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(Rev. 10/02)
OMB No. 0651-0027 (exp. 6/30/2005)

102645347

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Tab settings ⇨⇨⇨ ▼ ▼ ▼ ▼ ▼ ▼ ▼

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

MICROCOATING TECHNOLOGIES, INC.
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: SILICON VALLEY BANK
Internal Address: Atlanta Financial Center
Street Address: 3353 Peachtree Road, N.E.
North Tower, Suite M-10
City: Atlanta State: GA Zip: 30326
Additional name(s) & addresses(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Other ____________

Execution Date: May 23, 2003

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:________:

A. Patent Application No.(s) 09291252, 09721605, 09733815, 09748714, 09781462, 09897157, 09889237, 09921437, 10030446, 10070958, 10111684, 10111696, 10150479, 60384991, 60389406, 60394494, 60396864, 60399067, 60399748, 60401288, 60401249, 60406070, 60406114, 60416781, 60425236, 60429529, 60430636, 10311785, 60438956, 10332866, 10341883, 10019082, 10362435, 10398641, 10421092, 09952881, and 10190292

B. Patent No.(s) 5997956, 6132653, 6193911, 6207522, 6208234, 6212078, 6214473, 6270835, 6276347, 6368665, 6372364, 6390076, 6396387, 6403245, 6416870, 6433993, 4940328, 5623561, 5652021, 5858465, 5863604, 6013318, 6034015, 6545759, 6210592, 6329899, and 6500350

Additional numbers attached? ☐ Yes ☒ No

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

Name: Ryan A. Schneider
Troutman Sanders LLP
Internal Address:____________
Street Address: Bank of America Plaza, 600 Peachtree Street, NE, Suite 5200
City: Atlanta State: GA Zip: 30308-2216

6. Total number of applications and patents involved: 64

7. Total fee (37 CFR 3.41)............$2,560.00

☒ Enclosed

☒ Authorized to charge deficiency in fees to deposit account

8. Deposit account number: 20-1507

RESUBMISSION OF RECORDATION SHEET, DOCUMENT ID NO. 102480899

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9. Signature.
Ryan A. Schneider
Name of Person Signing
Signature
6 January 2004
Date
Docket Ref.: MICROCOATING
Total number of pages including cover sheet, attachments, and documents: 43

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, P.O. Box 1450, Mail Stop Assignment Recordation Services
Alexandria, VA 22313-1450

6-19-03

06-24-2003

102480899

FORM **PTO-1595**
(Rev. 10/02)
OMB No. 0651-0027 (exp. 6/30/2005)

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U.S. Patent and Trademark Office

Tab settings ⇨⇨⇨ ▼ ▼ ▼ ▼ ▼ ▼ ▼

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1. Name of conveying party(ies):

MICROCOATING TECHNOLOGIES, INC.

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

2. Name and address of receiving party(ies)

Name: SILICON VALLEY BANK

Internal Address: ✓

Street Address:

City: State: Zip:

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

FINANCE SECTION
2003 JUN 19 PM 5:55
OFFICE OF PUBLIC RECORDS

3. Nature of conveyance:

☐ Assignment ☐ Merger

☒ Security Agreement ☐ Change of Name

☐ Other

Execution Date: May 23, 2003

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:

A. Patent Application No.(s) 09291252, 09721605, 09733815, 09748714, 09781462, 09897157, 09889237, 09921437, 10030446, 10070958, 10111684, 10111696, 10150479, 60384991, 60389406, 60394494, 60396864, 60399067, 60399748, 60401288, 60401249, 60406070, 60406114, 60416781, 60425236, 60429529, 60430636, 10311785, 60438956, 10332866, 10341883, 10019082, 10362435, 10398641, 10421092, 09952881, and 10190292

B. Patent No.(s) 5997956, 6132653, 6193911, 6207522, 6208234, 6212078, 6214473, 6270835, 6276347, 6368665, 6372364, 6390076, 6396387, 6403245, 6416870, 6433993, 4940328, 5623561, 5652021, 5858465, 5863604, 6013318, 6034015, 6545759, 6210592, 6329899, and 6500350

Additional numbers attached? ☐ Yes ☒ No

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

Name: Ryan A. Schneider
Troutman Sanders LLP

Internal Address:

Street Address: Bank of America Plaza, 600 Peachtree Street, NE, Suite 5200

City: Atlanta State: GA Zip: 30308-2216

06/23/2003 TDIAZ1 00000139 09291252
01 FC:8021 2560.00 OP

6. Total number of applications and patents involved: 64

7. Total fee (37 CFR 3.41)............$2,560.00

☒ Enclosed

☒ Authorized to charge deficiency in fees to deposit account

8. Deposit account number: 20-1507

DO NOT USE THIS SPACE

9. Signature.

Ryan A. Schneider
Name of Person Signing

Signature

June 19, 2003
Date

Total number of pages including cover sheet, attachments, and documents: 43

Mail documents to be recorded with required cover sheet information to:
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Alexandria, VA 22313-1450

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of May 23, 2003 by and between SILICON VALLEY BANK ("Bank") and MICROCOATING TECHNOLOGIES, INC. ("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 November 27, 2002 (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein and not otherwise defined shall have the meanings ascribed to such terms 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, Patent License Agreements, Trademarks, and Mask Works listed on **Exhibits A**, **B1**, **B2**, **B3**, **B4**, **B5**, **B6**, **C** and **D** attached 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. Grantor agrees that Bank shall be authorized to file financing statements, with all appropriate jurisdictions, without notice to Grantor, as Bank deems appropriate, in order to perfect or protect Bank's interest in the Intellectual Property Collateral.

