

05-30-2006

FORM PTO-1595

(Rev. 08/05)

Office OMB No. 0651-0027 (exp. 06/30/2008)

RECORDED

U.S. DEPARTMENT OF COMMERCE

United States Patent and Trademark

P... 103247027

Page 1 of 2

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):

ZYVEX CORPORATION

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

Name: Silicon Valley Bank

Internal Address: HF 154

Street Address: 3003 TASMAN DRIVE

City: SANTA CLARA

State: CA

Country: USA

Zip: 95054

Additional name(s) & address(es) attached? ☐ Yes ☒ NoAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

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

Execution Date: 09/29/2005

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

4. Application or patent number(s):

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

A. Patent Application No.(s)

09/884,205; 10/732,490; 10/306,464; 10/266,724; 10/895,161;

10/894,738; 10/931,650; 10/698,178; 10/749,256; 10/680,021;

10/850,721; 10/616,735; 10/762,848; 10/948,385; 11/074,448;

11/061,076; 10/967,002; 11/056,567; 10/920,877; 10/741,136;

11/105,078; 10/799,836; 11/064,127; 11/063,692; 11/064,131;

B. Patent No.(s)

6,510,359; 6,672,795; 6,398,280; 6,677,225; 6,676,416;

6,561,725; 6,723,299; 6,838,121; 6,678,458; 6,973,365;

6,745,567; 6,806,991; 6,967,335; 6,617,185; 6,816,170;

6,608,307; 6,698,201; 6,718,764; 6,762,116; 6,679,055;

6,812,460; 6,987,277; 6,837,723; 6,887,450; 6,879,016;

Additional numbers attached? ☒ Yes ☐ No

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

Name: Silicon Valley Bank

Internal Address: Loan Collateral HF154

Street Address: 3003 Tasman Drive

City: Santa Clara

State: CA

Zip: 95054

Phone Number: (408) 654-4042

Fax Number: (408) 654-6313

Email Address: ldc@svbank.com

6. Total number of applications and patents involved: 59

7. Total fee (37 CFR 1.21 (h) & 3.41) \$2,360.00

- ☐ 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

Expiration Date

b. Deposit Account Number

Authorized User Name

9. Signature: Maibela Higareda

Signature

9/22/06

Date

Maibela Higareda c/o Shannon Hubbard

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 30

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

05/26/2006 MJAMA1 00000021 09884205

01 FC:8021

(2360.00 DP)

PATENT
REEL: 017921 FRAME: 0368

RECORDATION FORM COVER SHEET

PATENTS ONLY

Page 2 of 2

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- ☐ Assignment ☐ Merger
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☐ Other _____

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Country: USA

Zip: 95054

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

4. Application or patent number(s):

A. Patent Application No.(s)

11/089,814; 10/884,904; 11/131,760;

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

B. Patent No.(s)

6,905,667; 6,891,170; 7,012,491; 6,877,316; 6,923,669;
6,956,219;Additional numbers attached? ☐ Yes ☒ No

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

Name: Silicon Valley Bank

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State: CA

Zip: 95054

Phone Number: (408) 654-4042

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Email Address: ldc@svbank.com

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

8. Payment Information

a. Credit Card Last 4 Numbers

Expiration Date

b. Deposit Account Number

Authorized User Name

9. Signature:

Maribel Higuera
Signature5/22/00

Date

Maribel Higuera c/o Shannon Hubbard
Name of Person Signing

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

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of the Effective Date by and between SILICON VALLEY BANK ("Bank") and ZYVEX CORPORATION ("Grantor").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank and Grantor dated the Effective Date (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property Collateral (including without limitation those Copyrights, Patents, Trademarks and Mask Works listed on Schedules A, B, C, and D hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

IN WITNESS WHEREOF, the parties have cause this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Address of Grantor:

1321 N. Plano Road
Plano, TX 75081

Attn: _____

GRANTOR:

ZYVEX CORPORATION

By: T.M. [Signature]

Title: CEO & Secretary

Address of Bank:

14185 N. Dallas Parkway, Suite 780
Centura Tower
Dallas, TX 75254

Attn: _____

BANK:

SILICON VALLEY BANK

By: Melissa [Signature]

Title: Relationship Manager

EXHIBIT A

Copyrights

Description

Registration/
Application
Number

Registration/
Application
Date

None

EXHIBIT B

Patents

Description

Registration/
Application
Number

Registration/
Application
Date

See Attached

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P001US 34003.3	US	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/11/2000 AppNo: 09/569330	Granted	MAINTENANCE	Issued Patent Number 6510355 Issue Date: 01/21/2003 1st Maintenance Fee due 07/21/2005 - to be paid timely
P001WO 34003.8	Closed	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/10/2001 AppNo: PCT/US01/40719 Published: 11/15/2001 PubNo: 200186361	Closed		Filed National Phase Applications in China, Europe, Japan, and Korea
P001CN 34003.4	Closed	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/10/2001 AppNo: 01810882.2 Published: 07/06/2005 PubNo: 1636169	Closed		Abandoned per Client Instructions 11/28/2005
P001EP 34003.5 P001GB 34003.167 P001FR 34003.166 P001DE 34003.165	Foreign	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/10/2001 AppNo: 01935776.3 Published: 02/05/2003 PubNo: 1281108	Granted	MAINTENANCE	Issued Patent Number: 1281108 Issue Date: 07/20/2005 Great Britain Annuity due 05/10/2007 French Annuity due 05/10/2007 German Annuity due 05/10/2007 Awaiting annuity receipts for 2006
P001JP 34003.6	Closed	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/10/2001 AppNo: 2001583249 Published: 11/05/2003 PubNo: 2003533059	Closed		Abandoned per Client Instructions 11/28/2005
P001KR 34003.7	Foreign	Method and System for Self-Replicating Manufacturing Stations	Merle, Parker, Skidmore	Filed: 05/10/2001 AppNo: 10-2002-7014969	Granted	MAINTENANCE	Issued Patent Number 550817 Issue Date: 02/03/2006 Annuity due 02/03/2009
P002US 34003.9	Closed	Humps Process	Skidmore		Closed		Closed per client
P003US 34003.10	US	System and Method for Coupling Micro-Components	Ellis (972-792-1614), Skidmore	Filed: 05/11/2000 AppNo: 09/570170	Granted	MAINTENANCE	Issued Patent Number 6672795 Issue Date: 01/06/2004 1st Maintenance Fee due 07/06/2007 Abandoned per client
P003WO 34003.11	Closed	System and Method for Coupling Micro-Components	Ellis, Skidmore	Filed: 05/10/2001 AppNo: PCT/AUS01/15059 Published: 11/15/2001 PubNo: 200185599	Closed		
P004US 34003.12	US	Gripper and Complementary Handle for Use with Microcomponents	Parker, Skidmore	Filed: 05/11/2000 AppNo: 09/569329	Granted	MAINTENANCE	Issued Patent Number 6398280 Issue Date: 06/04/2002 2nd Maintenance Fee due 12/04/2009
P004WO 34003.13	Closed	Gripper and Complementary Handle for Use with Microcomponents	Parker, Skidmore	Filed: 05/10/2001 AppNo: PCT/AUS01/15011 Published: 11/15/2001 PubNo: 200185401	Closed		Abandoned per client

