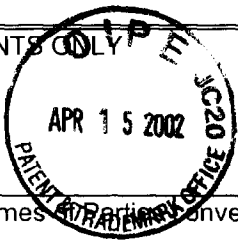


04-23-2002

Our Case No. 10322-31

PATENTS ONLY



TO THE



102063474

ENTENTS

Please record the attached original document or copy thereof.

1. Names of Parties conveying an interest:

J. Gary Eden
Sung-Jin Park
Jack Chen
Chang Liu

4-15-02

Additional name(s) of conveying party(ies) attached?

Yes No

2. Name and Address of Party receiving an interest:

Name: Board of Trustees of the University of Illinois
Internal Address: 352 Henry Administration Building
Street Address: 506 S. Wright
City: Urbana
State/Zip: Illinois 61801

Additional name(s) and addresses attached?

Yes No

3. Description of the interest conveyed:

Assignment Change of Name Other:
 Security Agreement Merger

Execution Date: March 14, 17 and 27, 2002

4. Application number(s) or patent number(s). Additional sheet attached? Yes No

If this document is being filed together with a new application, the execution date of the application is:

Date

A. Patent Application No.(s)
10/047,469

B. Patent No.(s)

Additional numbers attached? Yes No

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

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610
(312)321-4200

6. Number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$ 40
 Enclosed
 Authorized to be charged to Deposit Account No. 23-1925
8. Please charge any deficiencies in fee or credit any overpayment to Deposit Account No. 23-1925.

DO NOT USE THIS SPACE

04/22/2002 DBYRNE 00000207 10047469

01 FC:581 40.00 DP

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.

Anthony P. Curtis, Ph.D., Reg. No. 46,193
Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: 13

ASSIGNMENT

WHEREAS, J. Gary Eden, Sung-Jin Park, Jack Chen and Chang Liu, hereinafter called the "Assignors", have made the invention described in the United States patent application entitled Microdischarge Devices and Arrays Having Tapered Microcavities, for a full description of which reference is here made to an application for Letters Patent of the United States filed on January 15, 2002, and assigned Application Serial No. 10/047,469;

WHEREAS, the Board of Trustees of the University of Illinois, a not-for-profit corporation organized and existing under the laws of the State of Illinois, having a place of business at 352 Henry Administration Building, 506 S. Wright, Urbana, Illinois 61801, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignors hereby covenant and agree, for both the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in

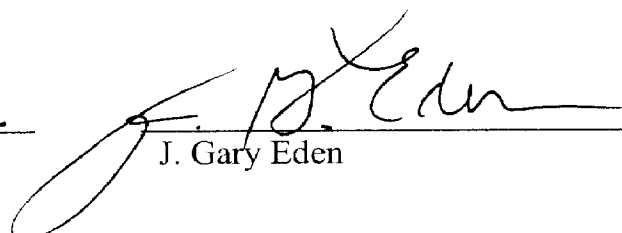
vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATED:

MARCH 14, 2002



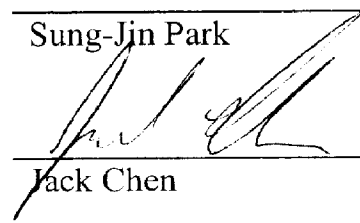
J. Gary Eden

DATED:

Sung-Jin Park

DATED:

March 27th, 2002



Jack Chen

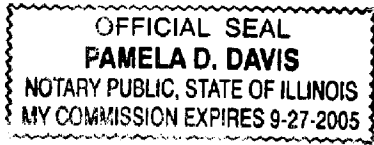
DATED:

Chang Liu

STATE OF *Illinois*)
) ss.
COUNTY OF *Champaign*)

I, *Pamela D. Davis*, A Notary Public in and for the County and State aforesaid, do hereby certify that J. Gary Eden, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this *14* day of *March*, 20*02*.



Pamela D. Davis

Notary Public

My Commission Expires: *September 27, 2005*

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Sung-Jin Park, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this _____ day of _____, 20____.

