

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5228855

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
GOLDMAN SACHS BANK USA, AS COLLATERAL AGENT	11/06/2018
RECEIVING PARTY DATA	
Name:	ENTEGRIS, INC.
Street Address:	129 CONCORD ROAD
City:	BILLERICA
State/Country:	MASSACHUSETTS
Postal Code:	01821
Name:	POCO GRAPHITE, INC.
Street Address:	129 BONCORD ROAD
City:	BILLERICA
State/Country:	MASSACHUSETTS
Postal Code:	01821
Name:	ATMI, INC.
Street Address:	7 COMMERCE DRIVE
City:	DANBURY
State/Country:	CONNECTICUT
Postal Code:	06810
Name:	ATMI PACKAGING, INC.
Street Address:	7 COMMERCE DRIVE
City:	DANBURY
State/Country:	CONNECTICUT
Postal Code:	06810
Name:	ADVANCED TECHNOLOGY MATERIALS, INC.
Street Address:	7 COMMERCE DRIVE
City:	DANBURY
State/Country:	CONNECTICUT
Postal Code:	06810
PROPERTY NUMBERS Total: 877	

Property Type	Number
Patent Number:	5820664
Patent Number:	6110529
Patent Number:	5916359
Patent Number:	6444264
Patent Number:	6214105
Patent Number:	6730523
Patent Number:	7005303
Patent Number:	6303391
Patent Number:	6005127
Patent Number:	6099653
Patent Number:	6077356
Patent Number:	6245151
Patent Number:	5851270
Patent Number:	5961697
Patent Number:	6027547
Patent Number:	5985008
Patent Number:	6019823
Patent Number:	6110257
Patent Number:	5917140
Patent Number:	6204180
Patent Number:	5837027
Patent Number:	5993766
Patent Number:	5882384
Patent Number:	5858067
Patent Number:	5711816
Patent Number:	5518528
Patent Number:	5704965
Patent Number:	5704967
Patent Number:	5707424
Patent Number:	5935305
Patent Number:	6132492
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Patent Number:	6540819
Patent Number:	6660063
Patent Number:	5608283
Patent Number:	5900301
Patent Number:	5761910
Patent Number:	5916245

Property Type	Number
Patent Number:	6031250
Patent Number:	6680489
Patent Number:	6268229
Patent Number:	5566045
Patent Number:	5576928
Patent Number:	5581436
Patent Number:	5679815
Patent Number:	5677002
Patent Number:	5783716
Patent Number:	6162712
Patent Number:	5972430
Patent Number:	5741363
Patent Number:	6015917
Patent Number:	6379748
Patent Number:	5882416
Patent Number:	5902639
Patent Number:	6320213
Patent Number:	5919522
Patent Number:	5972743
Patent Number:	5876503
Patent Number:	6356014
Patent Number:	6379210
Patent Number:	6030454
Patent Number:	6117571
Patent Number:	7029724
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Patent Number:	6120846
Patent Number:	5859274
Patent Number:	6111124
Patent Number:	6001172
Patent Number:	6284654
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Patent Number:	6033919
Patent Number:	6083298
Patent Number:	5932905
Patent Number:	6277436
Patent Number:	6101816
Patent Number:	6089027

Property Type	Number
Patent Number:	6343476
Patent Number:	6199599
Patent Number:	6296025
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Patent Number:	6457494
Patent Number:	6111122
Patent Number:	5875921
Patent Number:	6713797
Patent Number:	6100200
Patent Number:	6645860
Patent Number:	6787186
Patent Number:	6204402
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Patent Number:	6302139
Patent Number:	6511706

Property Type	Number
Patent Number:	7534752
Patent Number:	6211126
Patent Number:	6566315
Patent Number:	6660700
Patent Number:	6224785
Patent Number:	6896826
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Patent Number:	6599447
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Patent Number:	7094284
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Patent Number:	8506689

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Patent Number:	7011614
Patent Number:	6821795
Patent Number:	7172918
Patent Number:	6767830
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Patent Number:	7446217
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Patent Number:	8598022
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Patent Number:	5910292
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Property Type	Number
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Property Type	Number
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Property Type	Number
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Property Type	Number
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Property Type	Number
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Application Number:	13960412
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Application Number:	61836390
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Property Type	Number
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Application Number:	61933299
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Application Number:	14114868
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Application Number:	12922408
Application Number:	13510569
Application Number:	13515129
Application Number:	13880710
Application Number:	13880711
Application Number:	13880944