u.s. 10,359

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P005US 34003.14	US	System and Method for Constraining Totally Released Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 07/14/2000 AppNo: 09/616500	Granted	MAINTENANCE	Issued Patent Number: 6677225 Issue Date: 01/13/2004 1st Maintenance Fee due 07/13/2007
P005WO 34003.19	Closed	System and Method for Constraining Totally Released Microcomponents	Ellis, Parker, Skidmore	Filed: 07/12/2001 AppNo: PC7/US01/21899 Published: 01/24/2002 PubNo: 200206152	Closed		Filed National Phase Applications in China, Europe, Japan, and Korea
P005CN 34003.15	Foreign	System and Method for Constraining Totally Released Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 07/12/2001 AppNo: 01812786 X Published: 09/10/2003 PubNo: 1441749	Allowed	STABLE	Awaiting issued patent Annulity due 07/12/2006 - to be timely filed
P005EP 34003.16	Foreign	System and Method for Constraining Totally Released Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 07/12/2001 AppNo: 01951048 6 Published: 01/24/2002 PubNo: 1345843	Pending	STABLE	Awaiting further office action Annulity due 07/31/2006 - to be timely filed
P005JP 34003.17	Foreign	System and Method for Constraining Totally Released Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 07/12/2001 AppNo: 2002512060 Published: 02/12/2004 PubNo: 2004504172	Pending	DORMANT	Awaiting further office action
P005KR 34003.18	Foreign	System and Method for Constraining Totally Released Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 07/12/2001 AppNo: 10-2003-7000550	Granted	MAINTENANCE	Issued Patent Number: 539137 Issued date: 12/20/2005 Annulity due 12/20/2008
P006US 34003.20	US	System and Method for Post-Fabrication Reduction of Minimum Feature Size Spacing of Microcomponents	Ellis (972-792-1614), Parker, Skidmore	Filed: 06/19/2001 AppNo: 09/884205 not scheduled for publication	Pending	DORMANT	Awaiting further office action
P007US 34003.21	US	Ribbon Cable and Electrical Connector for Use with Microcomponents	Skidmore, Ellis (972-792-1614)	Filed: 05/11/2000 AppNo: 09/559328	Granted	MAINTENANCE	Issued Patent Number: 6676416 Issue Date: 01/13/2004 1st Maintenance Fee due 07/13/2007
P007WO 34003.22	Closed	Ribbon Cable and Electrical Connector for Use with Microcomponents	Skidmore, Ellis	Filed: 05/10/2001 AppNo: PCT/US01/15032 Published: 11/15/2001 PubNo: 200186662	Closed		Abandoned per client
P008US 34003.23	US	System and Method for Coupling Microcomponents Utilizing a Pressure Fitting Receptacle	Ellis (972-792-1614), Skidmore	Filed: 08/21/2000 AppNo: 09/643011	Granted	MAINTENANCE	Issued Patent Number: 6561725 Issue Date: 05/13/2003 1st Maintenance Fee due 11/13/2006 - to be timely filed
P008WO 34003.24	Closed	System and Method for Coupling Microcomponents Utilizing a Pressure Fitting Receptacle	Ellis, Skidmore	Filed: 08/01/2001 AppNo: PCT/US01/24173 Published: 02/28/2002 PubNo: 200216255	Closed		Abandoned per client
P009US 34003.25	Closed	Rationally Designed Artificial Binding Sites	Halls		Closed		Closed per client
P010US 34003.26	Closed	Ordered Surface-Bound Catalyzed Reaction Pathways	Halls, Von Ehrll		Closed		Closed per client
P011V1 34003.27	Closed	Cyclodextrin Mediated Soft Cutting of Single-Walled Carbon Nanotubes	Chen, Dyer	Filed: 05/17/2001 AppNo: 60/291101	Closed		Filed as Utility Application

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P011US 34003.28	US	System and Method for Manipulating Nanotubes	Chen, Dyer	Filed: 01/11/2002 AppNo: 10044317	Granted	MAINTENANCE	Issued Patent Number: 6723299 Issue Date: 04/20/2004 1st Maintenance Fee due 10/20/2007 Awaiting initial office action
P011USDIV 34003.102	US	System and Method for Manipulating Nanotubes	Chen, Dyer	Filed: 12/10/2003 AppNo: 10732490 Published: 08/24/2004 PubNo: 20040120879	Pending	DORMANT	
P012US 34003.29	Closed	Molecular Structure Having a Controllably Rotational Portion	Zhang	Filed: 10/05/2001 AppNo: 09972118	Closed		Client authorized abandonment 06/25/2003
P013US 34003.30	US	System and Method for Controlling Deposition Parameters in Producing a Surface to Tune the Surface's	Weimer	Filed: 05/10/2001 AppNo: 09852992 Published: 02/06/2003 PubNo: 20030026900	Granted	MAINTENANCE	Issued Patent Number: 6838121 Issue Date: 01/04/2005
P013CP1 34003.31	Closed	System and Methods for Detection of Low Concentrations of Molecules Using Surface Enhanced Raman Spectroscopy	Weimer	Filed: 11/12/2003 AppNo: 10706735 Published: 05/20/2004 PubNo: 20040096981	Closed		1st Maintenance Fee due 07/04/2008 Abandoned per Client instructions 09/09/2005 As of 09/09/2005, Client contacted inventor to offer him the opportunity to proceed with prosecution.
P013WO 34003.32	Closed	System and Method for Controlling Deposition Parameters in Producing a Surface to Tune the Surface's Plasmon Resonance Wavelength	Weimer	Filed: 05/09/2002 AppNo: PCT/US02/14700 Published: 11/14/2002 PubNo: 2002090949	Closed		Abandoned per Client instructions
P014US 34003.33	US	System and Method for Precise Positioning of Microcomponents	Ellis (972-792-1614), Skidmore	Filed: 08/17/2001 AppNo: 09932489 Published: 11/27/2003 PubNo: 20030219220	Granted	MAINTENANCE	Issued Patent Number 6678458 Issue Date: 01/13/2004
P014WO 34003.34	Closed	System and Method for Precise Positioning of Microcomponents	Ellis, Skidmore	Filed: 08/15/2002 AppNo: PCT/US02/25820 Published: 02/27/2003 PubNo: 2003016206	Closed		1st Maintenance Fee due 07/13/2007 Abandoned per Client
P015US 34003.35	US	System and Method for Handling Microcomponent Parts for Performing Assembly of Micro-Devices	Mercanzini	Filed: 12/28/2001 AppNo: 10034495	Granted	MAINTENANCE	Issued Patent Number 6973365 Issue Date: 12/06/2005
P015USCON 34003.142	Closed	System and Method for Handling Microcomponent Parts for Performing Assembly of Micro-Devices	Mercanzini	Filed: 05/25/2005 AppNo: 11/137099	Closed		1st Maintenance Fee due 06/06/2009 Abandoned Per Client instructions 11/28/2005
P016US 34003.36	US	System and Method for Positional Movement of Microcomponents	Mercanzini	Filed: 12/28/2001 AppNo: 10033011	Granted	MAINTENANCE	Issued Patent Number: 6745567 Issue Date: 06/09/2004
P017V1 34003.37	Closed	Microcomponents and Applications Thereof	Sarkar, Geisberger, Ellis	Filed: 08/16/2001 AppNo: 60312706	Closed		1st Maintenance Fee due 12/08/2007 Filed as Utility Application
P017US 34003.38	US	Fully Released MEMS XYZ Flexure Stage with Integrated Capacitive Feedback	Sarkar, Geisberger (972-792-1650), Ellis (972-792-1614)	Filed: 08/14/2002 AppNo: 10219044	Granted	MAINTENANCE	Issued Patent Number: 6806991 Issue Date: 10/19/2004
P018US 34003.39	Closed	Zybot Platform	Dyer	---	Closed		1st Maintenance Fee due 04/19/2008 Closed per client
P019US 34003.40	Closed	Manipulating Micro-Scale Devices	Dyer	---	Closed		Closed per client
P020US 34003.41	Closed	Micro-Mechanical Local-Force Clamping Fastener	Dyer	---	Closed		Closed per client

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P021US 34003.42	US	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 06/17/2002 AppNo: 10/173542	Granted	MAINTENANCE	Issued Patent Number: 6867335 Issue Date: 11/22/2005 1st Maintenance Fee due 05/22/2009 Filed National Phase applications in China, Japan, S. Korea, Europe (DE, GB, FR)
P021WO 34003.78	Closed	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: PCT/US03/16695 Published: 12/24/2003 PubNo: 2003/107065	Closed		Abandoned per Client instructions 11/28/2005
P021CN 34003.132	Closed	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 03814146.9 Published: 08/31/2005 PubNo: 1662838	Closed		Abandoned per Client instructions 11/28/2005
P021EU 34003.133	Closed	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 03736728.1 Published: 04/06/2005 PubNo: 1520200	Closed		Abandoned per Client instructions 11/28/2005
P021JP 34003.134	Closed	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 2004513823	Closed		Abandoned per Client instructions 11/28/2005
P021KR 34003.135	Closed	Manipulation System for Manipulating a Sample Under Study with a Microscope	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 7020657/2004 Published: 03/07/2005 PubNo: 21987/2005	Closed		Abandoned per Client instructions 11/28/2005
P022US 34003.43	Closed	Molecular Structure Comprising Terminal Diacetylene and Group	Chai	Filed: 12/31/2001 AppNo: 10/039079	Closed		Abandoned per Client instructions 11/06/2003
P023US 34003.44	US	System and Method for Latching a Micro-Structure and a Process for Fabricating a Micro-Latching Structure	Geisberger (972-792-1650)	Filed: 02/07/2002 AppNo: 10/071772 Published: 02/20/2003 PubNo: 20030034183	Granted	MAINTENANCE	Issued Patent Number 6617185 Issue Date: 09/09/2003 1st Maintenance Fee due 03/09/2007 Abandoned per Client instructions 04/05/2005
P023USDIV 34003.93	Closed	System and Method for Latching a Micro-Structure and a Process for Fabricating a Micro-Latching Structure	Geisberger	Filed: 07/02/2003 AppNo: 10/612473	Closed		
P024US 34003.45	US	System and Method for Robust and Efficient Resizing of Simple Polygons	Udeshi (972-792-1646)	Filed: 02/22/2002 AppNo: 10/080984	Granted	MAINTENANCE	Issued Patent Number: 6816170 Issue Date: 11/09/2004 1st Maintenance Fee due 05/09/2008
P025US 34003.46	US	System and Method for Gap Stabilization in Scanning Probe Microscopes	Baur	Filed: 06/27/2002 AppNo: 10/184181	Granted	MAINTENANCE	Issued Patent Number 6608307 Issue Date: 08/19/2003 1st Maintenance Fee due 02/19/2007
P026US 34003.47	US	Cascaded Bimorph Rotary Actuator (based off P017V1)	Sarkar, Geisberger (972-792-1650)	Filed: 06/05/2002 AppNo: 10/163331	Granted	MAINTENANCE	Issued Patent Number 6698201 Issue Date: 03/02/2004 1st Maintenance Fee due 09/02/2007
P027US 34003.48	US	System and Method for Microstructure Positioning Using Metal Yielding	Sarkar, Geisberger (972-792-1650)	Filed: 06/28/2002 AppNo: 10/184492	Granted	MAINTENANCE	Issued Patent Number: 6716764 Issue Date: 04/13/2004 1st Maintenance Fee due 10/13/2007
P028US 34003.49	US	System and Method for Fabricating Microcomponent Parts on a Substrate Having Pre-Fabricated Electronic Circuitry Thereon	Skidmore	Filed: 06/12/2002 AppNo: 10/167939	Granted	MAINTENANCE	Issued Patent Number 6762116 Issue Date: 07/13/2004 1st Maintenance Fee due 01/13/2008