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

GRANTOR:

MICROCOATING TECHNOLOGIES,
INC.

By: DaSmith
Name: DAVID A. SMITH
Title: CFO

BANK:

SILICON VALLEY BANK

By:____________________
Name:____________________
Title:____________________

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. Grantor agrees that Bank shall be authorized to file financing statements, with all appropriate jurisdictions, without notice to Grantor, as Bank deems appropriate, in order to perfect or protect Bank's interest in the Intellectual Property Collateral.

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

GRANTOR:

MICROCOATING TECHNOLOGIES,
INC.

By:____________________
Name:____________________
Title:____________________

BANK:

SILICON VALLEY BANK

By: Laura M Scott
Name: Laura M Scott
Title: Senior Vice President

EXHIBIT A

COPYRIGHTS

None

EXHIBIT B1

ISSUED PATENTS OWNED BY MCT

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Patent #: 5,997,956 **Country:** U.S.
Issue date: 12/7/1999 **Status:** Issued, Expires 8/2/16
Government Contract (see below) **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Patent #: 6,132,653 **Country:** U.S.
Issue date: 10/17/2000 **Status:** Issued, Expires 8/2/16
Government Contract (see below) **Licensee(s):** Shipley, Ballard

Title: PRECURSOR SOLUTION COMPOSITIONS FOR ELECTRONIC DEVICES USING CCVD
Patent #: 6,193,911 **Country:** U.S.
Issue date: 2/27/2001 **Status:** Issued, Expires 4/29/2018
Government Contract (see below) **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS
Patent #: 6,207,522 **Country:** U.S.
Issue date: 3/27/2001 **Status:** Issued, Expires 11/23/2018
Government Contract (see below) **Licensee(s):** Shipley

Title: RESISTORS FOR ELECTRONIC PACKAGING
Patent #: 6,208,234 **Country:** U.S.
Issue date: 3/27/2001 **Status:** Issued, Expires 4/29/2018
Government Contract (see below) **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Patent #: 6,212,078 **Country:** U.S.
Issue date: 4/3/2001 **Status:** Issued, Expires 10/27/2019
Government Contract (see below) **Licensee(s):** Shipley

Title: CORROSION-RESISTANT MULTILAYER COATING
Patent #: 6,214,473 **Country:** U.S.

Issue date: 4/10/2001 **Status:** Issued, Expires 5/13/2018

Government Contract (see below) **Licensee(s):**

Title: FORMATION OF THIN FILM CAPACITORS **Patent #:** 6,270,835 **Country:** U.S.

Issue date: 8/7/2001 **Status:** Issued, Expires 11/23/18

Government Contract (see below) **Licensee(s):** Shipley

Title: SYSTEMS AND METHODS FOR DELIVERING ATOMIZED FLUIDS **Patent #:** 6,276,347 **Country:** U.S.

Issue date: 8/21/2001 **Status:** Issued, Expires 9/25/18

Government Contract (see below) **Licensee(s):**

Title: FORMATION OF THIN FILM CAPACITORS **Patent #:** 144618 **Country:** Taiwan

Issue date: 10/21/2001 **Status:** Issued, Expires 11/23/18

Government Contract (see below) **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Patent #:** 0322784 **Country:** South Korea

Issue date: 1/18/2002 **Status:** Issued, Expires 4/29/18

Government Contract (see below) **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Patent #:** 6,368,665 **Country:** U.S.

Issue date: 4/9/2002 **Status:** Issued, Expires 4/29/18

Government Contract (see below) **Licensee(s):** Shipley

Title: NANOSTRUCTURE COATINGS **Patent #:** 6,372,364 **Country:** U.S.

Issue date: 4/16/2002 **Status:** Issued, Expires 8/18/19

Government Contract (see below) **Licensee(s):**

Title: SYSTEMS AND METHODS FOR DELIVERING ATOMIZED FLUIDS **Patent #:** 6,390,076 **Country:** U.S.

Issue date: 5/21/2002 **Status:** Issued, Expires 9/25/18

Government Contract (see below) **Licensee(s):**

Title: RESISTORS FOR ELECTRONIC PACKAGING **Patent #:** 6,396,387 **Country:** U.S.

