
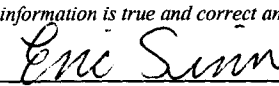


5.27.04

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Date of Deposit: May 27, 2004

Attorney Docket No. 21465-509 UTIL

<small>OFFICE OF PUBLIC RECORDS</small> RECORDATION FORM COVER SHEET <small>PATENT</small>	
FORM PTO-1595 <small>(Rev. 6-93)</small> OMB No. 0651-0011 (exp. 4/94)	<div style="display: flex; justify-content: space-between;"> <div> 2004 MAY 27 AM 9:07 FINANCE SECTION </div> <div style="text-align: right;"> 06-03-2004  102757449 </div> </div> <div style="text-align: right; padding-top: 10px;"> DEPARTMENT OF COMMERCE Patent and Trademark Office </div>
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1. Name of conveying party(ies): Yi-Ju Chen John H. Learnon Kenton L. Lohman Michael T. Ronan Jonathan M. Rothberg Maithreyan Srinivasan Michael P. Weiner Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies) 454 Corporation 20 Commercial Street Branford, Connecticut 06405 Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Other <u>Change of address of the Assignee</u> </div> <div> <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name </div> </div>	
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is _____ <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> A. Patent Application No(s): 10/768,729; Filed January 28, 2004 </div> <div> B. Patent No(s): </div> </div> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Ivor R. Elrifi, Esq. Address: MINTZ, LEVIN, COHN, FERRIS GLOVSKY and POPEO, P.C. 666 Third Avenue, 24 th Floor New York, New York 10017 Telephone: (212) 935-3000 Telefax: (212) 983-3115	6. Total number of applications and patents involved: [<u>1</u>] 7. Total fee (37 CFR 3.41) \$40.00 <input checked="" type="checkbox"/> Enclosed <input checked="" type="checkbox"/> The Commissioner is authorized to charge Deposit Account No: 50-0311, Reference No. 21465-509 UTIL for any deficiencies.
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Eric Sinn, Reg. No. 40,177 <hr/> Name of Person Signing	<div style="text-align: center;">  <hr/> Signature </div> <div style="text-align: right; padding-top: 10px;"> May 27, 2004 <hr/> Date </div>
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PATENT
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ASSIGNMENT

I, Yi-Ju **CHEN**, John H. **LEAMON**, Kenton L. **LOHMAN**, Michael T. **RONAN**, Jonathan M. **ROTHBERG**, Maithreyan **SRINIVASAN** and Michael P. **WEINER**, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, hereby assign, sell and transfer to **454 Corporation**, a **Connecticut** corporation, with offices at **20 Commercial Street, Branford, Connecticut 06405** and its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

DOUBLE ENDED SEQUENCING

filed with the U.S. Patent and Trademark Office on **January 28, 2004** and assigned Serial No.: **10/768,729**, including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications therefor; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my/our names at the ASSIGNEE, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications.

I hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

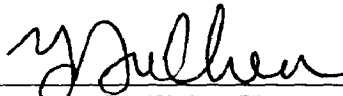
I agree, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

I further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

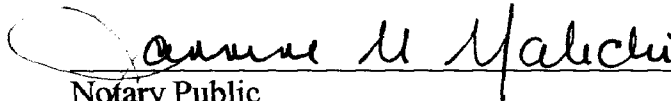
I further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: 5/14/2004

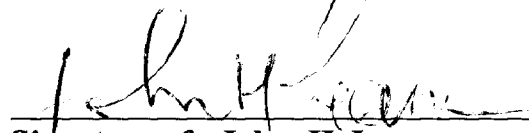

Signature of: Yi-Ju Chen

State of Connecticut
County of New Haven

Subscribed and sworn to before me this 14th day of May 2004.