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P029US 34003.50	Closed	System and Method for Modeling Fabrication	Randall		Closed		Closed per client
P030US 34003.51	US	Electrothermal Quadmorph Microactuator	Ellis (972-792-1614)	Filed: 01/31/2002 AppNo: 10061775	Granted	MAINTENANCE	Issued Patent Number: 6679055 Issue Date: 01/20/2004 1st Maintenance Fee due 07/20/2007
P031US 34003.52	Closed	Molecular Rotor	Zhang		Closed		Closed per client
P032US 34003.53	US	Efficient Data Structure	Parker, (Client) Appointed Contact: Udeshi - 972-792-1646	Filed: 11/27/2002 AppNo: 100308464 not scheduled for publication	Pending	DORMANT	Awaiting further office action
P033US 34003.54	US	Nano-Manipulation by Gyration	Stallcup II (972-792-1619), Baur	Filed: 10/07/2003 AppNo: 10680339	Granted	MAINTENANCE	Issued Patent Number: 6812460 Issue Date: 11/02/2004 1st Maintenance Fee due 05/02/2008
P034US 34003.55	US	System and Method for Picking and Placing of Nanoscale Objects Utilizing Differences in Chemical and Physical Binding Forces	Baur, Stallcup II (972-792-1619)	Filed: 10/10/2003 AppNo: 10684120 Published: 04/14/2005 PubNo: 20050077468	Granted	MAINTENANCE	Issued Patent Number: 6987277 Issue Date: 01/17/2006 1st Maintenance Fee due 01/17/2009
P035US 34003.56	US	Self-Actuating Connector for Coupling Microcomponents	Randall (972-792-1648), Ellis (972-792-1614)	Filed: 05/24/2002 AppNo: 10154685	Granted	MAINTENANCE	Issued Patent Number: 6837723 Issue Date: 01/04/2005 1st Maintenance Fee due 07/04/2008 Client does not wish to proceed with Divisional
P035USDIV 34003.99	Closed	Self-Actuating Connector for Coupling Microcomponents	Randall, Ellis		Closed		
P037US 34003.57	US	Directional Assembly of Carbon Nanotube Strings	Chen, Von Ehr II (972-792-1611)	Filed: 01/02/2002 AppNo: 10038102 Published: 12/25/2003 PubNo: 20030234465	Granted	MAINTENANCE	Issued Patent Number: 6887450 Issue Date: 05/03/2005 1st Maintenance Fee due 11/03/2008 Abandoned per Client instructions 07/16/2003
P037WO 34003.58	Closed	Directional Assembly of Carbon Nanotube Strings	Chen, Von Ehr II	Filed: 12/20/2002 AppNo: PCT/US02/40789 Published: 07/24/2003 PubNo: 2003060208	Closed		
P038US 34003.59	Closed	Microgripper Having Linearly Actuated Grasping Mechanisms	Ellis	Filed: 04/26/2002 AppNo: 10133936 Published: 10/30/2003 PubNo: 20030201654	Closed		Abandoned per Client instructions 11/29/2005
P039US 34003.60	US	Process for Fabricating Microcomponents that Enable Electrical Isolation	Skidmore, Magel, Roberts	Filed: 10/07/2002 AppNo: 10266724 not scheduled for publication	Pending	DORMANT	Awaiting further office action
P040US 34003.61	US	Microcomponent Having Intra-layer Electrical Isolation with Mechanical Robustness	Skidmore, Geisberger (972-792-1650), Ellis (972-792-1614)	Filed: 10/07/2002 AppNo: 10266726	Granted	MAINTENANCE	Patent Number: 6879016 Issue Date: 04/12/2005 1st Maintenance Fee due 10/12/2008
P041US 34003.62	Closed	Molecular Memory	Von Ehr II		Closed		Closed per client
V042.0 34003.68	Closed	System and Method for Dissolution of Nanotubes University of Pittsburgh	Chen, Liu	Filed: 05/02/2002 AppNo: 60377856	Closed		Filed as Utility Application

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P042US 34003.67	Closed	Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 09/24/2002 AppNo: 10/255122 Published: 02/19/2004 PubNo: 20040034177	Closed		Abandoned per Client
P042USCON 34003.118	US	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 07/20/2004 AppNo: 10/895161 Published: 12/30/2004 PubNo: 20040266939	Pending	DORMANT	Awaiting initial office action
P042CN 34003.63	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 04/29/2003 AppNo: 03136785.2 Published: 12/24/2003 PubNo: 1462767	Allowed	STABLE	Awaiting issued patent Annuity due 04/29/2007 Awaiting receipt for 2006 payment
P042EP 34003.64	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 05/01/2003 AppNo: 03252761.6 Published: 11/05/2003 PubNo: 1359121	Pending	STABLE	Awaiting further office action
P042JP 34003.65	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 05/02/2003 AppNo: 2003127132 Published: 01/09/2004 PubNo: 2004002850	Pending	DORMANT	Annuity due 05/01/2007 Awaiting annuity receipt for 2006
P042KR 34003.66	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen, Liu	Filed: 05/02/2003 AppNo: 200329184	Pending	DORMANT	Awaiting further office action
P042TW 34003.94	Closed	University of Pittsburgh Polymer and Method for Using the Polymer for Solubilizing Nanotubes	Chen	Filed: 07/10/2003 AppNo: TBD	Closed		Abandoned per Client instructions 08/18/2003
P043.0 34003.74	Closed	System and Method for Functionalization of Nanotube Surfaces	Chen, Liu, Weimer, Halls, Waldeck, Walker	Filed: 05/02/2002 AppNo: 60377920	Closed		Filed as Utility Application Awaiting corrected filing receipt
P043US 34003.73	US	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 12/13/2002 AppNo: 10/318730	Granted	MAINTENANCE	Patent Number: 6905667 Issued: 06/14/2005
P043USCON 34003.119	US	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 07/20/2004 AppNo: 10/894738 Published: 01/05/2006 PubNo: 20060002841	Pending	DORMANT	1st Maintenance Fee due 12/14/2008 Awaiting initial office action
P043CN 34003.69	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 04/29/2003 AppNo: 03136786.0 Published: 07/28/2004 PubNo: 1515598	Allowed	URGENT	Grant fee and annuity due 04/04/2006 - Awaiting client's instructions/authorization of budget estimate
P043EP 34003.70	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 05/01/2003 AppNo: 03252762.4 Published: 11/19/2003 PubNo: 1359169	Pending	STABLE	Awaiting further office action
P043JP 34003.71	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 05/02/2003 AppNo: 2003127114 Published: 01/09/2004 PubNo: 2004002849	Pending	DORMANT	Annuity due 05/01/2007 Awaiting annuity receipt for 2006
P043KR 34003.72	Foreign	University of Pittsburgh Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 05/02/2003 AppNo: 200329185	Pending	DORMANT	Awaiting further office action

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P0431W 34003.95	Closed	Polymer and Method for Using the Polymer for Noncovalently Functionalizing Nanotubes	Chen, Liu	Filed: 07/10/2003 AppNo: 92118896	Closed		Abandoned per Client instructions 08/18/2003
P044US 34003.75	US	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 06/17/2002 AppNo: 10/173543	Granted	MAINTENANCE	Issued Patent Number: 6881170 Issue Date: 05/10/2005
P044USCON 34003.121	US	Under Study with a Microscope	Dyer, Bray, Yu	Filed: 08/31/2004 AppNo: 10/831650 Published: 02/10/2005 PubNo: 20050079467	Allowed	DORMANT	1st Maintenance Fee due 11/10/2008 Awaiting further office action
P044WO 34003.76	Closed	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: PCT/US03/16750 Published: 12/24/2003 PubNo: 2003107066	Closed		Filed National Phase applications in China, Japan, S. Korea, Europe (DE, GB, FR)
P044CN 34003.136	Foreign	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 03814150.7 Published: 08/31/2005 PubNo: 1562839	Pending	DORMANT	Awaiting initial office action
P044EP 34003.137	Foreign	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 03734223.5 Published: 03/23/2005 PubNo: 1516220	Pending	CRITICAL	Annuity due 05/31/2006 - to be timely paid Response to Examination Report due 06/06/2006 - awaiting instructions/comments from client and budget approval
P044JP 34003.138	Foreign	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 2004513824 Published: 02/17/2005 PubNo: P200553031.1	Pending	CRITICAL	Request for Examination due 06/29/2006 - awaiting authorization from Client and approval of budget from Client
P044KR 34003.139	Foreign	Modular Manipulation System for Manipulating a Sample	Dyer, Bray, Yu	Filed: 05/29/2003 AppNo: 7020667/2004 Published: 03/07/2005 PubNo: 219902005	Pending	STABLE	Request for Examination due 05/29/2008
P045US 34003.80	US	Storing Mechanical Potential in a MEMS Device Using Mechanically Multi-Stable Mechanism	Geisberger (972-792-1650), Ellis (972-792-1614)	Filed: 09/10/2002 AppNo: 10/238319 not scheduled for publication	Granted	DORMANT	Patent Number: 7012491 Issue Date: 03/14/2006 Awaiting issued patent
V046US 34003.81	Closed	Laterally-Actuated Tunable Capacitor With Locking Mechanism	Goldsmith, Ellis, Geisberger, Nilsen	Filed: 07/08/2002 AppNo: 60/394451	Closed		Filed as Utility Application
P046US 34003.82	Closed	Laterally-Actuated Tunable Electronic Device	Goldsmith, Ellis, Geisberger, Nilsen	Filed: 12/03/2002 AppNo: 10/309326	Closed		Abandoned per Client instructions 05/18/2004
V047.0 34003.84	Closed	System and Method for Processing Data Stored in DAG Octree Data Structure	Parker, Udeshi		Closed		Closed per client
P047US - A 34003.83	US	System and Method for Processing DAG Octree	Parker, Udeshi (972-792-1646)	Filed: 10/31/2003 AppNo: 10/698178 Published: 06/10/2004 PubNo: 20040111406	Pending	DORMANT	Awaiting initial office action
P047WO - A 34003.130	Closed	System and Method for Processing DAG Octree	Parker, Udeshi	Filed: 10/27/2004 AppNo: PCT/US2004/25625 Published: 05/19/2005 PubNo: 2005045765	Closed		Abandoned per Client's instructions 01/23/2006
P047US - B 34003.100	US	Iso-surface Extraction Into Splat Hierarchy	Parker, Udeshi (972-792-1646)	Filed: 12/31/2003 AppNo: 10/749256 Published: 08/19/2004 PubNo: 20040162839	Pending	DORMANT	Awaiting initial office action

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P047WO - B 34003.141	Closed	Iso-surface Extraction into Splat Hierarchy	Parker, Udeshi (972-792-1646)	Filed: 12/30/2004 AppNo: PCT/US04/43833 Published: 07/21/2005 PubNo: 2005066901	Closed		Client authorized abandonment 10/31/2005
V048.0 34003.86	Closed	System and method for Cutting Tissues	Yu	Filed: 11/19/2002 AppNo: 60/427592	Closed		Client authorized abandonment 10/16/2003
P048US 34003.85	Closed	System and method for Cutting Tissues	Yu		Closed		Client authorized closure 10/16/2003
V049.0 34003.88	Closed	Tissue Micro-Chip	Yu	Filed: 11/19/2002 AppNo: 60/427621	Closed		Client authorized abandonment 10/16/2003
P049US 34003.87	Closed	Tissue Micro-Chip	Yu		Closed		Client authorized closure 10/16/2003
V050.0 34003.89	Closed	System for Manipulating a Sample Under Study with a Microscope	Khouri, Chiew, Yu, Kim, Baur, Stallcup II, Tham, Bray	Filed: 01/22/2003 AppNo: 60/441787	Closed		Client authorized abandonment 11/12/2003
P051US 34003.90	US	Electro-Thermal Scratch Drive Actuator	Sarker, Geisberger (972-792-1650), Ellis (972-792-1614)	Filed: 11/21/2003 AppNo: 10/719286	Granted	MAINTENANCE	Patent Number: 6877316 Issue Date: 04/12/2005
V052.0 34003.91	Closed	Method of Generating a Tetrahedral Mesh from Voxel Data	Udeshi	Filed: 11/26/2003 AppNo: 60/525425	Closed		1st Maintenance Fee due 10/12/2008 Abandoned per Client 10/11/2004 - no interest in utility or international filings
P053US 34003.92	US	Stiction Resistant Release Process	Gory (972-792-1674), Gnade, Mantiziba	Filed: 10/07/2003 AppNo: 10/680021 Published: 04/07/2005 PubNo: 20050074913	Pending	DORMANT	Awaiting further office action
V054.0 34003.79	Closed	Nanotube Polymer Composites and their Applications	Chen, Rajagopal	Filed: 05/22/2003 AppNo: 60/472820	Closed		Provisional expired PCT and Utility Application filed
P054US 34003.114	US	Nanomaterial Polymer Composites And Processes Therefor	Chen, Rajagopal	Filed: 05/21/2004 AppNo: 10/650721 publication delayed for security review	Pending	DORMANT	Awaiting initial office action
P054WO 34003.115	Closed	Nanocomposites and Method for Chen, Rajagopal Production	Chen, Rajagopal	Filed: 05/21/2004 AppNo: PCT/US04/16226 Published: 12/09/2004 PubNo: 2004/106420	Closed		Filed National Phase Applications in China, Japan, Korea and United Kingdom
P054CN 34003.170	Foreign	Nanocomposites and Method for Chen, Rajagopal Production	Chen, Rajagopal	Filed: 05/21/2004 AppNo: 200408018160.3	Pending	CRITICAL	Petition for Examination due 05/22/2006 - awaiting authorization to proceed and approval of budget
P054JP 34003.171	Foreign	Nanocomposites and Method for Chen, Rajagopal Production	Chen, Rajagopal	Filed: 05/21/2004 AppNo: TBD	Pending	STABLE	Awaiting filing receipt Petition for Examination due 05/21/2007
P054KR 34003.172	Foreign	Nanocomposites and Method for Chen, Rajagopal Production	Chen, Rajagopal	Filed: 05/21/2004 AppNo: 7022277/2005	Pending	DORMANT	Request for Examination due 05/21/2009

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P054UK 34003.173	Foreign	Nanocomposites and Method for Production	Chen, Rajagopal	Filed: 05/21/2004 AppNo: 0523751.6	Pending	DORMANT	Awaiting initial office action
P055US 34003.77	US	Microcomponent Interconnection Utilizing Post-Assembly Activation	Nilsen, Ellis (972-792-1614), Goldsmith, Lee, Huang, Nallani, Kim, Skidmore	Filed: 07/10/2003 AppNo: 10/616735 not scheduled for publication	Pending	DORMANT	Awaiting further office action
P056US 34003.96	US	MEMS Device Having Compact Actuator	Sarkar, Geisberger (972-792-1650)	Filed: 01/22/2004 AppNo: 10/762848 Published: 07/28/2005 PubNo: 20050161751	Pending	URGENT	Restriction/Election Response due 04/08/2006 - awaiting instructions/comments from Client and budget approval.
P057US 34003.97	Closed	Thermal Plastic Deformation Of RF Mem's Devices	Sarkar, Geisberger	Filed: 05/20/2004 AppNo: 10/850904	Closed		Abandoned per Client instructions 11/28/2005
P058US 34003.98	Closed	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis, Geisberger, Tuck, Bray, Chiew, Folaron	Filed: 09/23/2003 AppNo: 60/505026	Closed		Provisional expired PCT and Utility Application filed
P058US 34003.122	US	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	Filed: 09/23/2004 AppNo: 10/948385 Published: 08/18/2005 PubNo: 20050178980	Pending	CRITICAL	Response to Office Action due 06/24/2006 -Awaiting instructions/comments from Client/inventorand awaiting budget approval
P058WO 34003.123	Foreign	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	Filed: 09/23/2004 AppNo: PCT/US04/31482 Published: 04/07/2005 PubNo: 2005031789	Pending	STABLE	National Phase Chapter II due 03/23/2006 - national cases to be timely filed in China, Europe (GB, DE, FR), Japan and S. Korea.
P058CN 34003.175	Foreign	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	...	Disclosure		to be timely filed
P058EP 34003.176	Foreign	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	...	Disclosure		to be timely filed
P058JP 34003.177	Foreign	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	...	Disclosure		to be timely filed
P058KR 34003.178	Foreign	Method, System and Device for Microscope Examination Employing Fib-Prepared Sample Grasping Element	Skidmore, Ellis (972-792-1614), Geisberger (972-792-1650), Tuck (972-792-1604), Bray, Folaron	...	Disclosure		to be timely filed