Issue date: 5/28/2002 **Status:** Issued, Expires 4/29/18

Government Contract (see below) **Licensee(s):** Shipley

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Patent #:** 6,403,245 **Country:** U.S.

Issue date: 6/11/2002 **Status:** Issued, Expires 5/21/19

Government Contract (see below) **Licensee(s):** Ballard

Title: CORROSION RESISTANT MULTI-LAYER COATINGS **Patent #:** 6,416,870 **Country:** U.S.

Issue date: 7/9/2002 **Status:** Issued, Expires 5/13/18

Government Contract (see below) **Licensee(s):**

Title: CORROSION-RESISTANT MULTILAYER COATING **Patent #:** 745998 **Country:** Australia

Issue date: 7/25/2002 **Status:** Issued, Expires 5/13/18

Government Contract (see below) **Licensee(s):**

Title: FORMATION OF THIN FILM CAPACITORS **Patent #:** 6,433,993 **Country:** U.S.

Issue date: 8/13/2002 **Status:** Issued, Expires 11/23/18

Government Contract (see below) **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Patent #:** 956865 **Country:** Israel

Issue date: 10/1/2002 **Status:** Issued

Government Contract (see below) **Licensee(s):** Shipley

EXHIBIT B2

ISSUED PATENTS OWNED BY GEORGIA TECH RESEARCH CORP. AND EXCLUSIVELY LICENSED BY MCT

Title: OPTICAL SENSING APPARATUS AND METHOD **Patent #:** 4,940,328 **Country:** U.S.
Issue date: 7/10/1990 **Status:** Issued, Expires 11/4/08
Government Contract **Licensee(s)**

Title: OPTICAL SENSING APPARATUS AND METHOD **Patent #:** 2,002,353 **Country:** Canada
Issue date: 1/17/1995 **Status:** Issued, Expires 11/4/08
Government Contract **Licensee(s)**

Title: OPTICAL SENSING APPARATUS AND METHOD **Patent #:** 2041773 **Country:** Japan
Issue date: 4/9/1996 **Status:** Issued, Expires 11/4/08
Government Contract **Licensee(s)**

Title: OPTICAL SENSING APPARATUS AND METHOD **Patent #:** 0 441 898 **Country:** Europe
Issue date: 1/8/1997 **Status:** Issued, Expires 11/4/08
Government Contract **Licensee(s)**

Title: INTEGRATED OPTIC INTERFEROMETRIC SENSOR **Patent #:** 5,623,561 **Country:** U.S.
Issue date: 4/22/1997 **Status:** Issued, Expires 9/29/15
Government Contract **Licensee(s)**

Title: METHODS AND APPARATUS FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS **Patent #:** 5,652,021 **Country:** U.S.

Issue date: 7/29/1997 **Status:** Issued, Expires 7/29/2014

Government Contract **Licensee(s)** Shipley, Ballard

Title: COMBUSTION CHEMICAL VAPOR DEPOSITION OF PHOSPHATE FILMS AND COATINGS **Patent #:** 5,858,465 **Country:** U.S.

Issue date: 1/12/1999 **Status:** Issued, Expires 3/24/2013

Government Contract **Licensee(s)** Shipley

Title: METHOD FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS **Patent #:** 5,863,604 **Country:** U.S.

Issue date: 1/26/1999 **Status:** Issued, Expires 3/24/2013

Government Contract **Licensee(s)** Shipley, Ballard

Title: METHOD FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS **Patent #:** 6,013,318 **Country:** U.S.

Issue date: 1/11/2000 **Status:** Issued, Expires 3/24/2013

Government Contract **Licensee(s)** Shipley, Ballard

Title: CERAMIC COMPOSITIONS FOR MICROWAVE COMMUNICATIONS **Patent #:** 6,034,015 **Country:** U.S.

Issue date: 3/7/2000 **Status:** Issued, Expires 5/14/2018

Government Contract **Licensee(s)**

Title: METHODS AND APPARATUS FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS **Patent #:** 2,158,568 **Country:** Canada

Issue date: 12/4/2001 **Status:** Issued, Expires 3/24/13

Government Contract **Licensee(s)** Shipley, Ballard

Title: METHODS AND APPARATUS FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS **Patent #:** 323216 **Country:** South Korea

Issue date: 1/22/2002 **Status:** Issued, Expires 3/24/13

Government Contract **Licensee(s)** Shipley, Ballard

Title: INTEGRATED OPTIC INTERFEROMETRIC SENSOR **Patent #:** 0 852 715 **Country:** Europe

Issue date: 5/2/2002 **Status:** Issued, Expires 9/29/15

Government Contract **Licensee(s)**

Title: COMBUSTION CHEMICAL VAPOR DEPOSITION OF PHOSPHATE FILMS AND COATINGS **Patent #:** 745098 **Country:** Australia

Issue date: 6/27/2002 **Status:** Issued, Expires 3/24/13

Government Contract **Licensee(s)** Shipley

Title: TRANSVERSE INTEGRATED OPTIC INTERFEROMETER **Patent #:** 6,545,759 **Country:** U.S.

