



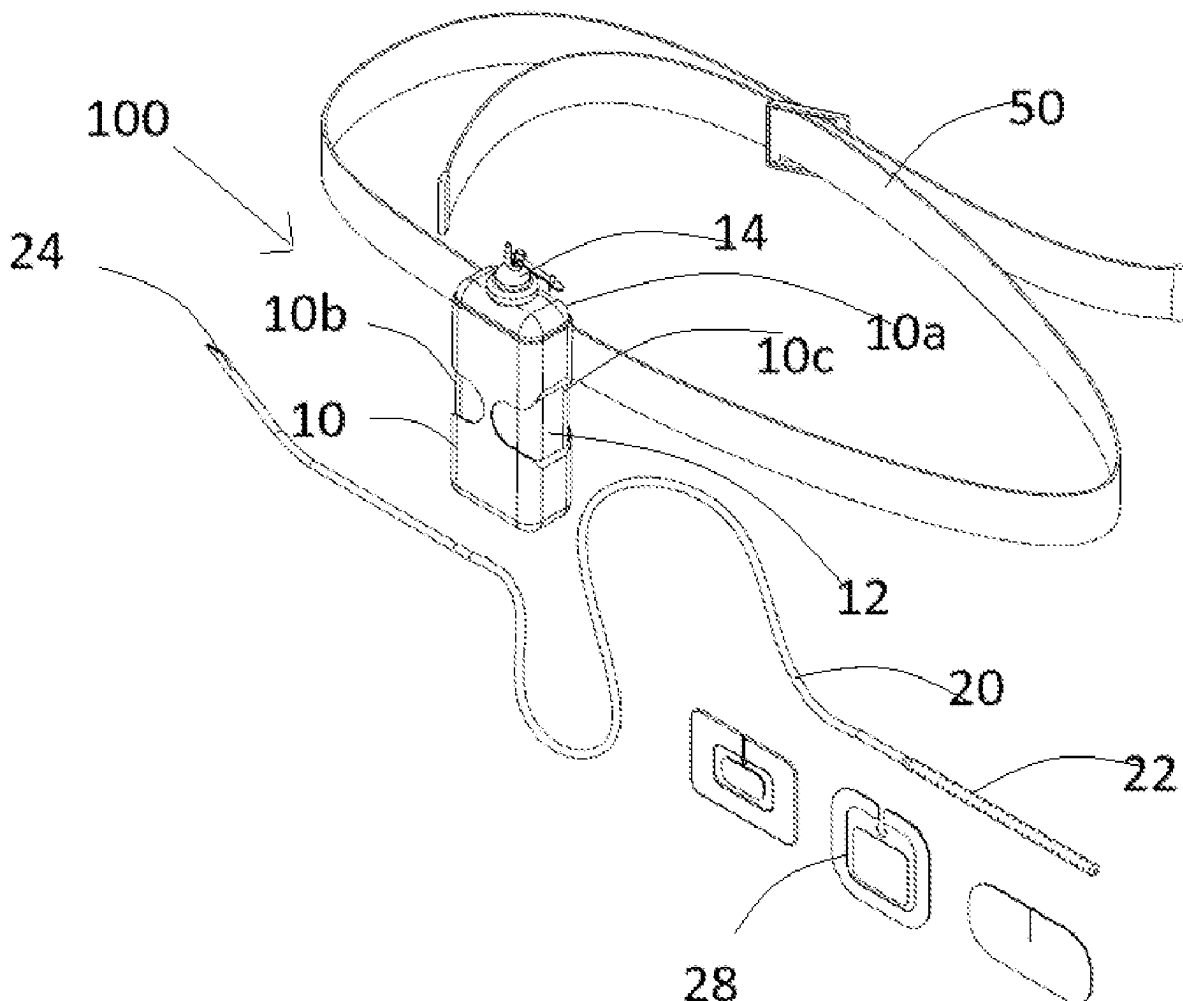
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(19) **United States**(12) **Patent Application Publication**  
**HERNANDEZ MORA**(10) **Pub. No.: US 2025/0256020 A1**(43) **Pub. Date: Aug. 14, 2025**(54) **WOUND DRAINING PUMP SYSTEM**(71) Applicant: **MARIA ELENA HERNANDEZ MORA**, MIAMI SPRINGS, FL (US)(72) Inventor: **MARIA ELENA HERNANDEZ MORA**, MIAMI SPRINGS, FL (US)(21) Appl. No.: **18/439,753**(22) Filed: **Feb. 12, 2024****Publication Classification**(51) **Int. Cl.**  
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(57)

**ABSTRACT**

A wound draining pump system that prevents the cross contamination of a patient's wound and that allows the patient's wound and incision to heal faster. The wound drainage pump system comprises a rigid rectangular cartridge holder. A collapsible tank that has a negative pressure suction pump front end, the collapsible tank inserts within the rectangular cartridge holder. A surgical grade tube that connects to the negative pressure suction pump and to an absorption tip. The absorption tip is placed on the wound of the patient. And, an adhesive holder that secures the absorption tip on the wound of the patient.



