apparatus of Claims 1 to 21, wherein the port is configured to receive a portion of the pump inlet.