Property Type	Number
Application Number:	13880948
Application Number:	29467250
Application Number:	14115626
Application Number:	14238693
Application Number:	61728644
Application Number:	61816576
Application Number:	61818343
Application Number:	61836572
Application Number:	61874697
Application Number:	61890611
Application Number:	61940744
Application Number:	61886568
Application Number:	61886589
Application Number:	13747171
Application Number:	12026336
Application Number:	12087914
Application Number:	14234120
Application Number:	12305895
Application Number:	61607962
Application Number:	29423843
Application Number:	29430855
Application Number:	61944455
Application Number:	12454336
Application Number:	13266657
Application Number:	13667516
Application Number:	14234023
Application Number:	13818339
Application Number:	61764170
Application Number:	61831656
Application Number:	61834748
Application Number:	61916633
Application Number:	61879804
Application Number:	61925312
Application Number:	61907214
Application Number:	61937135
Application Number:	13699279
Application Number:	12997205
Application Number:	13583316

Property Type	Number
Application Number:	13824909
Application Number:	61765428
Application Number:	61895230

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ATTORNEY DOCKET NUMBER: 1010959 PT REL2

NAME OF SUBMITTER: CONNOR WISE

SIGNATURE: /Connor Wise/

DATE SIGNED: 11/08/2018

Total Attachments: 64

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RELEASE OF PATENT SECURITY INTEREST dated as of November 6, 2018 (this “Release”), by GOLDMAN SACHS BANK USA (“Goldman Sachs”), as Collateral Agent (the “Collateral Agent”). Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Credit Agreement or the Pledge and Security Agreement, as applicable, referred to below.

A. Reference is made to (a) the Term Credit and Guaranty Agreement dated as of April 30, 2014 (as amended, the “Credit Agreement”), among Entegris, Inc., a Delaware corporation (the “Borrower”), certain subsidiaries of the Borrower party thereto, the Lenders party thereto and Goldman Sachs, as administrative agent and collateral agent, (b) the Term Pledge and Security Agreement dated as of April 30, 2014 (as amended, the “Pledge and Security Agreement”), among the Borrower, the Guarantors party thereto and the Collateral Agent and (c) the Grant of Security Interest in United States Patents dated as of April 30, 2014 (as amended, the “Grant” and, together with the Pledge and Security Agreement, the “Security Agreements”), among Entegris, Inc., Poco Graphite, Inc., ATMI, Inc., Advanced Technology Materials, Inc., ATMI Packaging, Inc. (together with Entegris, Inc., Poco Graphite, Inc., ATMI, Inc. and Advanced Technology Materials, Inc., the “Grantors”) and the Collateral Agent.

B. Pursuant to the Security Agreements, the Grantors granted a security interest to the Collateral Agent, for the benefit of the Secured Parties, in, among other things, the patents of the Grantors set forth on Schedule I hereto (the “Patents”), which security interest was recorded with the United States Patent and Trademark Office on May 2, 2014 at Reel 32812 Frame 192.

C. In connection with the payment and discharge of all Obligations of the Borrower and the other Credit Parties and the termination of all Commitments under the Credit Agreement, the Grantors have informed the Collateral Agent of their desire that the Collateral Agent, on behalf of the Secured Parties, release all right, title and interest granted to it, for the ratable benefit of the Secured Parties, under the Security Agreements in and to the Patents.

Accordingly, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Collateral Agent hereby terminates, releases and discharges any and all security interests it has in the Patents and reassigns all right, title and interest it has in the Patents, together with the goodwill associated therewith, to the applicable Grantor. The execution and delivery of this Release and the performance of any actions by the Collateral Agent are made without representation or warranty by, or recourse to, the Collateral Agent or any other Secured Party.

THIS RELEASE SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK.

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IN WITNESS WHEREOF, the Collateral Agent has caused this Release to be duly executed as of the day and year first written above.