Issue date: 4/8/2003 **Status:** Issued, expires 11/30/19

Government Contract **Licensee(s)**

Exhibit B3

PATENT APPLICATIONS OWNED BY MCT

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Application #: JP 9-508559 **Country:** Japan
Date filed: 8/2/1996 **Status:** Filed
Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Application #: 96 928 045.2 **Country:** Europe
Date filed: 8/2/1996 **Status:** Filed
Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Application #: 1998-700815 **Country:** South Korea
Date filed: 8/2/1996 **Status:** Filed
Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Application #: 980986 **Country:** Mexico
Date filed: 8/2/1996 **Status:** Filed
Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS
Application #: PI96100699 **Country:** Brazil
Date filed: 8/2/1996 **Status:** Filed
Government Contract **Licensee(s):** Shipley, Ballard

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION
Application #: 88104056 **Country:** Taiwan
Date filed: 3/16/1999 **Status:** Allowed

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Application #:** 455/DEL/99 **Country:** India

Date filed: 3/22/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Application #:** 99016552 **Country:** Singapore

Date filed: 4/7/1999 **Status:** Allowed

Government Contract **Licensee(s):** Shipley

Title: PRECURSOR SOLUTION COMPOSITIONS FOR ELECTRONIC DEVICES USING CCVD **Application #:** 09/291,252 **Country:** U.S.

Date filed: 4/13/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Application #:** 993646 **Country:** Mexico

Date filed: 4/20/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Application #:** 2,269,862 **Country:** Canada

Date filed: 4/26/1999 **Status:** Allowed 1/8/03

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION **Application #:** 99012871 **Country:** Brazil

Date filed: 4/27/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION
Application #: 00104196.4 **Country:** Hong Kong
Date filed: 4/29/1999 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION
Application #: 991053850 **Country:** China
Date filed: 4/29/1999 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION
Application #: 99303373.7 **Country:** Europe
Date filed: 4/29/1999 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: APPARATUS AND PROCESS FOR CONTROLLED ATMOSPHERE CHEMICAL VAPOR DEPOSITION
Application #: 11124905 **Country:** Japan
Date filed: 4/30/1999 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: CORROSION-RESISTANT MULTILAYER COATING
Application #: 2,296,505 **Country:** Canada
Date filed: 5/13/1999 **Status:** Filed
Government Contract **Licensee(s):**

Title: SYSTEMS AND METHODS FOR DELIVERING ATOMIZED FLUIDS
Application #: EP 99952953.0 **Country:** Europe
Date filed: 9/23/1999 **Status:** Filed
Government Contract **Licensee(s):**

Title: FORMATION OF THIN FILM CAPACITORS
Application #: 2289239 **Country:** Canada

Date filed: 11/10/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 132834 **Country:** Israel

Date filed: 11/10/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 00107629.4 **Country:** Hong Kong

Date filed: 11/17/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 10-1999-0051164 **Country:** South Korea

Date filed: 11/17/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 99309146.1 **Country:** Europe

Date filed: 11/17/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 991244885 **Country:** China

Date filed: 11/23/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 99333500 **Country:** Japan

Date filed: 11/24/1999 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: CORROSION-RESISTANT MULTILAYER COATING
Application #: 99 923 038.6 **Country:** Europe
Date filed: 1/13/2000 **Status:** Filed
Government Contract **Licensee(s):**

Title: CORROSION-RESISTANT MULTILAYER COATING
Application #: 2000-548522 **Country:** Japan
Date filed: 1/13/2000 **Status:** Filed
Government Contract **Licensee(s):**

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Application #: 00309340.8 **Country:** Europe
Date filed: 10/24/2000 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Application #: 10-2000-0063292 **Country:** South Korea
Date filed: 10/27/2000 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Application #: 329569/2000 **Country:** Japan
Date filed: 10/27/2000 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Application #: 89122645 **Country:** Taiwan
Date filed: 10/27/2000 **Status:** Filed
Government Contract **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS
Application #: 00137023.5 **Country:** China

Date filed: 10/27/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS **Application #:** 200006502-9 **Country:** Singapore

Date filed: 10/27/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: RESISTORS FOR ELECTRONIC PACKAGING **Application #:** 09/721,605--2748 **Country:** U.S.

Date filed: 11/22/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: FORMATION OF THIN FILM CAPACITORS **Application #:** 09/733,815 **Country:** U.S.

Date filed: 12/9/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS **Application #:** 09/748,714--4539 **Country:** U.S.