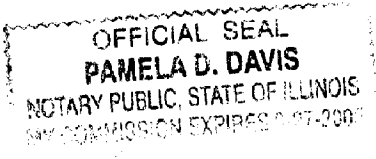
Notary Public

My Commission Expires:

STATE OF *Illinois*)
) ss.
COUNTY OF *Champaign*)

I, *Pamela D. Davis*, A Notary Public in and for the County and State aforesaid, do hereby certify that Jack Chen, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this *27* day of *March*, 20*02*.



Pamela D. Davis

Notary Public

My Commission Expires: *September 27, 2005*

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Chang Liu, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this _____ day of _____, 20____.

Notary Public

My Commission Expires:

ASSIGNMENT

WHEREAS, J. Gary Eden, Sung-Jin Park, Jack Chen and Chang Liu, hereinafter called the "Assignors", have made the invention described in the United States patent application entitled Microdischarge Devices and Arrays Having Tapered Microcavities, for a full description of which reference is here made to an application for Letters Patent of the United States filed on January 15, 2002, and assigned Application Serial No. 10/047,469;

WHEREAS, the Board of Trustees of the University of Illinois, a not-for-profit corporation organized and existing under the laws of the State of Illinois, having a place of business at 352 Henry Administration Building, 506 S. Wright, Urbana, Illinois 61801, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignors hereby covenant and agree, for both the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in

vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATED: _____

J. Gary Eden

DATED: _____

Sung-Jin Park

DATED: _____

Jack Chen

DATED: 3/14/2002



Chang Liu

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that J. Gary Eden, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of _____, 20_____.

Notary Public

My Commission Expires:

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Sung-Jin Park, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of _____, 20_____.

Notary Public

My Commission Expires:

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Jack Chen, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this
day of _____, 20_____.

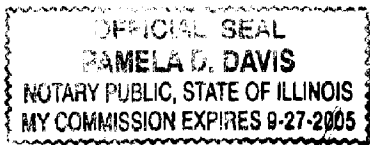
Notary Public

My Commission Expires:

STATE OF Illinois)
) ss.
COUNTY OF Waukegan)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Chang Liu, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this
14 day of March, 2002.



Pamela D. Davis

Notary Public

My Commission Expires: September 27, 2005

ASSIGNMENT

WHEREAS, J. Gary Eden, Sung-Jin Park, Jack Chen and Chang Liu, hereinafter called the "Assignors", have made the invention described in the United States patent application entitled Microdischarge Devices and Arrays Having Tapered Microcavities, for a full description of which reference is here made to an application for Letters Patent of the United States filed on January 15, 2002, and assigned Application Serial No. 10/047,469;

WHEREAS, the Board of Trustees of the University of Illinois, a not-for-profit corporation organized and existing under the laws of the State of Illinois, having a place of business at 352 Henry Administration Building, 506 S. Wright, Urbana, Illinois 61801, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignors hereby covenant and agree, for both the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in

vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignors will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

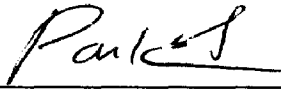
The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATED: _____

J. Gary Eden

DATED: Mar. 17, 2002


Sung-Jin Park

DATED: _____

Jack Chen

DATED: _____

Chang Liu

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that J. Gary Eden, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of _____, 20_____.

Notary Public

My Commission Expires:

STATE OF)
) ss.
COUNTY OF)

I, _____, A Notary Public in and for the County and State aforesaid, do hereby certify that Sung-Jin Park, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of _____, 20_____.

Notary Public

My Commission Expires:

STATE OF)
) ss.
COUNTY OF)

I, , A Notary Public in and for the County and State aforesaid, do hereby certify that Jack Chen, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of , 20 .

Notary Public

My Commission Expires:

STATE OF)
) ss.
COUNTY OF)

I, , A Notary Public in and for the County and State aforesaid, do hereby certify that Chang Liu, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that (s)he signed, sealed and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this day of , 20 .

Notary Public

My Commission Expires: