



Tab settings

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To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
**Alexander Fridman**                      **Igor Matveev**  
**Alexander F. Gutsol**  
**Young I. Cho**  
**Kenneth Blank**

Additional names(s) of conveying party(ies)       Yes     No

3-20-06

2. Name and address of receiving party(ies):  
Name: **Drexel University**  
Address: **32nd and Chestnut Streets**  
City: **Philadelphia**                      State/Prov.: **PA**  
Country: **US**                                      ZIP: **19103**

Additional name(s) & address(es)                       Yes     No

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FINANCE SECTION

3. Nature of conveyance:  
 Assignment                                       Merger  
 Security Agreement                                       Change of Name  
 Other

Execution Date: **July 15, 2004 and September 28, 2004**

4. Application number(s) or patent numbers(s):  
If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

Patent Application No.	Filing date	B. Patent No.(s)
<b>10/560,537</b>	<b>Internat'l Filing Date June 18, 2004</b>	

03/21/2006 DBYRNE 00000232 10560537  
01 FC:8021                      40.00 BP                      Additional numbers                       Yes     No

5. Name and address of party to whom correspondence concerning document should be mailed:  
Name: **Kevin J. Dunleavy**  
Registration No. **32,024**  
Address: **Knoble Yoshida & Dunleavy, LLC**  
**Eight Penn Center, Suite 1350**  
**1628 John F. Kennedy Boulevard**  
City: **Philadelphia**                      State/Prov.: **PA**  
Country: **US**                                      ZIP: **19103**

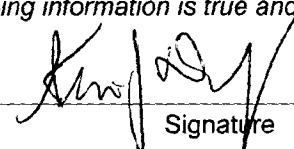
6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41):.....\$ **40.00**  
 Enclosed - Any excess or insufficiency should be credited or debited to deposit account  
 Authorized to be charged to deposit account

8. Deposit account number:  
**50-0462**  
(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

**Kevin J. Dunleavy**                                            **15 March 2006**  
Name of Person Signing                      Signature                      Date

Total number of pages including cover sheet, attachments, and document: **7**

**ASSIGNMENT**

WHEREAS, We, Alexander Fridman, 36 John James Audubon Way, Marlton, NJ 08053, United States of America; Alexander F. Gutsol, residing at 203 Yorktown Court, Malvern, PA 19355, United States of America; Young I. Cho, 433 Tuvira Lane, Cherry Hill, NJ 08003, United States of America; Kenneth Blank, 3016 W. Coulter Street, Philadelphia, PA 19129, United States of America; and Igor Matveev 7231 Woodley Place, Falls Church, VA 22046, United States of America (hereinafter collectively referred to as "the Assignor"), are the inventors of certain inventions or improvements for which we have made application for Letters Patent under the Patent Cooperation Treaty, identified as International Patent Application No. PCT/US04/19590, entitled, "Vortex Reactor And Method Of Using It," having been filed on June 18, 2004, and for which we have filed U.S. provisional application no. 60/551,725, on March 10, 2004 and U.S. provisional application no. 60/480,341, on June 20, 2003.

WHEREAS, DREXEL UNIVERSITY, A Pennsylvania Corporation, having a place of business at 32<sup>nd</sup> and Chestnut Streets, Philadelphia, PA 19104, United States of America, (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said applications, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, We, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said applications including the right to claim priority to the applications in any foreign application entitled to claim such priority under national law, international conventions, treaties or otherwise, and any and all continuations, divisions and renewals of and substitutes for said applications, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our name applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me had this assignment, sale and transfer not been made.

AND We hereby covenant that We have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its

successors, assigns, nominees, or legal representatives, all known facts respecting said inventions or improvements, said applications and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Director – U.S. Patent and Trademark Office and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the applications aforesaid, in accordance with the terms of this assignment.

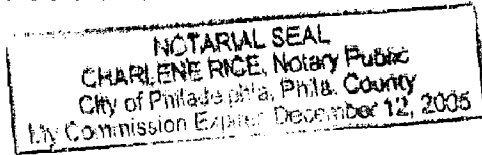
IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 07/15/2004

*Alexander Fridman* (L.S.)  
Alexander Fridman, Inventor

Notarial Certificate

State of Pennsylvania )  
County Philadelphia )




Before me personally appeared Alexander Fridman, who acknowledged the foregoing instrument to be a free act and deed and also represented that he is authorized to execute the same the 15<sup>th</sup> day of July, in the year 2004.

*Charlene Rice*  
Notary Public

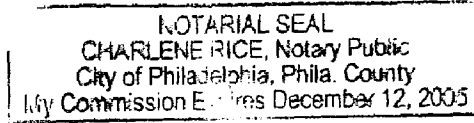
IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 07/15/04

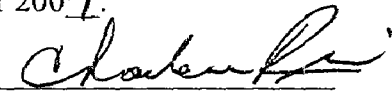
 (L. S.)  
Alexander F. Gutsol, Inventor

Notarial Certificate

State of Pennsylvania )  
County Philadelphia )



Before me personally appeared Alexander F. Gutsol, who acknowledged the foregoing instrument to be a free act and deed and also represented that he is authorized to execute the same the 15<sup>th</sup> day of July, in the year 2004.

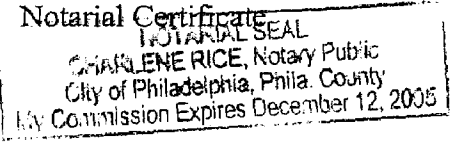
  
Notary Public

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 7-15-04

Young I. Cho (L. S.)  
Young I. Cho, Inventor

State of Pennsylvania )  
County Philadelphia )



Before me personally appeared Young I. Cho, who acknowledged the foregoing instrument to be a free act and deed and also represented that he is authorized to execute the same the 15th day of July, in the year 2004.

Charlene Rice  
Notary Public

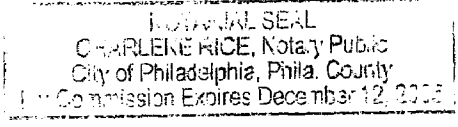
IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: 7/15/04

*Kenneth Blank* (L. S.)  
Kenneth Blank, Inventor

Notarial Certificate

State of Pennsylvania )  
County Philadelphia )



Before me personally appeared Kenneth Blank, who acknowledged the foregoing instrument to be a free act and deed and also represented that he is authorized to execute the same the 15<sup>th</sup> day of July, in the year 2004.

*Charlene Rice*  
Notary Public