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P059US 34003.101	US	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650), Skidmore	Filed: 02/13/2004 AppNo: 10778460 Published: 08/18/2005 PubNo: 20050181658	Granted	MAINTENANCE	Issued Patent Number: 6923659 Issued: 08/02/2005 1st Maintenance Fee due 02/02/2009
P059USCIP 34003.148	US	Sockets for Microassembly	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 03/08/2005 AppNo: 11074448 Published: 09/18/2005 PubNo: 20050181636	Allowed	DORMANT	Awaiting issued patent
P059CN 34003.149	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650), Skidmore	Filed: 02/07/2005 AppNo: 200510062813.4 Published: 08/17/2005 PubNo: 1654310	Pending	STABLE	Request for Examination due 02/13/2007
P059EP 34003.150	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650), Skidmore	Filed: 02/10/2005 AppNo: 05002767.1 Published: 08/17/2005 PubNo: 1564183	Pending	STABLE	Annuity due 02/28/2007 Awaiting initial office action
P059JP 34003.151	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650), Skidmore	Filed: 02/14/2005 AppNo: 200535386	Pending	STABLE	Request for Examination due 02/14/2008
P059KR 34003.152	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650), Skidmore	Filed: 02/11/2005 AppNo: 0011600/2005	Pending	STABLE	Request for Examination due 02/11/2010
P059NCIP 34003.179	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 03/08/2006 AppNo: tba	Pending	STABLE	Awaiting filing receipt Request for Examination due 03/08/2009
P059PCIP 34003.180	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 03/08/2006 AppNo: tba	Pending	STABLE	Awaiting filing receipt
P059PCIP 34003.181	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 03/08/2006 AppNo: 2006-062097	Pending	STABLE	Awaiting filing receipt Request for Examination due 03/08/2009
P059RCIP 34003.182	Foreign	Mems Microconnectors and Non-Powered Microassembly Therewith	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 03/08/2006 AppNo: tba	Pending	STABLE	Awaiting filing receipt Request for Examination due 03/08/2011
V060US 34003.103	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/20/2004 AppNo: 60546352	Closed		Filed Utility and International applications (US, CN, EP, JP, KR, and TW)
P060US 34003.129	US	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/18/2005 AppNo: 11/061076 Published: 08/25/2005 PubNo: 20050184623	Pending	STABLE	Response to office action due 03/19/2005 - instructions for response and budget received 03/13/2006
P060CN 34003.124	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/18/2005 AppNo: 200510009393.3 Published: 09/28/2005 PubNo: 1673067	Closed		Abandoned per Client instructions 11/29/2005

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P060EP 34003.125	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/09/2005 AppNo: 05250932.2 Published: 09/14/2005 PubNo: 1574282	Closed		Abandoned per Client Instructions 11/29/2005
P060JP 34003.126	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/12/2005 AppNo: 200543485	Closed		Abandoned per Client Instructions 11/29/2005
P060KR 34003.127	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/18/2005 AppNo: 00134962005	Closed		Abandoned per Client Instructions 11/29/2005
P060TW 34003.128	Closed	Positioning Device for Microscopic Motion	Baur, Bray	Filed: 02/05/2005 AppNo: 94104097 Published: 09/16/2005 PubNo: 200531420	Closed		Abandoned per Client Instructions 11/29/2005
P061US 34003.104	US	Thermal Interface Incorporating Nanotubes	Von Ehr II (972-792-1611)	Filed: 10/15/2004 AppNo: 10967002	Pending	STABLE	Awaiting initial office action
P061CN 34003.168	Foreign	Thermal Interface Incorporating Nanotubes	Von Ehr II (972-792-1611)	Filed: 10/14/2005 AppNo: TBD	Pending	DORMANT	Awaiting filing receipt; Request for Examination due 10/15/2007
P061TW 34003.169	Foreign	Thermal Interface Incorporating Nanotubes	Von Ehr II (972-792-1611)	Filed: 10/17/2005 AppNo: 94135572	Pending	DORMANT	Request for Examination due 10/12/2008
V062US 34003.105	Closed	Simple Diamond Mechanosynthesis Tool and its Method of Manufacture	Freitas	Filed: 02/11/2004 AppNo: 60543802	Closed		Utility Application filed/No foreign per Client Assignment not received from Inventor
P062US 34003.153	US	Simple Tool For Positional Diamond Mechanosynthesis, And Its Method Of Manufacture	Freitas	Filed: 02/11/2005 AppNo: 11056567 not scheduled for publication	Pending	DELAY	Awaiting initial Office action; Awaiting documents from Client for IDS - reminder to Client sent 02/16/2006
V063US 34003.106	Closed	No Impulse Piezo Driven Rotary Motor	Bray	Filed: 06/03/2004 AppNo: 60576555	Closed		Abandoned per Client 03/2005
P064US 34003.107	US	Polymers For Enhanced Solubility Of Nanomaterials, Compositions And Methods Therefor	Ait-Haddou (972-792-1636), Rutkowski (972-792-1634)	Filed: 08/18/2004 AppNo: 10920877 Published: 02/23/06 PubNo: 20060041104	Pending	DORMANT	Awaiting further office action
P065US 31144.7	US	System and Method for Interfacing Cellular Matter with a Machine	Caulier (972-883-2436), Nilsen (214-405-0524)	Filed: 12/19/2003 AppNo: 10741136 Published: 06/23/2005 PubNo: 20050137652	Pending	DORMANT	Awaiting initial office action
V066US 34003.109	Closed	Methods For The Synthesis Of Modular Poly (Phenyleneethynyls) And Fine Tuning The Electronic Properties Thereof For The Functionalization Of Nanomaterials	Ait-Haddou (X236), Rutkowski (X234)	Filed: 04/13/2004 AppNo: 60561562	Closed		Utility and PCT filed 04/13/2005
P066US 34003.163	US	Methods For The Synthesis Of Modular Poly (Phenyleneethynyls) And Fine Tuning The Electronic Properties Thereof For The Functionalization Of Nanomaterials	Ait-Haddou (972-792-1636), Rutkowski (972-792-1634)	Filed: 04/13/2005 AppNo: 11105078 publication scheduled for 03/16/2006	Pending	DORMANT	Awaiting initial Office Action

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P066WO 34003.159	Foreign	Methods For The Synthesis Of Modular Poly (Phenyleneethynylenes) And Fine Tuning The Electronic Properties Thereof For The Functionalization Of Nanomaterials	Ali-Haddou (972-792-1636), Rutkofsky (972-792-1634)	Filed: 04/13/2005 AppNo: PCT/US0512717 Published: 10/27/2005 PubNo: 2005100466	Pending	STABLE	Awaiting International Preliminary Report on Patentability National Phase Chapter II due 10/13/2006
P067US 34003.110	US	Compact Microcolumn For Automated Assembly	Saini (972-792-1666), Jandric (972-792-1612)	Filed: 03/12/2004 AppNo: 10/799836 Published: 09/15/2005 PubNo: 20050195821	Allowed	DORMANT	Awaiting issued Patent Awaiting Acceptance of 2nd 312 Amendments
P067USCIP 34003.120	US	MEMS Based Charged Particle Deflector Design	Saini (972-792-1666), Jandric (972-792-1612), Tuggle	Filed: 11/72/2004 AppNo: 10/987871 Published: 09/15/2005 PubNo: 20050199822	Granted	MAINTENANCE	Issued Patent Number: 6956219 Issued: 10/18/2005 1st Maintenance Fee due 04/18/2009
P068US 34003.111	US	Polymerization from the surface of CN's-PPE platform (the grafting form approach): Preparation of Nanocomposites	Ali-Haddou (972-792-1636), Rutkofsky (972-792-1634)		Disclosure	STABLE	Released from ON HOLD status 02/28/2006 Application in preparation
P069US 34003.112	Closed	Automated And Semi-Automated Probing In A Charged Particle Beam Device	Stallcup II, Baur, Folaron, Nelson, Bray, Foster	Filed: 02/23/2004 AppNo: 60/546840	Closed		Filed Utilities and International applications (US, CN, EP, JP, KR)
P069US-A 34003.140	US	Charged Particle Beam Device Probe Operation	Stallcup II (972-792-1619), Baur, Folaron, Nelson (972-792-1651), Foster, Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 11/064127 publication delayed for pre-exam review	Pending	DORMANT	Awaiting initial Office Action
P069US-B 34003.154	US	Probe Current Imaging	Baur, Stallcup II (972-792-1619)	Filed: 02/23/2005 AppNo: 11/063692 Published: 08/25/2005 PubNo: 20050184236	Pending	DORMANT	Awaiting initial Office Action
P069US-C 34003.155	US	Probe Tip Processing	Baur, Stallcup II (972-792-1619), Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 11/064131 Published: 08/25/2005 PubNo: 20050184028	Pending	DORMANT	Awaiting initial Office Action
P069CN 34003.143	Foreign	Automated And Semi-Automated Probing In A Charged Particle Beam Device	Stallcup II (972-792-1619), Baur, Folaron, Nelson (972-792-1651), Foster, Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 200510078348.3 Published: 11/16/2005 PubNo: 1696652	Pending	STABLE	Petition for Examination due 02/23/2007
P069EP 34003.144	Foreign	Automated And Semi-Automated Probing In A Charged Particle Beam Device	Stallcup II (972-792-1619), Baur, Folaron, Nelson (972-792-1651), Foster, Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 05251070.8 Published: 08/24/2005 PubNo: 1566647	Pending	STABLE	Annuity due 02/23/2007 Awaiting initial office action Dave Hofman reviewing claim set for possible future amendments prior to March 31, 2006

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P069JP 34003.145	Foreign	Automated And Semi-Automated Probing In A Charged Particle Beam Device	Stallcup II (972-792-1619), Baur, Folaron, Nelson (972-792-1651), Foster, Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 200546523 Published: 09/15/2005 PubNo: P2005251745	Pending	STABLE	Petition for Examination due 02/23/2008
P069KR 34003.146	Foreign	Automated And Semi-Automated Probing In A Charged Particle Beam Device	Stallcup II (972-792-1619), Baur, Folaron, Nelson (972-792-1651), Foster, Hartman (972-792-2878)	Filed: 02/23/2005 AppNo: 0149902005	Pending	STABLE	Petition for Examination due 02/23/2010
P070US 34003.113	Closed	Patterned Atomic Layer Epitaxy	Randall, Peng, Liu, Skidmore, Baur, Stallcup II, Folaron	Filed: 03/26/2004 AppNo: 60/556614	Closed		Utility filed 03/25/2005 No foreign, per Client
P070US 34003.157	US	Patterned Atomic Layer Epitaxy	Randall (972-792-1648), Peng (972-792-1602), Lu, Skidmore, Baur, Stallcup II (972-792-1619), Folaron	Filed: 03/25/2005 AppNo: 11/089814 Published: 10/13/2005 PubNo: 20050223968	Pending	DORMANT	Awaiting initial Office action
P071US 34003.116	Closed	Calibration Systems and Techniques for Automated Microassembly	Tsui, Geisberger	Filed: 06/25/2004 AppNo: 60/583272	Closed		Filed as Utility 07/06/2004 International filing not available
P071US 34003.117	US	Calibration Systems and Techniques for Automated Microassembly	Tsui (972-792-1662), Geisberger (972-792-1650)	Filed: 07/06/2004 AppNo: 10/684904 Published: 01/12/2006 PubNo: 20060005602	Pending	STABLE	Response to Office Action due 05/01/2006 - received authorization and budget approval 02/15/2006
P072US 34003.131	Closed	Methods For The Synthesis Of Modular Poly (Phenyleneethylenes) And Fine Tuning The Electronic Properties Thereof For The Functionalization Of	Alt-Haddou	---	Closed		Closed per Client 06/30/2005
P073US 34003.156	US	Apparatus And Methods Of Manufacturing And Assembling Microscale And Nanoscale Components And Assemblies	Nolan (972-792-1629)	Filed: 05/18/2005 AppNo: 11/131760 publication scheduled for 09/18/2006	Pending	CRITICAL	Awaiting initial Office Action, International Filing due 05/18/2006
P074US 34003.158	US	Nanoprobng, Nanopositioning, and Nanomanipulation on a Chip	Sarkar	---	Disclosure	DELAY	Application draft in review by inventor.
P075US 34003.164	US	Multifunctional CNT/Polymer Complex Composites	Chen, Balasubramaniyam (334-332-9872), Patel (972-792-1610)	---	Disclosure	STABLE	Released from ON HOLD status 02/28/2006 Application in preparation

Reference Numbers	Type	Title	Inventor(s)	Filing and Publication Information	Status	Deadline Review	Status Information
P076US 34003 183	US	Mass Spec Apparatus	Verbeck (972-792-XXXX)	—	Disclosure	STABLE	Application in preparation
PXXXUS 34003 147	US	4 DOF Actuator	Unknown	—	Closed		Closed per client - application opened and closed before "p" number assigned
G001US 34003 108	Closed	THIRD PARTY PRIOR ART SUBMISSION: Bistable Microelectromechanical System Based Structures, Systems and Methods	—	Filed: 05/10/2002 AppNo: 10/063762 Published: 11/13/2003 PubNo: 20030210115	Closed		3rd Party Prior Art Submission filed 01/06/2004 Noted as received by the USPTO

EXHIBIT C

Trademarks

Description

Registration/
Application
Number

Registration/
Application
Date

See Attached

Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
US	ASSEMBLING TOMORROW K001US (34007.3)	75/538,844 2,279,370	08/19/1998 09/21/1999	9	Computer software for molecular modeling; computer aided design and computer aided manufacturing all in the field of nanotechnology.	REGISTERED 09/21/2009 - Renewal Due.
US	KENITERA K026US (34007.48)					ABANDONED 04/27/2005 - Per client instructions.
US	MECHTILE K023US (34007.44)	78/319671	10/28/2003	9, 42	Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblers; nanoscale assemblers; macroscale assemblers; nanotechnology research tools and nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, clamps, nanomechanical probes, probes, actuators and related attachments for microscopes, and nanomanipulators; microassembly systems comprised of mechanisms for grasping, rotating, moving and assembling microscale components for microelectromechanical systems fabrication. (Class 9) Custom manufacture of nanotechnology components, assemblers and nano, macro and micro devices for others. Class 40)	PENDING 04/11/2006 - Awaiting acceptance of Statement of Use.
US	MEMULATOR K012US (34007.4)	76/357,953 2,952,239	01/11/2002 05/17/2005	9	Providing information via the Internet on the subject of nanotechnology; design and testing for new product development; design for others in the field of nanotechnology; research and development for new products for others in the field of nanotechnology; scientific research; technical consultation and research in the field of nanotechnology; scientific research and development for others in the field of nanotechnology; design for others in the field of nanotechnology components, assemblers and nano, macro and micro devices. (Class 42)	REGISTERED 05/17/2010 - 05/17/2011 - Section 8 & 15 due. 05/17/2015 - Section 8 & 9 renewal due.

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Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
US	MISCELLANEOUS DESIGN K018US (34007 21)	76/450,096 2,885,672	9/16/2002 09/21/2004	16, 40, 41 & 42	Printed matter namely, papers, articles and books in the field of nanotechnology (Class 16); Custom manufacture of nanotechnology components, assemblies and nano, macro and micro devices for others (Class 40); Development and dissemination of educational materials for others in the field of nanotechnology; electronic publishing services, namely, publication of text and graphic works of others via the Internet featuring information in the field of nanotechnology (Class 41) Providing information via the Internet on the subject of nanotechnology; design and testing for new product development; design for others in the field of nanotechnology; research and development for new products for others; scientific research, technical consultation and research in the field of nanotechnology; scientific research and development of equipment, processes, and applications for others in the field of nanotechnology; design and construction of nanotechnology components, assemblies and nano, macro and micro devices (Class 42)	REGISTERED 09/21/2009 - 09/21/2010 Section 8 & 15 due. 09/21/2014 Section 8 & 9 Renewal due.
US	MISCELLANEOUS DESIGN K019US (34007 20)	76/449,954	9/16/2002	9 & 42	Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools and nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, clamps, nanomechanical probes, probes, actuators and related attachments for microscopes, and nanomanipulators; microassembly systems comprised of mechanisms for grasping, rotating, moving and assembling microscale components for microelectromechanical systems fabrication (Class 9); Design and testing of new products for others; licensing of intellectual property; development of new technology for others in the field of nanotechnology (Class 42)	ALLOWED 05/01/2006 - Awaiting Certificate of Registration.
US	NANOCONECTOR K014US (34007 5)	76/449,950	9/16/2002	9	Nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials	ABANDONED 07/23/2003 - Abandoned per Client instructions.
US	NANOEFFECTOR K015US (34007 6)	76/449,952 2,981,400	09/16/2002 08/02/2005	9	Nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, micromechanical probes, probes.	REGISTERED 08/02/2010 - 08/02/2011 - Section 8 & 15 due.
US	NANOLOCK K030US (34007 51)	78/657,285	6/23/2005	9	Nanoscale assemblies, mezoscale assemblies, and microscale assemblies; nanoassembly systems, mezoassembly systems, and microassembly systems comprised of mechanisms for grasping, rotating, moving, attaching, and assembling nanoscale, mezoscale, and microscale components for nanoelectromechanical, mezelectromechanical, and microelectromechanical systems fabrication; nanotechnology devices for the manipulation, fabrication, or characterization of nanotechnology materials, namely actuators, grippers, clamps, and probes; mezoscale, microscale, and nanoscale instrumentation and equipment for measuring, processing, fabricating, or characterizing mezoscale, microscale, nanoscale, molecularscale, and atomicscale components, materials, or mechanisms, including mini mass spectrometers, mini scanning electronic microscopes (SEMs), mini-neutron-generators, and mini materials characterization systems.	PENDING 07/26/2006 - Response to Office Action due