Date filed: 12/21/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION METHOD AND COATINGS PRODUCED THEREFROM **Application #:** 200203931-1 **Country:** Singapore

Date filed: 12/21/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS **Application #:** 00 990 367.5 **Country:** Europe

Date filed: 12/21/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: NANOLAMINATED THIN FILM CIRCUITRY MATERIALS **Application #:** 09/781,462 **Country:** U.S.
Date filed: 2/12/2001 **Status:** Allowed

Government Contract **Licensee(s):** Shipley

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL FLUID SOLUTIONS **Application #:** 09/897,157 - 2888 **Country:** U.S.
Date filed: 7/3/2001 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: EPITAXIAL THIN FILMS **Application #:** 2,359,710 **Country:** Canada
Date filed: 7/9/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS **Application #:** 09/889,237 - 8868 **Country:** U.S.
Date filed: 7/10/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS **Application #:** 00804586.0 **Country:** China
Date filed: 7/11/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS **Application #:** 2000-594127 **Country:** Japan
Date filed: 7/12/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS

Application #: IN/PCT/2001/0062 **Country:** India

Date filed: 7/12/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS

Application #: 90117374 **Country:** Taiwan

Date filed: 7/16/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL MATERIALS

Application #: 90119036 **Country:** Taiwan

Date filed: 8/3/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION USING THERMAL SPRAY WITH NEAR SUPERCRITICAL AND SUPERCRITICAL FLUID SOLUTIONS

Application #: 09/921,437-8003 **Country:** U.S.

Date filed: 8/3/2001 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: EPITAXIAL THIN FILMS

Application #: 2001122592 **Country:** Russia

Date filed: 8/10/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS

Application #: 41656/00 **Country:** Australia

Date filed: 8/12/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: EPITAXIAL THIN FILMS

Application #: 00 921 311.7 **Country:** Europe

Date filed: 8/12/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** 90121036 **Country:** Taiwan

Date filed: 8/29/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL SUBSYSTEMS ON-A-CHIP **Application #:** PCT/US01/30282 **Country:** International

Date filed: 9/27/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL SUBSYSTEMS ON-A-CHIP **Application #:** 90124425 **Country:** Taiwan

Date filed: 10/3/2001 **Status:** Allowed

Government Contract **Licensee(s):**

Title: FUEL CELL HAVING IMPROVED CATALYTIC LAYER **Application #:** PCT/US01/48581 **Country:** International

Date filed: 10/26/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** 2,371,428 **Country:** Canada

Date filed: 11/19/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** 2000-620687 **Country:** Japan

Date filed: 11/21/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** PA/a/2001/011968 **Country:** Mexico

Date filed: 11/21/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** **Country:** India

Date filed: 11/21/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** 00936152.8-2119- **Country:** Europe

Date filed: 11/21/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: METHOD OF COATING CERAMICS USING CCVD **Application #:** 00943355.8 **Country:** Europe

Date filed: 11/29/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: MATERIALS AND PROCESSES FOR PROVIDING FUEL CELLS AND ACTIVE MEMBRANES **Application #:** 51513/00 **Country:** Australia

Date filed: 12/21/2001 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: CHEMICAL VAPOR DEPOSITION DEVICES AND METHODS **Application #:** PCT/US01/49559 **Country:** International

Date filed: 12/27/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: METHOD OF COATING CERAMICS USING CCVD **Application #:** 10/030,446 **Country:** U.S.
Date filed: 1/2/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: NANOSTRUCTURE COATINGS **Application #:** IN/PCT/2002, **Country:** India
Date filed: 2/14/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: NANOSTRUCTURE COATINGS **Application #:** 200200884-5 **Country:** Singapore
Date filed: 2/15/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: NANOSTRUCTURE COATINGS **Application #:** PI 001 3378-7 **Country:** Brazil
Date filed: 2/18/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: NANOSTRUCTURE COATINGS **Application #:** EP00955757.0 **Country:** Europe
Date filed: 2/18/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: LIQUID ATOMIZATION METHODS AND DEVICES **Application #:** 200201422-3 **Country:** Singapore
Date filed: 3/12/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHOD AND DEVICES

Application #: 10/070,958 - 4878 **Country:** U.S.

Date filed: 3/12/2002 **Status:** Allowed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: PA/a/2002/002780 **Country:** Mexico

Date filed: 3/14/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: 2001-524736 **Country:** Japan

Date filed: 3/20/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: PI 001 4185-2 **Country:** Brazil

Date filed: 3/21/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: 2,385,324 **Country:** Canada

Date filed: 3/22/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: 00968397.0 **Country:** Europe

Date filed: 3/22/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES

Application #: IN/PCT/2002, **Country:** India

Date filed: 3/22/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES **Application #:** 148743 **Country:** Israel
Date filed: 3/22/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: VARIABLE CAPACITORS, COMPOSITE MATERIALS **Application #:** PCT/US02/11133 **Country:** International
Date filed: 4/9/2002 **Status:** Chapter II filed