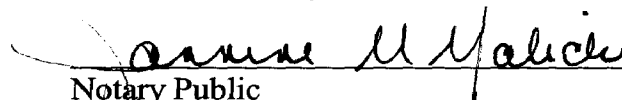

Notary Public
My commission expires 4/30/2007.
JANNINE M. MALICKI
NOTARY PUBLIC
MY COMMISSION EXPIRES APR. 30, 2007

Date: 5/14/2004


Signature of: John H. Leamon

State of Connecticut
County of New Haven

Subscribed and sworn to before me this 14th day of May, 2004.


Notary Public
My commission expires 4/30/2007.

Date:

5/14/04

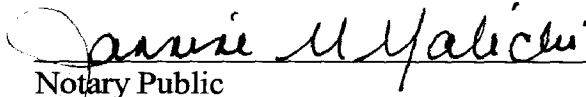


Signature of: Kenton L. Lohman

State of Connecticut

County of New Haven

Subscribed and sworn to before me this 14th day of May, 2004.


Notary Public

My commission expires April 30, 2004.
JANNINE M. MALICKI
NOTARY PUBLIC
MY COMMISSION EXPIRES APR. 30, 2007

Date:

5/14/2004

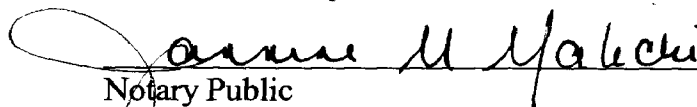


Signature of: Michael T. Ronan

State of Connecticut

County of New Haven

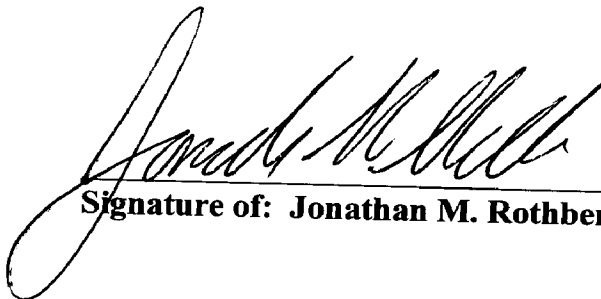
Subscribed and sworn to before me this 14th day of May, 2004.


Notary Public

My commission expires 4/30/2007.
JANNINE M. MALICKI
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Date:

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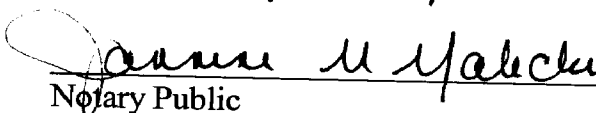


Signature of: Jonathan M. Rothberg

State of Connecticut

County of New Haven

Subscribed and sworn to before me this 14th day of May, 2004.



Notary Public

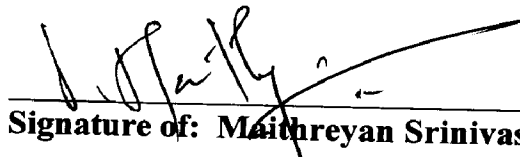
My commission expires

4/30/2007

JANNINE M. MALICKI
NOTARY PUBLIC
MY COMMISSION EXPIRES APR. 30, 2007

Date:

5/14/2004

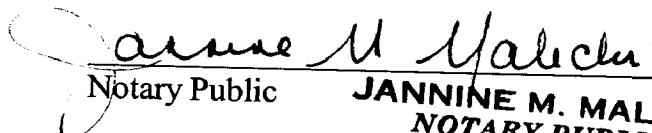


Signature of: Maithreyan Srinivasan

State of Connecticut

County of New Haven

Subscribed and sworn to before me this 14th day of May, 2004.



Notary Public

JANNINE M. MALICKI
NOTARY PUBLIC
MY COMMISSION EXPIRES APR. 30, 2007

My commission expires April 30, 2007.

Date:

4/30/04



Signature of: Michael P. Weiner

State of

Connecticut

County of

New Haven

SS: Guelker

Subscribed and sworn to before me this

30th

day of

April 2004



Notary Public

My commission expires ~~My~~ Commission Expires Mar. 31, 2006 .

NYC 287006v1