

08-18-2006



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U.S. DEPARTMENT OF COMMERCE  
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To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Kurt H. Wieland

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) July 14, 2006

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other

**2. Name and address of receiving party(ies)**

Name: Wieland Heart LLC

Internal Address: \_\_\_\_\_

Street Address: 302 Woodland Hills Dr

City: Escondido

State: California

Country: San Diego Zip: 92029

Additional name(s) & address(es) attached? ☐ Yes ☒ No

**4. Application or patent number(s):**

☐ This document is being filed together with a new application.

**A. Patent Application No.(s)**

- 1) United States Patent 6,449,983 B1  
Centrifugal blood pump apparatus  
2) United States Patent 6,048,363  
Centrifugal blood pump apparatus

**B. Patent No.(s)**

Additional numbers attached? ☐ Yes ☒ No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Kurt H. Wieland

Internal Address: Wieland Heart LLC

Street Address: 302 Woodland Hills Dr

City: ESCONDIDO

State: CA Zip: 92029

Phone Number: 760 489-0986

Fax Number: 760 735-6895

Email Address: kurt.wieland@msn.com

**6. Total number of applications and patents involved: 2**

**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 80.-**

- ☒ Authorized to be charged by credit card  
☐ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

**8. Payment Information**

a. Credit Card Last 4 Numbers 0106  
Expiration Date 10/08

b. Deposit Account Number \_\_\_\_\_

Authorized User Name \_\_\_\_\_

**9. Signature:**

Kurt H. Wieland  
Signature

August 13, 2006  
Date

Kurt H. Wieland

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 6

Documents to be recorded (including cover sheet) should be filed to (571) 273-6148, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1480, Alexandria, V.A. 22313-1480

09/06/2006 DBYRNE 00000166 6449983

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PATENT OWNERS AGREEMENT  
WIELAND HEART LLC

ASSIGNMENT OF PATENT OWNERSHIP

For valuable consideration, Kurt Wieland ("Wieland"), co-inventor of the Patents abstracted in Exhibit 1 attached to this assignment hereby assigns his entire right, title and interest in the inventions and patents to Wieland Heart LLC. ("Heart" or Assignee).

Wieland agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements. Wieland agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The Wieland hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to Assignee, as Assignee of the entire interest, and hereby covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

Wieland hereby grants to the law firm retained by HEART the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

Date 7/05/2006

*Kurt H. Wieland*

KURT H. WIELAND

Name of Inventor

Patent Inventor Assignment

PATENT RIGHTS

1. United States Patent 6,443,983: Centrifugal blood pump apparatus

**Abstract:** A centrifugal impeller-type pump for transporting blood has a new and improved design in the impeller, to allow for the elimination of stagnant flow areas, and a geometrical design that minimizes damage to the blood components. A system for controlling and stabilizing the speed of centrifugal-type pumps used in a human cardiovascular system is also provided. Further provided are methods of corrosion protection and enhancing thromboresistance, rejection of waste heat, and methods to connect the artificial heart to the cardiovascular system as a Left Ventricle Assist Device (LVAD) and as a Total Artificial Heart (TAH).

**Inventors:** Nagyszalanczy; Lorant (15004 Greenleaf St., Sherman Oaks, CA 91403); Wieland; Kurt H. (29811 Disney La., Vista, CA 92084-1225); Lemay; Dan (2514 Wilt Rd., Fallbrook, CA 92028); Spicer; Norman E. (77-570 Woodhaven Dr. North, Palm Desert, CA 92211); Sternlieb; Jack (13 Clancy La., Rancho Mirage, CA 92270)

2. United States Patent 6,048,363: Centrifugal blood pump apparatus

**Abstract:** A centrifugal impeller-type pump for transporting blood has a new and improved design in the impeller, to allow for the elimination of stagnant flow areas, and a geometrical design that minimizes damage to the blood components. A system for controlling and stabilizing the speed of centrifugal-type pumps used in a human cardiovascular system is also provided. Further provided are methods of corrosion protection and enhancing thromboresistance, rejection of waste heat, and methods to connect the artificial heart to the cardiovascular system as a Left Ventricle Assist Device (LVAD) and as a Total Artificial Heart (TAH).

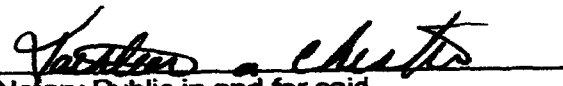
**Inventors:** Nagyszalanczy; Lorant (15004 Greenleaf St., Sherman Oaks, CA 91403); Wieland; Kurt H. (29811 Disney La., Vista, CA 92084-1225); Lemay; Dan (2514 Wilt Rd., Fallbrook, CA 92028); Spicer; Norman E. (77-570 Woodhaven Dr. North, Palm Desert, CA 92211); Sternlieb; Jack (13 Clancy La., Rancho Mirage, CA 92270)

**ACKNOWLEDGMENTS:**

STATE OF CALIFORNIA   )  
  ) SS:  
COUNTY OF SAN DIEGO )

On July 6th, 2006, before me, a Notary Public in and for said County and State, personally appeared Kurt Wieland, known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

  
Notary Public in and for said  
County and State



Patent Inventor Assignment  
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