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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Docket No. 446700)

In re the Application of:	Customer No. 27717
William J. Schnell, et al))) Art Unit: 3761
Serial No.: 11/270,080) Alt Oliit. 3761
Filed: November 9, 2005) }
For: DIAPHRAGM PRESSURE POD FOR MEDICAL FLUIDS) }

TO: MAIL STOP: Amendment Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

AMENDMENT

Dear Sir:

In response to the Office Action of June 30, 2010, a three-month extension of time is requested to respond to the Office Action, so that the due date for response will be December 30, 2010.

Please charge Deposit Account No. 19-1351 for the large entity extension fee, and any other fees that may be required.

Amendments to the specification begin on page 2.

Amendments to the claims begin on page 4.

The Remarks begin on page 9.

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PAGE 1/14 * RCVD AT 12/20/2010 3:01:35 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/27 * DNIS:2738300 * CSID:3124607000 * DURATION /mm.ss\-02-24



Please amend the first complete paragraph and the subsequent paragraph of page 18 as follows:

When the extracorporeal blood processing procedure is complete, it is necessary to rinse the blood back to the patient in a step known as "rinse back." To accomplish this, pressure tubing 42 may be disconnected from the pressure monitor transducer 43, and the veneus portion of the set, which draws blood from the patient, can be removed from the patient. Then, pressure tubing 42 is connected with a conventional syringe 52 (Fig. 1), which is depressed to add air or other fluid to the system to cause diaphragm 26 to assume its second position as shown in Fig. 4 (26a). A slide clamp 54 or other type of clamp then may close off pressure tubing 42, to keep diaphragm 26 under pressure and firmly in its second position 26a during the rinse back process, so that the blood containing volume of pod 12 is minimized. Saline solution or the like flows into the system through an access site such as parenteral solution line 35, to replace blood in the set with saline solution, and to return blood back to the patient through the remaining patient connection. Alternatively or additionally, saline solution may be added to the separated, veneus end of the set of set portion 16 for rinseback, to terminate the procedure.

Thus, by one embodiment of this invention, blood pressure in a blood flow tube may be monitored through a length of pressure tubing 42 connecting to a diaphragm pod 12 as described, with the diaphragm being positioned near a first position that essentially maximizes the blood holding volume in the pod, although varying, for example negative, pressures in the chamber can result in differing positions of the diaphragm. Then, at the end of the extracorporeal blood flow procedure, pressure

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sensing pod 12 may be pressurized to move diaphragm 26 28 to its second position 26a, to cause the blood holding volume of the pod to be substantially minimized, without blocking flow through the blood flow tube and pod. Parenteral solution such as saline is then passed into the tube and pod to replace the blood, while the blood is returned to the patient.

Please amend the bottom paragraph of specification page 20:

The pressure Pressure sensing diaphragm in pod 80 defines a dome 28 a which has a maximum depth 29 of about 6-7 mm. (such as 6.3 mm), and a width of the chamber defined by the dome of about 23-25 mm., specifically 24 mm.

LISTING OF CLAIMS AS AMENDED:

- 1. 8. (Cancelled)
- 9. (Currently Amended) A tubular blood flow set which comprises a pressure sensing pod defining a chamber, said pod being connected in flow-through relation to blood flow tubing of said set, said set defining a length of pressure tubing connected at one end with said chamber, for connection with a pressure sensing device at the other pressure tubing end, with a pressure measuring equipment connector with said pod being spaced from said connector; and a flexible diaphragm sealingly mounted within said pod between connections of said blood flow tubing and said pressure tubing, said diaphragm being moveable between first and second positions, the diaphragm in said first position bowing outwardly to substantially maximize volume in said chamber that communicates with said blood flow tubing, the diaphragm in said second position bowing inwardly to substantially minimize but not eliminate the blood volume in said chamber that is inside of said diaphragm, said diaphragm in use being in contact on one side thereof with flowing blood.
- 10. (Currently Amended) The blood flow set of Claim 9 in which said diaphragm occupies substantially said first second position when the interior of said flow set is filled with negatively pressurized blood.
- 11. (Currently Amended) The blood flow set of Claim 9 in which said flexible pressure tubing is attached to said pressure sensing pod and carries at said other pressure tubing end carries a connector for sequential connection with (1) a pressure sensing device and (2) a device to apply positive pressure through said outlet port to said chamber, to drive said diaphragm to the second position.



- 12. (Original) The blood flow set of Claim 11 in which said pressure tubing is flexible and carries a flow clamp to retain said positive pressure at said diaphragm.
- 13. (Original) The blood flow set of Claim 9 in which said pod has a bottom wall facing said chamber, which bottom wall defines a transverse channel having a wall of U or V-shaped cross-section, whereby the diaphragm in the second position does not block flow through the channel.
- 14. (Original) The blood flow set of Claim 13 in which said channel wall is U-shaped and substantially contiguous with a wall portion of said flow tubing of said set.
- 15. (Original) The blood flow set of Claim 9 in which said chamber connects to flow tubing which is pump segment tubing.
 - 16.-17. (Cancelled)
- 18. (Original) The blood flow set of Claim 9 in which an access port is provided to communicate with the chamber interior at a side of said diaphragm opposed to said pressure tubing.
 - 19.-32. (Cancelled)
- 33. (Original) A pressure transmitting pod defining a chamber, said pod being for connection in flow-through relation to fluid flow tubing of a fluid flow set, said pod having a flexible, fluid impermeable diaphragm dividing the pod into separate compartments, a first of said compartments communicating with flow connectors for said fluid flow tubing, a second of said compartments communicating with a connection port for connection with a length of pressure tubing at one end thereof, which tubing is for sealed connection at its other end to a remote pressure connector of a pressure sensing machine, to transmit pressure from the second of said compartments through





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