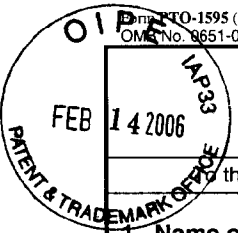


02-15-06

D#



Form PTO-1595 (Rev. 06/04)  
OMB No. 0651-0027 (exp. 6/30/2005)

U.S. Department of COMMERCE  
United States Patent and Trademark Office

02-21-2006



103183160

FR SHEET

.Y

HDP Docket No. 6550-000099  
Express Mail Label No. EV 717 343 953 US  
(2/14/2006)

attached documents or the new address(es) below.

2-14-06

1. Name of conveying party(ies)/Execution Date(s):

Norbert Muller  
Pezhman Akbari  
Janusz Piechna  
Flori Iancu

Execution Date(s) 01/12/06 (Piechna) and 02/13/06 (Muller, Akbari and Iancu)

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

2. Name and address of receiving party(ies)

Name: Board of Trustees of Michigan State University

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

Street Address: 246 Administration Building

City: Lansing

State: MI

Country: US Zip: 48824

Additional Name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

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

A. Patent Application No.(s)  
11/271,483

This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Monte L. Falcoff

Internal Address: Harness, Dickey & Pierce, P.L.C.

Street Address: P.O. Box 828

City: Bloomfield Hills

State: MI Zip: 48303

Phone Number: 248-641-1600

Fax Number: 248-641-0270

Email Address: \_\_\_\_\_

6. Total number of applications and patents involved:

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- 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 02/21/2006 MUELLER 0000035 11271483  
Expiration Date

b. Deposit Account Number 08-0750 40.00 DP

Authorized User Name Harness, Dickey & Pierce P.L.C.

9. Signature :

February 14, 2006

Monte L. Falcoff

Signature

Date

Name of Person Signing

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

## ASSIGNMENT

Atty. Docket No. 6550-000099

The undersigned, hereinafter referred to collectively as Assignor, has an interest in the invention entitled:

### WAVE ROTOR APPARATUS

which is the subject of a United States or International application for patent

- (a)  executed on even date preparatory to filing (each Inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b)  executed on \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_;
- (c)  filed on November 11, 2005, and assigned Serial No. 11/271,483 or PCT International Application No. \_\_\_\_\_;
- (d)  U.S. Patent No. \_\_\_\_\_, issued \_\_\_\_\_, and  
 presently assigned as evidenced at Reel \_\_\_\_\_, Frame \_\_\_\_\_; or
- (e)  entitled above and naming the undersigned inventors in this provisional patent application; and

Board of Trustees of Michigan State University, having a place of business at 246 Administration Building, Lansing, Michigan 48224, hereinafter referred to as Assignee, is desirous of acquiring Assignor's interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby authorizes an attorney authorized to prosecute this patent application to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

### ASSIGNMENT

U.S. Serial No. 11/271,483  
Attorney Docket No. 6550-000099

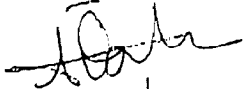
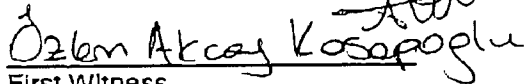
\_\_\_\_\_  
Norbert Müller

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

  
\_\_\_\_\_  
Pezhman Akbari

  
  
\_\_\_\_\_  
First Witness

2,13,06  
\_\_\_\_\_  
Dated

ABDULLATIF ABOL RAZOU  
\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Janusz Plechna

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Florin Iancu

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

### ASSIGNMENT

U.S. Serial No. 11/271,483  
Attorney Docket No. 6550-000099

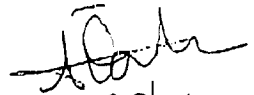
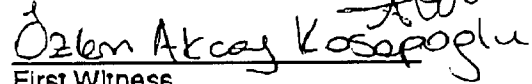
\_\_\_\_\_  
Norbert Müller

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

  
\_\_\_\_\_  
Pezhman Akbari

  
  
\_\_\_\_\_  
First Witness

2,13,06  
\_\_\_\_\_  
Dated

ABDULLATIF ABOLU RAZOU  
\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Janusz Plechna

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Florin Iancu

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

## ASSIGNMENT

Atty. Docket No. 6550-000099

The undersigned, hereinafter referred to collectively as Assignor, has an interest in the invention entitled:

### WAVE ROTOR APPARATUS

which is the subject of a United States or International application for patent

- (a)  executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b)  executed on \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_;
- (c)  filed on November 11, 2005, and assigned Serial No. 11/271,483 or PCT International Application No. \_\_\_\_\_;
- (d)  U.S. Patent No. \_\_\_\_\_, issued \_\_\_\_\_, and  
 presently assigned as evidenced at Reel \_\_\_\_\_, Frame \_\_\_\_\_; or
- (e)  entitled above and naming the undersigned inventors in this provisional patent application; and