**GOLDMAN SACHS BANK USA, as
Collateral Agent,**

By: 

Authorized Signatory

**Douglas Tansey
Authorized Signatory**

[Signature Page to Term Release of Patent Security Interest]

**PATENT
REEL: 047477 FRAME: 0059**

SCHEDULE I

Patents Owned by the Grantors

Patents

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	EXCHANGE RESISTANT METAL-ORGANIC PRECURSOR SOLUTIONS COMPRISING SAME	5,820,664	8/25/2006
Advanced Technology Materials, Inc.	Method of forming metal films on a substrate by chemical vapor deposition	6,110,529	6/7/1995
Advanced Technology Materials, Inc.	Alkane and polyamine solvent compositions for liquid delivery chemical vapor deposition	5,916,359	11/20/1997
Advanced Technology Materials, Inc.	ALKANE/POLYAMINE SOLVENT COMPOSITIONS FOR LIQUID DELIVERY CVD	6,444,264	1/30/2001
Advanced Technology Materials, Inc.	ALKANE/POLYAMINE SOLVENT COMPOSITIONS FOR LIQUID DELIVERY CVD	6,214,105	11/3/1998
Advanced Technology Materials, Inc.	LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION PROCESS FOR FORMING BISMUTH-CONTAINING CERAMIC THIN FILMS USEFUL IN FERROELECTRIC MEMORY DEVICES	6,730,523	6/1/2001
Advanced Technology Materials, Inc.	LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION PROCESS FOR FORMING BISMUTH-CONTAINING CERAMIC THIN FILMS USEFUL IN FERROELECTRIC MEMORY DEVICES	7,005,303	4/30/2004
Advanced Technology Materials, Inc.	LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION PROCESS FOR FORMING BISMUTH-CONTAINING CERAMIC THIN FILMS USEFUL IN FERROELECTRIC MEMORY DEVICES	6,303,391	11/20/1997
Advanced Technology Materials, Inc.	Antimony/Lewis base adducts for Sb-ion implantation and formation of antimonide films	6,005,127	11/24/1997
Advanced Technology Materials, Inc.	Liquid reagent delivery system with constant thermal loading of vaporizer	6,099,653	12/12/1997

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	REAGENT SUPPLY VESSEL FOR CHEMICAL VAPOR DEPOSITION	6,077,356	12/17/1997
Advanced Technology Materials, Inc.	Liquid delivery system comprising upstream pressure control means	6,245,151	4/6/2000
Advanced Technology Materials, Inc.	Low pressure gas source and dispensing apparatus with enhanced diffusive/extractive means	5,851,270	5/20/1997
Advanced Technology Materials, Inc.	Bulk storage and dispensing system for fluids	5,961,697	5/20/1997
Advanced Technology Materials, Inc.	Fluid storage and dispensing vessel with modified high surface area solid as fluid storage medium	6,027,547	5/18/1998
Advanced Technology Materials, Inc.	Sorbent-based fluid storage and dispensing system with high efficiency sorbent medium	5,985,008	5/20/1998
Advanced Technology Materials, Inc.	Sorbent-based fluid storage and dispensing vessel with replaceable sorbent cartridge members	6,019,823	5/18/1998
Advanced Technology Materials, Inc.	FLUID DELIVERY SYSTEM AND METHOD OF DELIVERING A LOW CONCENTRATION FLUID TO A PROCESS FOR UTILIZATION OF SAME	6,110,257	5/18/1998
Advanced Technology Materials, Inc.	Sorbent-based fluid storage and dispensing vessel with enhanced heat transfer means	5,917,140	5/20/1997
Advanced Technology Materials, Inc.	Apparatus and process for manufacturing semiconductor devices, products and precursor structures utilizing sorbent-based fluid storage and dispensing	6,204,180	12/31/1997
Advanced Technology Materials, Inc.	METHOD OF MANUFACTURING FLUID STORAGE AND DISPENSING VESSEL AS WELL AS METHOD OF MANUFACTURING FLUID STORAGE AND DISPENSING APPARATUS	5,837,027	5/20/1997
Advanced Technology Materials, Inc.	Gas source and dispensing system	5,993,766	5/20/1997
Advanced Technology Materials, Inc.	Gas source and dispensing system with in situ monitoring of pressure and temperature	5,882,384	5/20/1997