Government Contract **Licensee(s):**

Title: METHOD OF DEPOSITING MATERIALS **Application #:** 10/111,684 - 5880 **Country:** U.S.
Date filed: 4/17/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: PROCESSING LINE HAVING MEANS TO MONITOR CRYSTALLOGRAPHIC OREINTATION **Application #:** 10/111,696 - 4564 **Country:** U.S.
Date filed: 4/17/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: LIQUID ATOMIZATION METHODS AND DEVICES **Application #:** 78322/00 **Country:** Australia
Date filed: 4/18/2002 **Status:** Filed, Exam Requested

Government Contract **Licensee(s):** Shipley , Ballard

Title: LIQUID ATOMIZATION METHODS AND DEVICES **Application #:** 2002110464 **Country:** Russia
Date filed: 4/19/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: CAPACITOR WITH IMPROVED ELECTRODE STRUCTURE
Application #: PCT/US02/14861 **Country:** International
Date filed: 5/9/2002 **Status:** Allowed

Government Contract **Licensee(s):**

Title: VARIABLE DIRECTION RESISTIVE MATERIAL
Application #: 10/150,479 **Country:** U.S.
Date filed: 5/17/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: TRANSVERSE INTEGRATED OPTIC INTERFEROMETER
Application #: 2,393,076 **Country:** Canada
Date filed: 5/29/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: TRANSVERSE INTEGRATED OPTIC INTERFEROMETER
Application #: 00 992 553.8 **Country:** Europe
Date filed: 5/30/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: BARRIER COATING, METHOD OF FORMATION
Application #: 60/384,991 1966 **Country:** U.S. Provisional
Date filed: 5/31/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS
Application #: 2,393,531 **Country:** Canada
Date filed: 6/3/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: BARRIER COATINGS
Application #: 60/389,406 - 4127 **Country:** U.S. Provisional
Date filed: 6/17/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: METHOD FOR THERMAL MANAGEMENT OF INTERNAL COMBUSTION ENGINES
Application #: PCT/US02/19038 **Country:** International
Date filed: 6/17/2002 **Status:** Filed, No Chapter II

Government Contract **Licensee(s):**

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS
Application #: IN/PCT/2002/0073 **Country:** India
Date filed: 6/29/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS
Application #: PI 0016782-7 **Country:** Brazil
Date filed: 6/29/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: TELECOMMUNICATIONS CIRCUITRY
Application #: 60/394,494 - 6460 **Country:** U.S. Provisional
Date filed: 7/9/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: MULTI-BAND TRANSCEIVER
Application #: 60/396,864 - 3385 **Country:** U.S. Provisional
Date filed: 7/18/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: SELECTIVE AREA DEPOSITION OF CIRCUITRY LAYERS
Application #: 60/399,067 **Country:** U.S. Provisional
Date filed: 7/26/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: CHEMICAL VAPOR DEPOSITION METHODS FOR MAKING POWDERS AND COATINGS, AND COATINGS MADE USING THESE METHODS

Application #: 27402/01 **Country:** Australia

Date filed: 7/29/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: INTEGRATED-OPTIC CROSS-CONNECT SWITCH

Application #: 60/399,748 **Country:** U.S. Provisional

Date filed: 7/30/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL/RF HYBRID CIRCUIT

Application #: 60/401,288 **Country:** U.S. Provisional

Date filed: 8/6/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: POLYMER-TETHERED NANOPARTICULATES

Application #: 60/401,249 **Country:** U.S. Provisional

Date filed: 8/6/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: CHEMICAL VAPOR DEPOSITION AND POWDER FORMATION DEVICES, METHODS AND PRODUCTS:

Application #: 60/406,070 **Country:** U.S. Provisional

Date filed: 8/27/2002 **Status:**

Government Contract **Licensee(s):**

Title: CONFINED CHEMICAL REACTIONS

Application #: 60/406,114 **Country:** U.S. Provisional

Date filed: 8/27/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: COMPRESSED GAS SOLUTIONS AND USES **Application #:** 60/416,781 **Country:** U.S. Provisional

Date filed: 10/10/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: RESISTIVE MATERIAL **Application #:** **Country:** U.S.

Date filed: 10/18/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: TUNABLE CAPACITORS USING FLUID DIELECTRICS **Application #:** PCT/US02/33328 **Country:** International

Date filed: 10/18/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: CARBONACEOUS MATERIALS **Application #:** 60/425,236 **Country:** U.S. Provisional

Date filed: 11/12/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: BARRIER COATING, METHOD OF FORMATION **Application #:** 60/429,529 **Country:** U.S. Provisional

Date filed: 11/27/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: NEUROLOGICAL METHODS AND DEVICES **Application #:** 60/430,636 **Country:** U.S. Provisional

Date filed: 12/3/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: LIQUID ATOMIZATION METHODS AND DEVICES **Application #:** **Country:** Hong Kong

Date filed: 12/17/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley , Ballard

Title: POLYMER COATINGS **Application #:** 10/311,785 **Country:** U.S.