Board of Trustees of Michigan State University, having a place of business at 246 Administration Building, Lansing, Michigan 48224, hereinafter referred to as Assignee, is desirous of acquiring Assignor's interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby authorizes an attorney authorized to prosecute this patent application to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

# ASSIGNMENT

U.S. Serial No. 11/271,483  
Attorney Docket No. 6550-000099

\_\_\_\_\_  
Norbert Müller

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Pezhman Akbari

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated


\_\_\_\_\_  
Second Witness

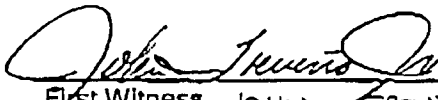
\_\_\_\_\_  
Janusz Plechna

\_\_\_\_\_  
First Witness

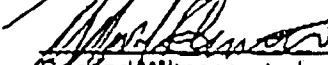
\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

  
\_\_\_\_\_  
Florin Iancu

  
\_\_\_\_\_  
First Witness JOHN TREVINO JR.

2/13/06  
\_\_\_\_\_  
Dated

  
\_\_\_\_\_  
Second Witness Michael Kohorst

**ASSIGNMENT**

Atty. Docket No. 6550-000099

The undersigned, hereinafter referred to collectively as Assignor, has an interest in the invention entitled:

**WAVE ROTOR APPARATUS**

which is the subject of a United States or International application for patent

- (a)  executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b)  executed on \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_;
- (c)  filed on November 11, 2005, and assigned Serial No. 11/271,483 or PCT International Application No. \_\_\_\_\_;
- (d)  U.S. Patent No. \_\_\_\_\_, issued \_\_\_\_\_, and  
 presently assigned as evidenced at Reel \_\_\_\_\_, Frame \_\_\_\_\_; or
- (e)  entitled above and naming the undersigned inventors in this provisional patent application; and

Board of Trustees of Michigan State University, having a place of business at 246 Administration Building, Lansing, Michigan 48224, hereinafter referred to as Assignee, is desirous of acquiring Assignor's interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby authorizes an attorney authorized to prosecute this patent application to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

# ASSIGNMENT

U.S. Serial No. 11/271,483  
Attorney Docket No. 6550-000099

N. Müller  
Norbert Müller

02/13/06  
Dated

C. W. Hamer  
First Witness

[Signature]  
Second Witness

\_\_\_\_\_  
Pezhman Akbari

\_\_\_\_\_  
Dated

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Janusz Piechna

\_\_\_\_\_  
Dated

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Florin Iancu

\_\_\_\_\_  
Dated

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Second Witness



**ASSIGNMENT**

Atty. Docket No. 6550-000098

The undersigned, hereinafter referred to collectively as Assignor, has an interest in the invention entitled:

**WAVE ROTOR APPARATUS**

which is the subject of a United States or International application for patent

- (a)  executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
- (b)  executed on \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_;
- (c)  filed on November 11, 2005, and assigned Serial No. 11/271,483 or PCT International Application No. \_\_\_\_\_;
- (d)  U.S. Patent No. \_\_\_\_\_, issued \_\_\_\_\_, and  
 presently assigned as evidenced at Reel \_\_\_\_\_, Frame \_\_\_\_\_; or
- (e)  entitled above and naming the undersigned inventors in this provisional patent application; and

Board of Trustees of Michigan State University, having a place of business at 246 Administration Building, Lansing, Michigan 48224, hereinafter referred to as Assignee, is desirous of acquiring Assignor's interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor by these presents does sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the said invention as described in the aforesaid application, said application for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to recover for past infringements of, or liabilities for, any of the rights relating to any of said applications or patents resulting therefrom;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby authorizes an attorney authorized to prosecute this patent application to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

CONFIDENTIAL

**ASSIGNMENT**

U.S. Serial No. 11/271,483  
Attorney Docket No. 6550-000089

\_\_\_\_\_  
Norbert Müller

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Pezhman Akbari

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness

*Janusz Piechna*  
\_\_\_\_\_  
Janusz Piechna

*Am. D. [Signature]*  
\_\_\_\_\_  
First Witness

*12.01.2006*  
\_\_\_\_\_  
Dated

*[Signature]*  
\_\_\_\_\_  
Second Witness

\_\_\_\_\_  
Florin Iancu

\_\_\_\_\_  
First Witness

\_\_\_\_\_  
Dated

\_\_\_\_\_  
Second Witness