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Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
US	NANOSOLVE K025US (34007.46)	76/440,733 3,034,173	6/24/2004 12/27/2005	1	Chemical additives and enhanced materials applied to nanotubes, nanoparticles, carbon or boron nitride fibers, carbon or boron nitride ropes, carbon or boron nitride ribbons, carbon or boron nitride fibrils, carbon or boron nitride needles, graphite platelets, nanodots, other fullerene materials, and host materials or solvents; chemical preparations for use with commercial polymers for use in the manufacture or production of a wide variety of goods; processed, functionalized, or enhanced nanotubes, nanoparticles, carbon or boron nitride fibers, carbon or boron nitride ropes, carbon or boron nitride ribbons, carbon or boron nitride fibrils, carbon or boron nitride needles, graphite platelets, nanodots, all for use in the manufacture or production of a wide variety of goods.	REGISTERED 12/27/2010 - 12/27/2011 - Section 8 & 15 due.
US	NANOWORKS K013US (34007.10)	76/449,951 2,926,622	09/16/2002 02/15/2005	9	Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools, namely grippers, clamps, nanomechanical probes, probes, actuators positioners, drivers and related attachments and tools for microscopes, and nanomanipulators.	REGISTERED 02/15/2010 - 02/15/2011 - Section 8 & 15 due. 02/15/2015 - Section 8 & 9 renewal due.
US	PROMAS K028US (34007.49)	...	...	...	...	ABANDONED 04/27/2005 - Per client instructions.
US	PROVIDING NANOTECHNOLOGY SOLUTIONS - TODAY K029US (34007.50)	76/539,438	12/29/2004	1,9	Chemical additives and enhanced materials applied to nanotubes, nanoparticles, carbon or boron nitride fibers, carbon or boron nitride ropes, carbon or boron nitride ribbons, carbon or boron nitride fibrils, carbon or boron nitride needles, graphite platelets, nanodots, other fullerene materials, and host materials or solvents; chemical preparations for use with commercial polymers for use in the manufacture or production of a wide variety of goods; processed, functionalized, or enhanced nanotubes, nanoparticles, carbon or boron nitride fibers, carbon or boron nitride ropes, carbon or boron nitride ribbons, carbon or boron nitride fibrils, carbon or boron nitride needles, graphite platelets, nanodots, other fullerene materials, and for use in the manufacture or production of a wide variety of goods. (Class 1); Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanomanipulators; nanotechnology research tools and nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, clamps, micromechanical probes, nanomechanical probes, probes, actuators, positioners, drivers, and related attachments and tools for microscopes and nanomanipulators; microassembly systems, and nanoassembly systems comprised of mechanisms for grasping, rotating, moving and assembling microscale and noscale components for microelectromechanical systems fabrication and assembly. (Class 9)	PENDING 07/08/2006 - Awaiting Office Action.
US	ROTAPOD (34007.11)	K003US 75/910,497	1/28/2000	9	Mechanism for grasping, rotating, moving, and assembling nanotechnology components	ABANDONED 02/17/2004 - Abandoned per Client instructions.

Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
US	SNAP-STAK K024US (34007.45)	78/338682	12/10/2003	9	Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools and nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, clamps, micromechanical probes, nanomechanical probes, probes, actuators, positioners, drivers, and related attachments and tools for microscopes, and nanomanipulators; microassembly systems, and nanoassembly systems comprised of mechanisms for grasping, rotating, moving and assembling microscale and nanoscale components for microelectromechanical systems fabrication and assembly	ABANDONED 01/18/2005 - Abandoned per Client instructions.
US	ZYBOT K004US (34007.13)	75/910,520	1/28/2000	9	Robots for use in the field of nanotechnology	ABANDONED 02/17/2004 - Abandoned per Client instructions.
US	ZYMA K006US (34007.14)	76/268,722	6/6/2001	9	Computer software for molecular modeling, computer aided design and computer aided manufacturing all in the field of nanotechnology	ABANDONED 02/08/2004 - Abandoned per Client instructions.
US	ZYMA K022US (34007.43)	76/268,722	6/6/2001	9	Computer software for molecular modeling, computer aided design and computer aided manufacturing	ABANDONED Abandoned per client instructions.
US	ZYRIC K005US (34007.15)	76/268,721	6/6/2001	9	Computer software for molecular modeling, computer aided design and computer aided manufacturing all in the field of nanotechnology	ABANDONED 07/23/2003 - Abandoned per Client instructions.
US	ZYVEX K000US (34007.16)	75/538,845 2,281,503	08/19/1998 09/28/1999	9	Computer software for molecular modeling, computer aided design and computer aided manufacturing all in the field of nanotechnology	REGISTERED 09/28/2009 - Renewal due.
US	ZYVEX and Design K002US (34007.17)	75/622,594 2,474,096	01/14/1999 07/31/2001	9 & 41	Computer software for molecular modeling, computer aided design and computer aided manufacturing all in the field of nanotechnology (Class 9); scientific research and development for others in the field of nanotechnology (Class 42)	REGISTERED 07/31/2006-07/31/2007 Section 8 & 15 due.
US	ZYVEX K016US (34007.18)	76/449,953 2,854,635	09/16/2002 06/15/2004	9 & 42	Laboratory robots for use in the field of nanotechnology; mechanisms for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools and nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials, namely grippers, clamps, micromechanical probes, nanomechanical probes, probes, actuators, positioners, drivers, and related attachments and tools for microscopes, and nanomanipulators; microassembly systems comprised of mechanisms for grasping, rotating, moving and assembling microscale and nanoscale components for microelectromechanical systems fabrication and assembly (Class 9); Design and testing of new products for others; licensing of intellectual property, development of new technology for others in the field of nanotechnology (Class 42)	REGISTERED 06/15/2009 - 06/15/2010 Section 8 & 15 due. 06/15/2014 - Section 8 & 9 renewal due.

Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
US	ZVEX K017US (34007.19)	76/450,097 2,859,445	09/16/2002 07/06/2004	16, 40, 41 & 42	Printed matter namely, papers, articles and books in the field of nanotechnology (Class 16). Custom manufacture of nanotechnology components, assemblies and nano, macro and micro devices for others (Class 40). Development and dissemination of educational materials for others in the field of nanotechnology; electronic publishing services, namely, publication of text and graphic works of others via the Internet featuring information in the field of nanotechnology (Class 41). Providing information via the Internet on the subject of nanotechnology; design and testing for new product development; design for others in the field of nanotechnology; research and development for new products for others; scientific research; technical consultation and research in the field of nanotechnology; scientific research and development of equipment, processes, and applications for others in the field of nanotechnology; design of nanotechnology components, assemblies and nano, macro and micro devices (Class 42)	REGISTERED 07/06/2009 - 07/06/2010 - Section 8 & 15 due. 07/06/2014 Section 8 & 9 renewal due.
China	MISCELLANEOUS DESIGN K018CN16 (34007.27)	3488483 3488483	03/17/2003 12/29/2004	16	Printed matter, namely, papers, articles, and books in the field of nanotechnology	REGISTERED 12/28/2007 - Proof of Use due. 12/27/2014 - Renewal due.
China	MISCELLANEOUS DESIGN K018CN41 (34007.28)	3488482 3488482	03/17/2003 08/29/2004	41	Development and dissemination of educational materials for others in the field of nanotechnology; on-line publication of information in the field of nanotechnology; electronic publishing services, namely, publication of text and graphic works of others in the field of nanotechnology via the Internet	REGISTERED 08/28/2007 - Proof of Use due. 08/27/2014 - Renewal due.
China	MISCELLANEOUS DESIGN K018CN42 (34007.29)	3488581 3488581	03/17/2003 02/07/2005	42	Design and testing for new product development; design for others in the field of nanotechnology; research and development for new products for others; scientific research; technical consultation and research in the field of nanotechnology; scientific research and development for others in the field of nanotechnology; design and construction of nanotechnology components, assemblies and nano and macro devices	REGISTERED 02/07/2008 - Proof of Use due. 02/06/2015 - Renewal due.
China	MISCELLANEOUS DESIGN K019CN42 (34007.38)	3488484 3488484	3/17/2003 02/07/2005	42	Design and testing of new products for others; licensing of intellectual property; development of new technology for others in the field of nanotechnology	REGISTERED 02/07/2008 - Proof of Use due. 02/06/2015 - Renewal due.
China	MISCELLANEOUS DESIGN K019CN9 (34007.26)	3488485 3488485	3/17/2003 08/07/2004	9	Robots for use in the field of nanotechnology; mechanism for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools; microassembly systems for MEMS (microelectromechanical systems) fabrication; nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials	REGISTERED 08/06/2007 - Proof of Use due. 08/06/2014 - Renewal due.
China	ZVEX K000CN (34007.36)	3488580 3488580	03/17/2003 08/07/2004	9	Computer software for molecular modeling; computer aided design and computer aided manufacturing all in the field of nanotechnology	REGISTERED 08/07/2007 - Proof of Use due. 08/06/2014 - Renewal due.
China	ZVEX K016CN42 (34007.37)	3488578 3488578	03/17/2003 01/28/2005	42	Design and testing of new products for others; licensing of intellectual property; development of new technology for others in the field of nanotechnology	REGISTERED 01/28/2008 - Proof of Use due. 01/27/2015 - Renewal due.

Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
China	ZVEX K016CN9 (34007.22)	3488579 3488579	03/17/2003 08/07/2004	9	Robots for use in the field of nanotechnology; mechanism for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools; microassembly systems for MEMS (microelectromechanical systems) fabrication; nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials	REGISTERED 08/07/2007 - Proof of Use due. 08/06/2014 - Renewal due.
China	ZVEX K017CN16 (34007.23)	3488577 3488577	03/17/2003 01/28/2005	16	Printed matter, namely, papers, articles, and books in the field of nanotechnology	REGISTERED 01/28/2008 - Proof of Use due.
China	ZVEX K017CN41 (34007.24)	3488576 3488576	3/17/2003 08/28/2004	41	Development and dissemination of educational materials for others in the field of nanotechnology; on-line publication of information in the field of nanotechnology; electronic publishing services, namely, publication of text and graphic works of others in the field of nanotechnology via the Internet	REGISTERED 08/28/2007 - Proof of Use due. 08/27/2014 - Renewal due.
China	ZVEX K017CN42 (34007.25)	3488575 3488575	03/17/2003 01/28/2005	42	Design and testing of new product development; design for others in the field of nanotechnology; research and development for new products for others; scientific research; technical consultation and research in the field of nanotechnology; scientific research and development for others in the field of nanotechnology; design and construction of nanotechnology components, assemblies and nano and macro devices	REGISTERED 01/28/2008 - Proof of Use due. 01/27/2015 - Renewal due.
CTM	MISCELLANEOUS DESIGN K021EU (34007.35)	3074424 3074424	02/27/2003 06/08/2004	9, 16, 40, 41, 42	Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), life-saving and teaching apparatus and instruments; robots for use in the field of nanotechnology; mechanism for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools; microassembly systems for MEMS (microelectromechanical systems) fabrication; nanotechnology equipment and attachments to same for manipulation and/or characterization or nanotechnology materials; computer hardware and software including computer software for molecular modeling, computer aided design and computer aided manufacturing all in the field of nanotechnology (Class 9); Printed matter, including, papers, articles and books in the field of nanotechnology; instructional and teaching materials (except apparatus); photographs, paper, cardboard and goods made from these materials and not included in other classes (Class 16); Custom assembling of nanotechnology	REGISTERED 02/27/2013 - Renewal due.

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Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
CTM	ZVEX K020EU (34007.34)	3074606 3074606	02/27/2003 09/27/2004	9, 16, 41, 42	Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), life-saving and teaching apparatus and instruments; robots for use in the field of nanotechnology; mechanism for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools; microassembly systems for MEMS (microelectromechanical systems) fabrication; nanotechnology equipment and attachments to same for manipulation and/or characterization or nanotechnology materials; computer hardware and software including computer software for molecular modeling; computer aided design and computer aided manufacturing all in the field of nanotechnology (Class 9); Printed matter, including, papers, articles and books in the field of nanotechnology; instructional and teaching materials (except apparatus); photographs; paper, cardboard and goods made from these materials and not included in other classes (Class 16); education and training services, including development and dissemination of educational materials for others in the field of nanotechnology, on-line publication, including on-line publication of information in the field of nanotechnology; electronic publishing services, including electronic publication of text and graphic works of others in the field of nanotechnology via the Internet (Class 41); Scientific and technology services and research and design relating thereto; design and testing of new products for others; design and testing of new product development; design for others in the field of nanotechnology; research and development of new technology for others in the field of nanotechnology; technical consultation and research in the field of nanotechnology; scientific research and development for others in the field of nanotechnology; design and construction of nanotechnology components, assemblies, and nano, macro and micro devices; licensing of intellectual property (Class 42)	REGISTERED 09/27/2009 - Proof of Use due 02/27/2013 - Renewal due

Country	Mark/File No.	App. No./ Reg. No.	App. Date/ Reg. Date	Class(es)	Goods/Services	Status
Japan	MISCELLANEOUS DESIGN KO18JP (34007.33)	2003-018.982 4773724	03/11/2003 05/28/2004	16, 41, 42	Printed matter, namely, papers, articles, and books in the field of nanotechnology (Class 16); Development and dissemination of educational materials for others in the field of nanotechnology, on-line publication of information in the field of nanotechnology; electronic publishing services, namely, publication of text and graphic works of others in the field of nanotechnology via the Internet (Class 41); Design and testing for new product development; design for others in the field of nanotechnology; research and development for new products for others; scientific research; technical consultation and research in the field of nanotechnology; scientific research and development for others in the field of nanotechnology; design and construction of nanotechnology components, assemblies and nano and macro devices (Class 42)	REGISTERED 05/28/2014 - Renewal due.
Japan	MISCELLANEOUS DESIGN KO19JP (34007.32)	2003-018.981 4835317	03/11/2003 01/28/2005	7, 9, 42	Robots for industry for nanoscale or microscale super precision working and their parts/fittings; remote control type manipulators for industry for nanoscale or microscale super precision working and their parts/fittings; nanoscale or microscale super precision semiconductor manufacturing apparatus and their parts/fittings; nanoscale or microscale super precision electric/electronic parts manufacturing apparatus and their parts/fittings (Class 7); Robots for use in the field of nanotechnology; mechanism for grasping, rotating, moving and assembling nanotechnology components; microscale assemblies; nanoscale assemblies; macroscale assemblies; nanotechnology research tools; microassembly systems for MEMS (microelectromechanical systems) fabrication; nanotechnology equipment and attachments to same for manipulation and/or characterization of nanotechnology materials (Class 9); Design and testing of new products for others; licensing of intellectual property; development of new technology for others in the field of nanotechnology (Class 42)	REGISTERED 01/28/2008 - Proof of Use due. 01/28/2015 - Renewal due.
Japan	ZYVEX KO00JP (34007.30)	2003-018.979	3/11/2003	9	Computer software for molecular modeling; computer aided design and computer aided manufacturing all in the field of nanotechnology; other electronic machines/instruments and their parts/fittings; electrical communication apparatus/instruments; electronic publications	ABANDONED 12/04/2003 - Client authorized abandonment.
Japan	ZYVEX KO20JP (34007.31)	2003-018.978 4775780	03/11/2003 06/04/2004	41, 42, 40	Education information/educational services regarding the field of nanotechnology; and organization/management/arrangement of seminars/workshops regarding the field of nanotechnology (Class 41); designing for new product development; designing in the field of nanotechnology (Class 42); custom assembling of nanotechnology materials (Class 40)	REGISTERED 06/04/2014 - Renewal due.
Japan	ZYVEX KO20JP/DIV (34007.31.02)	2004-001782 4842203	03/11/2003 03/04/2005	42	Agencies or brokerage for contracts regarding intellectual property rights; testing of new products/consulting/scientific research and development of nanotechnology.	REGISTERED 03/04/2015 - Renewal due.

EXHIBIT D

Mask Works

Description

Registration/
Application
Number

Registration/
Application
Date

None