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Ex situ degassing and sorbate loading system for manufacture of sorbent-based fluid storage and dispensing apparatus	5,858,067	5/20/1997
Advanced Technology Materials, Inc.	Source reagent liquid delivery apparatus, and chemical vapor deposition system comprising same	5,711,816	6/7/1995
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS COMPOUNDS	5,518,528	10/13/1994
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS HYDRIDE, HALIDE AND ORGANOMETALLIC GROUP V COMPOUNDS	5,704,965	5/20/1996
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS HYDRIDE, HALIDE AND ORGANOMETALLIC GROUP V COMPOUNDS	5,704,967	5/20/1996
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS HYDRIDE, HALIDE AND ORGANOMETALLIC GROUP V COMPOUNDS	5,707,424	11/1/1996
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS HYDRIDE, HALIDE AND ORGANOMETALLIC GROUP V COMPOUNDS	5,935,305	4/11/1997
Advanced Technology Materials, Inc.	STORAGE AND DELIVERY SYSTEM FOR GASEOUS HYDRIDE, HALIDE AND ORGANOMETALLIC GROUP V COMPOUNDS	6,132,492	5/21/1998
Advanced Technology Materials, Inc.	SORBENT-BASED GAS STORAGE AND DELIVERY SYSTEM FOR DISPENSING OF HIGH-PURITY GAS	6,406,519	5/3/2000
Advanced Technology Materials, Inc.	SORBENT-BASED GAS STORAGE AND DELIVERY SYSTEM FOR DISPENSING OF HIGH-PURITY GAS	6,540,819	12/5/2001
Advanced Technology Materials, Inc.	Sorbent-based gas storage and delivery system	6,660,063	5/16/2002
Advanced Technology Materials, Inc.	Electron-emitting devices utilizing electron-emissive particles which typically contain carbon	5,608,283	6/29/1994

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Structure and fabrication of electron-emitting devices utilizing electron-emissive particles which typically contain carbon	5,900,301	1/3/1997
Advanced Technology Materials, Inc.	High capacity gas storage and dispensing system	5,761,910	5/20/1997
Advanced Technology Materials, Inc.	High capacity gas storage and dispensing system	5,916,245	4/7/1998
Advanced Technology Materials, Inc.	INTEGRATED CIRCUIT DEVICES AND METHODS EMPLOYING AMORPHOUS SILICON CARBIDE RESISTOR MATERIALS	6,031,250	12/20/1995
Advanced Technology Materials, Inc.	INTEGRATED CIRCUIT DEVICES AND METHODS EMPLOYING AMORPHOUS SILICON CARBIDE RESISTOR MATERIALS	6,680,489	4/25/2000
Advanced Technology Materials, Inc.	INTEGRATED CIRCUIT DEVICES AND METHODS EMPLOYING AMORPHOUS SILICON CARBIDE RESISTOR MATERIALS	6,268,229	12/14/1999
Advanced Technology Materials, Inc.	High-dielectric-constant material electrodes comprising thin platinum layers	5,566,045	8/1/1994
Advanced Technology Materials, Inc.	High-dielectric-constant material electrodes comprising thin platinum layers	5,576,928	6/7/1995
Advanced Technology Materials, Inc.	High-dielectric-constant material electrodes comprising thin platinum layers	5,581,436	6/7/1995
Advanced Technology Materials, Inc.	TANTALUM AND NIOBIUM REAGENTS USEFUL IN CHEMICAL VAPOR DEPOSITION PROCESSES, AND PROCESS FOR DEPOSITING COATINGS USING THE SAME	5,679,815	9/16/1994
Advanced Technology Materials, Inc.	TANTALUM AND NIOBIUM REAGENTS USEFUL IN CHEMICAL VAPOR DEPOSITION PROCESSES, AND PROCESS FOR DEPOSITING COATINGS USING THE SAME	5,677,002	5/30/1995
Advanced Technology Materials, Inc.	Platinum source compositions for chemical vapor deposition of platinum	5,783,716	6/28/1996

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Platinum source compositions for chemical vapor deposition of platinum	6,162,712	1/16/1998
Advanced Technology Materials, Inc.	Digital chemical vapor deposition (CVD) method for forming a multi-component oxide layer	5,972,430	11/26/1997
Advanced Technology Materials, Inc.	Interiorly partitioned vapor injector for delivery of source reagent vapor mixtures for chemical vapor deposition	5,741,363	3/22/1996
Advanced Technology Materials, Inc.	TANTALUM AMIDE PRECURSORS FOR DEPOSITION OF TANTALUM NITRIDE ON A SUBSTRATE	6,015,917	1/23/1998
Advanced Technology Materials, Inc.	TANTALUM AMIDE PRECURSORS FOR DEPOSITION OF TANTALUM NITRIDE ON A SUBSTRATE	6,379,748	1/23/1998
Advanced Technology Materials, Inc.	Liquid delivery system, heater apparatus for liquid delivery system, and vaporizer	5,882,416	6/19/1997
Advanced Technology Materials, Inc.	Method of forming bismuth-containing films by using bismuth amide compounds	5,902,639	3/31/1997
Advanced Technology Materials, Inc.	Diffusion barriers between noble metal electrodes and metallization layers, and integrated circuit and semiconductor devices comprising same	6,320,213	8/29/2000
Advanced Technology Materials, Inc.	Growth of BaSrTiO ₃ using polyamine-based precursors	5,919,522	4/8/1997
Advanced Technology Materials, Inc.	Precursor compositions for ion implantation of antimony and ion implantation process utilizing same	5,972,743	12/3/1996
Advanced Technology Materials, Inc.	Multiple vaporizer reagent supply system for chemical vapor deposition utilizing dissimilar precursor compositions	5,876,503	11/27/1996
Advanced Technology Materials, Inc.	Electron emitters coated with carbon containing layer	6,356,014	3/27/1997
Advanced Technology Materials, Inc.	Fabrication of electron emitters coated with material such as carbon	6,379,210	11/29/2000
Advanced Technology Materials, Inc.	Composition and method for forming thin film ferrite layers on a substrate	6,030,454	3/28/1997

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Compositions and method for forming doped A-site deficient thin-film manganate layers on a substrate	6,117,571	3/28/1997
Advanced Technology Materials, Inc.	Compositions and method for forming doped A-site deficient thin-film manganate layers on a substrate	7,029,724	3/28/1997
Advanced Technology Materials, Inc.	Method for nucleation controlled chemical vapor deposition of metal oxide ferroelectric thin films	6,010,744	12/23/1997
Advanced Technology Materials, Inc.	Method for the selective deposition of bismuth based ferroelectric thin films by chemical vapor deposition	6,120,846	12/23/1997
Advanced Technology Materials, Inc.	Anhydrous mononuclear tris(.beta.-diketonate) bismuth compositions for deposition of bismuth-containing films, and method of making the same	5,859,274	10/30/1997
Advanced Technology Materials, Inc.	Lewis base adducts of anhydrous mononuclear tris(.beta.-diketonate) bismuth compositions for deposition of bismuth-containing films, and method of mak	6,111,124	12/31/1998
Advanced Technology Materials, Inc.	Apparatus and method for the in-situ generation of dopants	6,001,172	8/5/1997
Advanced Technology Materials, Inc.	Chemical vapor deposition process for fabrication of hybrid electrodes	6,284,654	4/16/1998
Advanced Technology Materials, Inc.	Stable hydride source compositions for manufacture of semiconductor devices and structures	6,319,565	6/26/2000
Advanced Technology Materials, Inc.	Method of forming sidewall capacitance structure	6,033,919	10/22/1997
Advanced Technology Materials, Inc.	PROCESS FOR FABRICATING A SORBENT-BASED GAS STORAGE AND DISPENSING SYSTEM, UTILIZING SORBENT MATERIAL PRETREATMENT	6,083,298	8/31/1998
Advanced Technology Materials, Inc.	Article comprising a capacitor with non-perovskite Sr-Ba-Ti oxide dielectric thin film	5,932,905	11/26/1997
Advanced Technology Materials, Inc.	Article comprising a capacitor with non-perovskite Sr-Ba-Ti oxide dielectric thin film	6,277,436	12/18/1998

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	SYSTEM AND METHOD FOR FLUID STORAGE AND DISPENSING	6,101,816	4/28/1998
Advanced Technology Materials, Inc.	SYSTEM AND METHOD FOR FLUID STORAGE AND DISPENSING	6,089,027	4/28/1999
Advanced Technology Materials, Inc.	SYSTEM AND METHOD FOR FLUID STORAGE AND DISPENSING	6,343,476	4/19/2000
Advanced Technology Materials, Inc.	Chemical refill system for high purity chemicals	6,199,599	6/4/1999
Advanced Technology Materials, Inc.	Chemical refill system for high purity chemicals	6,296,025	11/13/2000
Advanced Technology Materials, Inc.	Chemical refill system for high purity chemicals	6,296,026	11/13/2000
Advanced Technology Materials, Inc.	Chemical refill system for high purity chemicals	6,457,494	9/7/2001
Advanced Technology Materials, Inc.	Group II MOCVD source reagents, and method of forming Group II metal-containing films utilizing same	6,111,122	4/28/1998
Advanced Technology Materials, Inc.	Liquid chemical dispensing system with sensor	5,875,921	3/12/1997
Advanced Technology Materials, Inc.	Amorphously deposited metal oxide ceramic films	6,713,797	11/23/1998
Advanced Technology Materials, Inc.	Sputtering process for the conformal deposition of a metallization or insulating layer	6,100,200	12/21/1998
Advanced Technology Materials, Inc.	Adhesion promotion method for CVD copper metallization in IC applications	6,645,860	11/1/2001
Advanced Technology Materials, Inc.	Method of controlled chemical vapor deposition of a metal oxide ceramic layer	6,787,186	12/14/1998

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	INDIUM SOURCE REAGENT COMPOSITIONS, AND USE THEREOF FOR DEPOSITION OF INDIUM-CONTAINING FILMS ON SUBSTRATES AND ION IMPLANTATION...	6,204,402	12/22/1998
Advanced Technology Materials, Inc.	Flat-panel display having spacer with rough face for inhibiting secondary electron escape	6,617,772	12/11/1998
Advanced Technology Materials, Inc.	Flat-panel display having spacer with rough face for inhibiting secondary electron escape	7,090,554	6/24/2003
Advanced Technology Materials, Inc.	Multi-component mixtures for manufacturing of in situ doped borophosphosilicate	6,030,445	5/15/1998
Advanced Technology Materials, Inc.	Multi-component mixtures for manufacturing of in situ doped borophosphosilicate	6,228,159	12/30/1999
Advanced Technology Materials, Inc.	BULK CHEMICAL DELIVERY SYSTEM	6,435,229	9/1/2000
Advanced Technology Materials, Inc.	BULK CHEMICAL DELIVERY SYSTEM	6,637,475	7/30/2002
Advanced Technology Materials, Inc.	BULK CHEMICAL DELIVERY SYSTEM	5,964,254	7/11/1997
Advanced Technology Materials, Inc.	BULK CHEMICAL DELIVERY SYSTEM	6,047,744	6/8/1999
Advanced Technology Materials, Inc.	CHEMICAL DELIVERY SYSTEM HAVING PURGE SYSTEM UTILIZING MULTIPLE PURGE TECHNIQUES	6,029,718	6/26/1998
Advanced Technology Materials, Inc.	CHEMICAL DELIVERY SYSTEM HAVING PURGE SYSTEM UTILIZING MULTIPLE PURGE TECHNIQUES	6,192,919	12/30/1999
Advanced Technology Materials, Inc.	Chemical cabinet employing air flow baffles	6,105,606	8/28/1998
Advanced Technology Materials, Inc.	Container chemical guard	6,520,218	9/3/1998

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	6,316,797	2/19/1999
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	6,984,417	8/1/2001
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	7,344,589	1/10/2006
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	7,705,382	10/26/2007
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	7,862,857	4/27/2010
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	8,501,976	12/23/2010
Advanced Technology Materials, Inc.	Low temperature CVD processes for preparing ferroelectric films using Bi alcoxides	6,500,489	12/9/1998
Advanced Technology Materials, Inc.	Method of and system for sub-atmospheric gas delivery with backflow control	6,155,289	5/7/1999

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Method of and system for sub-atmospheric gas delivery with backflow control	6,253,783	10/24/2000
Advanced Technology Materials, Inc.	Tetrahydrofuran-adducted group II .beta.-diketonate complexes as source reagents for chemical vapor deposition	6,504,015	2/21/2001
Advanced Technology Materials, Inc.	MOCVD of SBT using toluene based solvent system for precursor delivery	6,660,331	12/7/2001
Advanced Technology Materials, Inc.	Liquid chemical dispensing system with pressurization	6,206,240	3/23/1999
Advanced Technology Materials, Inc.	Auto-switching gas delivery system utilizing sub-atmospheric pressure gas supply vessels	6,302,139	7/16/1999
Advanced Technology Materials, Inc.	MOCVD of SBT using tetrahydrofuran-based solvent system for precursor delivery	6,511,706	11/16/1999
Advanced Technology Materials, Inc.	Post plasma ashing wafer cleaning formulation	7,534,752	9/17/2001
Advanced Technology Materials, Inc.	Formulations including a 1, 3-dicarbonyl compound chelating agent for stripping residues from semiconductor substrates	6,211,126	8/20/1999
Advanced Technology Materials, Inc.	Formulations including a 1, 3-dicarbonyl compound chelating agent for stripping residues from semiconductor substrates	6,566,315	12/5/2001
Advanced Technology Materials, Inc.	Formulations including a 1, 3-dicarbonyl compound chelating agent for stripping residues from semiconductor substrates	6,660,700	11/15/2001
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	6,224,785	8/29/1997
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	6,896,826	10/23/2001
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	7,605,113	5/24/2005