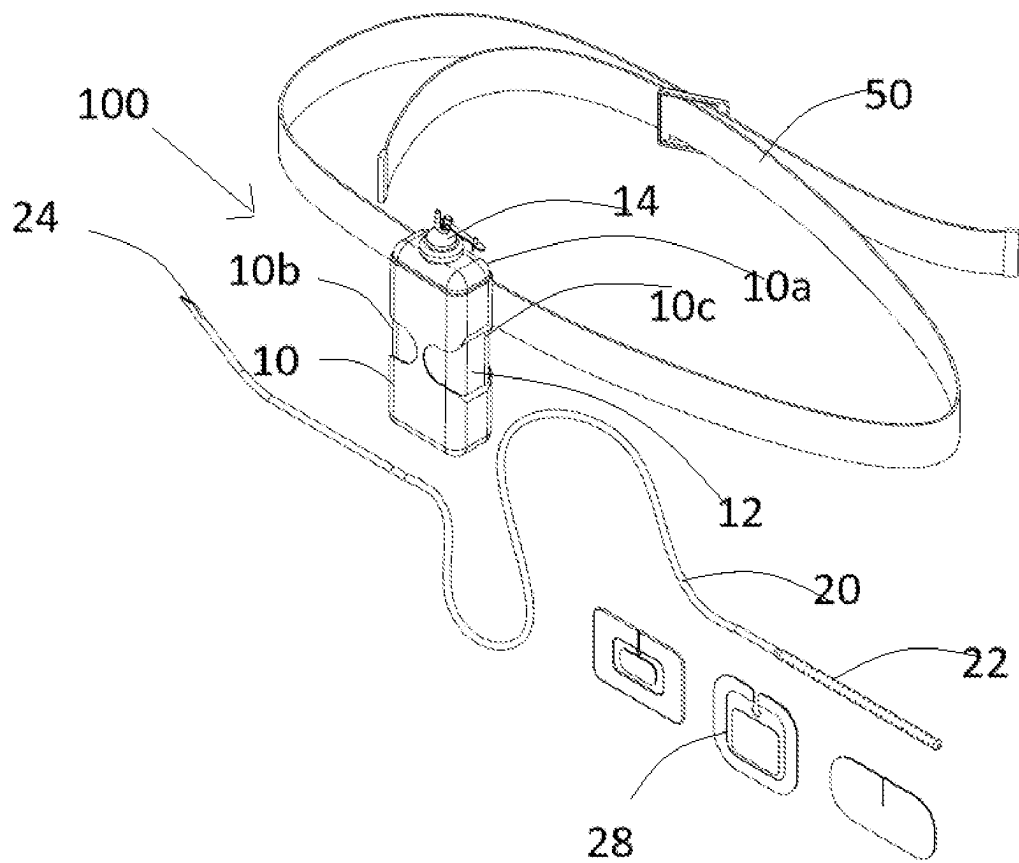


Fig. 1

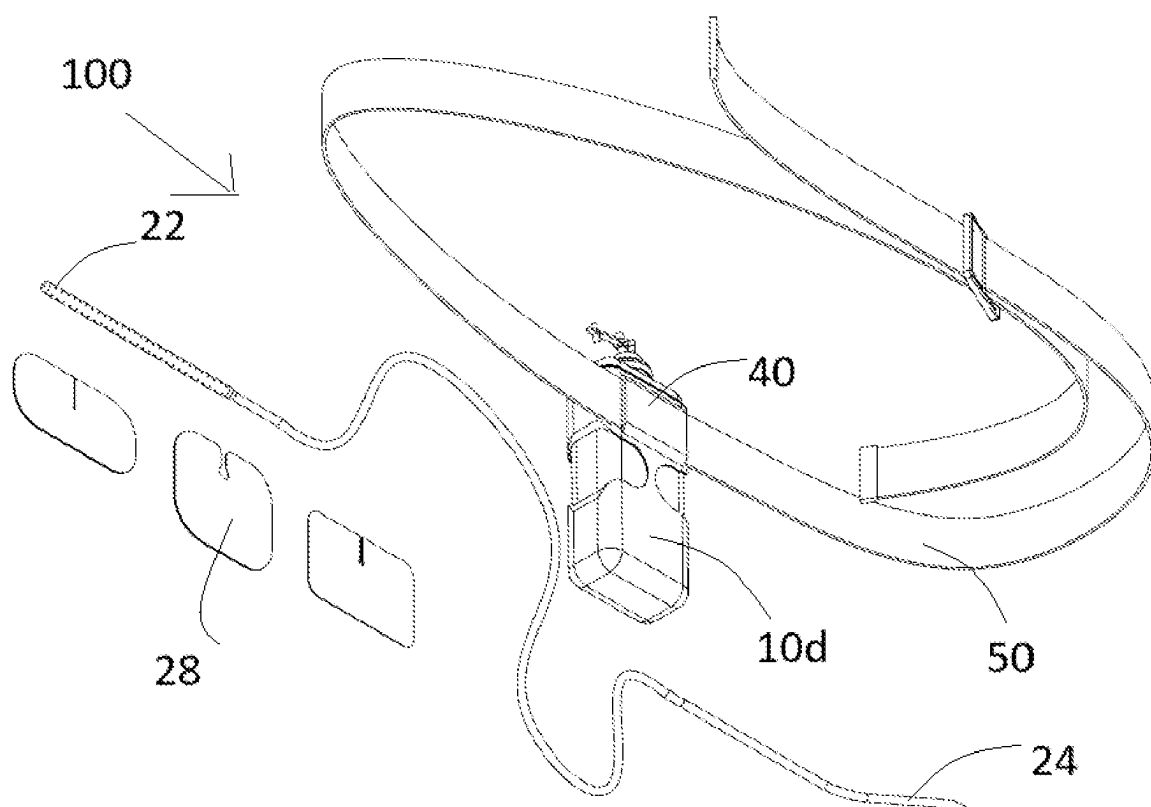


Fig. 2

## WOUND DRAINING PUMP SYSTEM

### BACKGROUND

[0001] The present invention is directed to a wound drainage pump system that is designed to drain secretions from a patient.

[0002] The wound drainage pump system removes bodily wound discharges after a patient's surgery.

[0003] The system, by removing the discharges from the patient's wound, minimizes infections that can be caused from bodily discharges after the patient's surgery.

[0004] The system is designed to minimize that chance of cross examination of a wound, for it uses dressings that seal its carrier tube and the patient's skin.

[0005] The present invention is designed to allow a patient to individually drain the tank of the system, after the tank is full.

[0006] The system is designed to encourage the sole use of the system by a patient.

[0007] The system is designed to be used after any type of surgery, for example: traumatology, gynecology, orthopedics, infected wounds, neurology, gastroenterology (peritonitis), and cosmetic surgeries.

[0008] The suction of the system is designed not to damage veins, arteries, tendons, or ligaments, for it is a low suction system.

[0009] The system will remove heavy exudate from patients' wound and it is safe to use on infants, children, adolescents, adults, and elderly patients.

[0010] The present invention will minimize the bacterial load, thereby causing wounds or incisions to close/heal faster.

[0011] The system is designed to minimize a patient's hospital stay, for it allows the patient to maintain the system in a hygienic manner.

[0012] The present invention is designed to minimize post operative trauma, for it is a low maintenance system that will allow wounds and incisions to heal faster.

[0013] The wound drainage pump system of the present invention addresses the need of having a wound draining system that will prevent cross contamination of wounds and that will allow wounds and incisions to heal faster.

### SUMMARY

[0014] The present invention directed to a wound draining pump system that prevents the cross contamination of a patient's wound and that allow the patient's wound and incision to heal faster.

[0015] The wound drainage pump system comprises a rigid rectangular cartridge holder. A collapsible tank that has a negative pressure suction pump front end, the collapsible tank inserts within the rectangular cartridge holder. A surgical grade tube that connects to the negative pressure suction pump and to an absorption tip. The absorption tip is placed on the wound of the patient. And, an adhesive holder that secures the absorption tip on the wound of the patient.

[0016] An object of the present invention is to provide a wound drainage pump system that will prevent the cross contamination of a patient's wound.

[0017] Another object of the present invention is to provide a wound drainage pump system that does not require an electrical pump to operate.

[0018] Yet another object of the present invention is to provide a wound drainage pump system that will drain wounds or incisions after surgery.

[0019] Still yet another object of the present invention is to provide a wound drainage pump system that is portable and lightweight.