Date filed: 12/18/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: POLYMER COATINGS **Application #:** IN/PCT/2002, **Country:** India

Date filed: 12/24/2002 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: METHOD OF DEPOSITING MATERIALS **Application #:** IN/PCT/2002, **Country:** India

Date filed: 12/24/2002 **Status:** Filed

Government Contract **Licensee(s):** Ballard

Title: POLYMER COATINGS **Application #:** **Country:** China

Date filed: 12/30/2002 **Status:** Advised Associate to File

Government Contract **Licensee(s):** Shipley, Ballard

Title: NANOSTRUCTURE COATINGS **Application #:** 03100112.0 **Country:** Hong Kong

Date filed: 12/30/2002 **Status:** Filed

Government Contract **Licensee(s):**

Title: INTEGRATED OPTIC CHIP BIOSENSORS **Application #:** 60/438,956 **Country:** U.S. Provisional

Date filed: 1/9/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS **Application #:** 2003001 12-0 **Country:** Singapore
Date filed: 1/10/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS **Application #:** 10/332,866 **Country:** U.S.
Date filed: 1/13/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS **Application #:** 57/MUMNP/2003 **Country:** India
Date filed: 1/14/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS **Application #:** PI01125052 **Country:** Brazil
Date filed: 1/14/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: SELECTIVE AREA DEPOSITION AND DEVICES FORMED THEREFROM **Application #:** 10/341,883 **Country:** U.S.
Date filed: 1/14/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL MATERIALS **Application #:** 10/019,082 **Country:** U.S.
Date filed: 1/27/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: METHOD OF DEPOSITING MATERIALS **Application #:** 01948815.4 **Country:** Europe
Date filed: 1/30/2003 **Status:** Advised Associate to File

Government Contract **Licensee(s):** Ballard

Title: POLYMER COATINGS **Application #:** 01950670.8 **Country:** Europe
Date filed: 1/30/2003 **Status:** Advised Associate to File

Government Contract **Licensee(s):** Shipley, Ballard

Title: ELECTRONIC AND OPTICAL MATERIALS **Application #:** 166/MUMNP/2003 **Country:** India
Date filed: 2/3/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL MATERIALS **Application #:** 01963804.8 **Country:** Europe
Date filed: 2/12/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: REDUCED GRAIN BOUNDARY CRYSTALLINE THIN FILMS **Application #:** **Country:** Europe
Date filed: 2/14/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** 237/MUMNP/2003 **Country:** India
Date filed: 2/18/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** 10/362,435 **Country:** U.S.
Date filed: 2/20/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: NARROW DIAMETER NEEDLE HAVING REDUCED INNER DIAMETER TIP **Application #:** **Country:** U.S.
Date filed: 2/21/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** 200300715 **Country:** Singapore
Date filed: 2/24/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: FUEL CELL MEMBRANES AND CATALYTIC LAYERS **Application #:** PCT/US03/06121 **Country:** International
Date filed: 2/28/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** 01968113.9 **Country:** Europe
Date filed: 3/10/2003 **Status:** Advised associate to File

Government Contract **Licensee(s):**

Title: NARROW DIAMETER NEEDLE HAVING REDUCED INNER DIAMETER TIP **Application #:** **Country:** Europe
Date filed: 3/22/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL SUBSYSTEMS ON-A-CHIP **Application #:** 10/398,641 **Country:** U.S.
Date filed: 4/4/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL SUBSYSTEMS ON-A-CHIP **Application #:** **Country:** India
Date filed: 4/4/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: OPTICAL WAVEGUIDES AND INTEGRATED OPTICAL SUBSYSTEMS ON-A-CHIP **Application #:** 01977215.1 **Country:** Europe
Date filed: 4/6/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTRONIC AND OPTICAL DEVICES AND METHODS OF FORMING THESE DEVICES **Application #:** **Country:** China
Date filed: 4/11/2003 **Status:** Filed

Government Contract **Licensee(s):**

Title: ELECTROCATALYST-CONTAINING LAYER **Application #:** 10/421,092 **Country:** U.S.
Date filed: 4/23/2003 **Status:** Filed

Government Contract **Licensee(s):** Ballard

EXHIBIT B4

PATENT APPLICATIONS OWNED BY GEORGIA TECH RESEARCH CORP. AND EXCLUSIVELY LICENSED BY MCT

Title: METHODS AND APPARATUS FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS

Application #: JP-6-521369 **Country:** Japan

Date filed: 3/24/1994 **Status:** Filed

Government Contract **Licensee(s):** Shipley, Ballard

Title: METHODS AND APPARATUS FOR THE COMBUSTION CHEMICAL VAPOR DEPOSITION OF FILMS AND COATINGS

Application #: EP 94 911 694.1 **Country:** Europe

Date filed: 3/24/1994 **Status:** Allowed

Government Contract **Licensee(s):** Shipley, Ballard

Title: INTEGRATED OPTIC INTERFEROMETRIC SENSOR

Application #: 2,233,305 **Country:** Canada

Date filed: 9/27/1996 **Status:** Filed

Government Contract **Licensee(s):**

Title: COMBUSTION CHEMICAL VAPOR DEPOSITION OF PHOSPHATE FILMS AND COATINGS

Application #: 2,302,580 **Country:** Canada

Date filed: 3/23/2000 **Status:** Filed

Government Contract **Licensee(s):** Shipley

Title: INTEGRATED OPTIC INTERFEROMETRIC SENSOR

Application #: 01 123 875.5 **Country:** Europe

Date filed: 5/10/2001 **Status:** Filed

Government Contract **Licensee(s):**

Title: INTEGRATED OPTIC INTERFEROMETRIC SENSOR

Government Contract

Application #: JP 2002-198798 **Country:** Japan

Date filed: 7/8/2002 **Status:** Filed

Licensee(s):