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	AQUEOUS CLEANING COMPOSITION CONTAINING COPPER-SPECIFIC CORROSION INHIBITOR FOR CLEANING INORGANIC RESIDUES ON SEMICONDUCTOR SUBSTRATE	8,293,694	10/19/2009
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	6,967,169	6/4/2004
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	7,662,762	1/24/2005
Advanced Technology Materials, Inc.	Aqueous ammonium fluoride and amine containing compositions for cleaning inorganic residues on semiconductor substrates	6,755,989	3/27/2001
Advanced Technology Materials, Inc.	Ammonium borate containing compositions for stripping residues from semiconductor substrates	6,875,733	3/3/2003
Advanced Technology Materials, Inc.	Selective silicon oxide etchant formulation including fluoride salt, chelating agent, and glycol solvent	6,383,410	8/8/2001
Advanced Technology Materials, Inc.	Selective silicon oxide etchant formulation including fluoride salt, chelating agent, and glycol solvent	6,280,651	12/16/1998
Advanced Technology Materials, Inc.	Boric acid containing compositions for stripping residues from semiconductor substrates	6,492,310	3/7/2001
Advanced Technology Materials, Inc.	Boric acid containing compositions for stripping residues from semiconductor substrates	6,599,870	6/25/2002
Advanced Technology Materials, Inc.	SOURCE REAGENT COMPOSITION AND METHOD FOR CHEMICAL VAPOR DEPOSITION FORMATION OR ZR/HF SILICATE GATE DIELECTRIC THIN FILMS	6,399,208	6/4/2002
Advanced Technology Materials, Inc.	Planarization composition for removing metal films	6,267,909	10/12/1999
Advanced Technology Materials, Inc.	Preparation of high performance silica slurry using a centrifuge	6,802,983	9/17/2001

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Low temperature process for high density thin film integrated capacitors and amorphously frustrated ferroelectric materials therefor	6,348,705	12/22/1999
Advanced Technology Materials, Inc.	Fluid storage and dispensing system	6,500,238	8/10/2000
Advanced Technology Materials, Inc.	Gas cabinet assembly comprising back migration scrubber unit	6,471,750	8/8/2001
Advanced Technology Materials, Inc.	Fluid storage and dispensing system featuring externally adjustable regulator assembly for high flow dispensing	6,474,076	11/12/2001
Advanced Technology Materials, Inc.	Fluid storage and dispensing system featuring interiorly disposed and exteriorly adjustable regulator for high flow dispensing of gas	6,257,000	3/22/2000
Advanced Technology Materials, Inc.	PERMEABLE GAS ASSEMBLY FOR GAS DELIVERY	6,935,354	12/9/2002
Advanced Technology Materials, Inc.	PERMEABLE GAS ASSEMBLY FOR GAS DELIVERY	7,370,661	8/29/2005
Advanced Technology Materials, Inc.	Adsorbents for low vapor pressure fluid storage and delivery	6,620,225	1/10/2002
Advanced Technology Materials, Inc.	Adsorbents for low vapor pressure fluid storage and delivery	7,048,785	1/10/2002
Advanced Technology Materials, Inc.	Channelized sorbent media, and methods of making same	6,764,755	12/17/2001
Advanced Technology Materials, Inc.	Chemical method for removal and analysis of boron impurities in tetraethylorthosilicate (TEOS)	6,458,984	3/31/2000
Advanced Technology Materials, Inc.	Silicon reagents and low temperature CVD method of forming silicon-containing gate dielectric materials using same	6,736,993	4/18/2000
Advanced Technology Materials, Inc.	FLUID DISTRIBUTION SYSTEM AND PROCESS, AND SEMICONDUCTOR FABRICATION FACILITY UTILIZING SAME	6,453,924	7/24/2000