[0020] Yet still a further object of the present invention is to provide a wound drainage pump system that can be opened and drained without altering its function or shape.

[0021] A further object of the present invention is to provide a wound drainage pump system that is disposable.

[0022] Yet a further object of the present invention is to provide a wound drainage pump system that can be self-maintained by a patient.

[0023] Yet a further object of the present invention is to provide a wound drainage pump system that helps to prevent discharge or clots from accumulating in the patient's wound.

[0024] Yet still a further object of the present invention is to provide a wound drainage pump system that will decrease post operative trauma that arises from a wound or incision of a patient.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0025] These and other features, aspects, and advantages of the present invention will become better understood with regards to the following description, appended claims, and drawings where:

[0026] FIG. 1 shows a front perspective view of the present invention; and

[0027] FIG. 2 shows a rear perspective view of the present invention.

### DESCRIPTION

[0028] As seen in FIGS. 1-2, the present invention is a wound draining pump system 100 that is used to drain a patient's wound after surgery.

[0029] The wound draining pump system 100 comprises a rigid rectangular cartridge holder 10 that defines an open end 10a, a first pressure aperture 10b, and a second pressure aperture 10c. A collapsible tank 12 that has a negative pressure suction pump 14, the collapsible tank 12 inserts within the open end 10a rectangular cartridge holder 10. A surgical grade tube 20 that connects to the negative pressure suction pump 14. An absorption tip 22 that is configured to be placed on the wound of the patient that connects to the surgical grade tube 20. And, an adhesive holder 28 that is configured to secure to the absorption tip 22 on the wound of the patient.

[0030] In an embodiment of the present invention, a rear side 10d of the rigid rectangular cartridge holder 10 defines a belt receiver 40, and wherein the wound draining pump system 100 further comprises a belt 50 that attaches to the belt receiver 40, the belt 50 secures the wound draining pump system 100 on to the patient.

[0031] In another embodiment of the present invention, a bayonet 24 is attached to an end of the surgical grade tube 20 that connects to the negative pressure suction pump 14, the bayonet 24 is configured to pierce an opening of the negative pressure suction pump 14.

[0032] An advantage of the present invention is that it provides a wound drainage pump system that prevents the cross contamination of a patient's wound.

[0033] Another advantage of the present invention is that it provides a wound drainage pump system that does not require an electrical pump to operate.

[0034] Yet another advantage of the present invention is that it provides a wound drainage pump system that drains wounds or incisions after surgery.

[0035] Still yet another advantage of the present invention is that it provides a wound drainage pump system that is portable and lightweight.

[0036] Yet still a further advantage of the present invention is that it provides a wound drainage pump system that is opened and drained without altering its function or shape.

[0037] A further advantage of the present invention is that it provides a wound drainage pump system that is disposable.

[0038] Yet a further advantage of the present invention is that it provides a wound drainage pump system that is self-maintained by the patient.

[0039] Yet a further advantage of the present invention is that it provides a wound drainage pump system that helps prevent discharge or clots from accumulating in the patient's wound.

[0040] Yet still a further advantage of the present invention is that it provides a wound drainage pump system that decreases post operative trauma that arises from a wound or incision of a patient.

[0041] While the inventor's description contains many specificities, these should not be construed as limitations of the wound draining pump system, but rather as an exemplification of several preferred embodiments thereof, any other variations may be possible. Accordingly, the scope should be

determined not by the embodiments illustrated, but by the specification, the drawings, and the claims and any legal equivalent thereof.

What is claimed is:

1. A wound draining pump system that is used to drain a patient's wound after surgery, the wound draining pump system comprises:

a rigid rectangular cartridge holder that defines an open end, a first pressure aperture, and

a second pressure aperture;

a collapsible tank that comprises of a negative pressure suction pump front end, the collapsible tank inserts within the open end of the rectangular cartridge holder;

a surgical grade tube that connects to the negative pressure suction pump;

an absorption tip that is configured be placed on the wound of the patient that connects to the surgical grade tube; and

an adhesive holder that is configured to secure the absorption tip on the wound of the patient.

2. The wound draining pump system that is used to drain the patient's wound after surgery of claim 1, wherein a rear side of the rigid rectangular cartridge holder defines a belt receiver, and wherein the wound draining pump system further comprises the belt, the belt secures the wound draining pump system on to the patient.

3. The wound draining pump system that is used to drain the patient's wound after surgery of claim 2, wherein a bayonet is attached to an end of the surgical grade tube that connects to the negative pressure suction pump, the bayonet is configured to pierce an opening of the negative pressure suction pump.

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