EXHIBIT B5

PATENT APPLICATIONS OWNED BY SHIPLEY AND LICENSED EXCLUSIVELY BY MCT OUTSIDE THE FIELD OF EMBEDDED PASSIVES

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: **Country:** Hong Kong
Date filed: 3/22/1999 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 2,267,492 **Country:** Canada
Date filed: 3/29/1999 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 99/DEL/553 **Country:** India
Date filed: 4/8/1999 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 129493 **Country:** Israel
Date filed: 4/18/1999 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 993700 **Country:** Mexico
Date filed: 4/21/1999 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 99303244.0 **Country:** Europe
Date filed: 4/27/1999 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 99013576 **Country:** Brazil
Date filed: 4/28/1999 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 991063589 **Country:** China
Date filed: 4/29/1999 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS
Application #: 11124575 **Country:** Japan
Date filed: 4/30/1999 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 01307874.6-2307 **Country:** Europe
Date filed: 9/14/2001 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 2,357,324 **Country:** Canada
Date filed: 9/14/2001 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 90122820 **Country:** Taiwan
Date filed: 9/14/2001 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 10-2001-0057028 **Country:** South Korea
Date filed: 9/15/2001 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 09/952,881 **Country:** U.S.
Date filed: 9/15/2001 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: CONTINUOUS FEED COATER
Application #: 282258/2001 **Country:** Japan
Date filed: 9/17/2001 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS
Application #: **Country:** Europe
Date filed: 7/3/2002 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS
Application #: **Country:** China
Date filed: 7/3/2002 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS
Application #: **Country:** Taiwan
Date filed: 7/3/2002 **Status:** Filed
Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS
Application #: **Country:** South Korea
Date filed: 7/3/2002 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS **Application #:** **Country:** Japan

Date filed: 7/3/2002 **Status:** Filed

Government Contract **Licensee(s):** MCT

Title: RESISTIVE MATERIALS **Application #:** 10/190,292 **Country:** U.S.

Date filed: 7/3/2002 **Status:** Filed

Government Contract **Licensee(s):** MCT

EXHIBIT B6

PATENTS OWNED BY SHIPLEY AND LICENSED EXCLUSIVELY BY MCT OUTSIDE THE FIELD OF EMBEDDED PASSIVES

Title: THE DEPOSITION OF RESISTOR MATERIALS DIRECTLY ON INSULATING SUBSTRATES **Patent #:** 6,210,592 **Country:** U.S.
Issue date: 4/3/2001 **Status:** Issued, Expires 4/29/2018
Government Contract **Licensee(s):** MCT

Title: FORMATION OF THIN FILM RESISTORS **Patent #:** 6,329,899 **Country:** U.S.
Issue date: 12/11/2001 **Status:** Issued, Expires 4/29/18
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS **Patent #:** 0322287 **Country:** South Korea
Issue date: 1/15/2002 **Status:** Issued, Expires 4/29/98
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS **Patent #:** SG68713 **Country:** Singapore
Issue date: 2/26/2002 **Status:** Issued, Expires 4/29/18
Government Contract **Licensee(s):** MCT

Title: METHOD FOR FORMING THIN FILM RESISTORS **Patent #:** 159129 **Country:** Taiwan
Issue date: 11/5/2002 **Status:** Allowed
Government Contract **Licensee(s):** MCT

Title: FORMATION OF THIN FILM RESISTORS **Patent #:** 6,500,350 **Country:** U.S.
Issue date: 12/31/2002 **Status:** Issued

Government Contract **Licensee(s):** MCT

EXHIBIT C

Trademarks

MARK	TYPE OF MARK	FILING DATE (if filed)	SERIAL NUMBER	DATE OF FIRST USE (if used)	REGISTRATION NUMBER (if registered)	REGISTRATION DATE (if registered)
NANOMISER	Trade/Service	9/10/1999	75/795702	10/15/2001	2579411	6/11/2002
BUILDING THE FUTURE LAYER BY LAYER	Service			7/20/1994		
MICROCOATING TECHNOLOGIES	Service			10/13/1995		
MAGICAP	Trade	11/14/2001	76/335536			
NANOMISER (Europe)		12/19/2001	00258760			

EXHIBIT D

Mask Works

None