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Advanced Technology Materials, Inc.	FLUID DISTRIBUTION SYSTEM AND PROCESS, AND SEMICONDUCTOR FABRICATION FACILITY UTILIZING SAME	6,561,213	6/5/2001
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM FEATURING EX SITU STRAIN GAUGE PRESSURE MONITORING ASSEMBLY	6,494,343	2/15/2001
Advanced Technology Materials, Inc.	FLUID STORAGE AND DELIVERY SYSTEM UTILIZING LOW HEELS CARBON SORBENT MEDIUM	6,592,653	11/12/2001
Advanced Technology Materials, Inc.	Non-plasma in-situ cleaning of processing chambers using static flow methods	6,620,256	11/8/2000
Advanced Technology Materials, Inc.	Thermal regulation of an ion implantation system	6,670,623	3/7/2001
Advanced Technology Materials, Inc.	Double chamber ion implantation system	6,545,419	3/7/2001
Advanced Technology Materials, Inc.	FOR POSITIONING A LIQUID LEVEL SENSOR	6,599,447	11/29/2000
Advanced Technology Materials, Inc.	Barrier structures for integration of high K oxides with Cu and Al electrodes	6,900,498	5/8/2001
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR MINIMIZING THE GENERATION OF PARTICLES IN ULTRAPURE LIQUIDS	7,188,644	5/3/2002
Advanced Technology Materials, Inc.	SOURCE REAGENT COMPOSITIONS FOR CVD FORMATION OF HIGH DIELECTRIC CONSTANT AND FERROELECTRIC METAL OXIDE THIN FILMS AND METHOD OF USING SAME	6,623,656	2/26/2001
Advanced Technology Materials, Inc.	SOURCE REAGENT COMPOSITIONS FOR CVD FORMATION OF HIGH DIELECTRIC CONSTANT AND FERROELECTRIC METAL OXIDE THIN FILMS AND METHOD OF USING SAME	7,094,284	7/17/2001

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Advanced Technology Materials, Inc.	SYSTEM FOR IN-SITU GENERATION OF FLUORINE RADICALS AND/OR FLUORINE-CONTAINING INTERHALOGEN (XFn) COMPOUNDS FOR USE IN CLEANING SEMICONDUCTOR PROCESSIN	6,841,141	9/26/2002
Advanced Technology Materials, Inc.	SOURCE REAGENT COMPOSITIONS FOR CVD FORMATION OF GATE DIELECTRIC THIN FILMS USING AMIDE PRECURSORS AND METHOD OF USING SAME	6,869,638	9/18/2001
Advanced Technology Materials, Inc.	METHOD FOR REMOVAL OF IMPURITIES IN CYCLIC SILOXANES USEFUL AS PRECURSORS FOR LOW DIELECTRIC CONSTANT THIN FILMS	7,423,166	8/28/2003
Advanced Technology Materials, Inc.	METHOD FOR REMOVAL OF IMPURITIES IN CYCLIC SILOXANES USEFUL AS PRECURSORS FOR LOW DIELECTRIC CONSTANT THIN FILMS	7,108,771	12/13/2001
Advanced Technology Materials, Inc.	Abrasive free formulations for chemical mechanical polishing of copper and associated materials and method of using same	6,800,218	8/23/2001
Advanced Technology Materials, Inc.	Chemical mechanical polishing compositions for metal and associated materials and method of using same	6,692,546	8/17/2001
Advanced Technology Materials, Inc.	Chemical mechanical polishing compositions for metal and associated materials and method of using same	7,029,373	8/14/2001
Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	7,702,418	12/19/2003
Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	8,150,549	2/17/2010
Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	7,747,344	5/3/2002
Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	7,664,568	3/8/2005

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Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	6,879,876	6/13/2001
Advanced Technology Materials, Inc.	Supercritical fluid-based cleaning compositions and methods	7,485,611	5/6/2003
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR DISPENSING HIGH VISCOSITY LIQUID	7,025,234	9/19/2002
Advanced Technology Materials, Inc.	Supercritical fluid-assisted deposition of materials on semiconductor substrates	7,294,528	3/11/2005
Advanced Technology Materials, Inc.	Supercritical fluid-assisted deposition of materials on semiconductor substrates	7,030,168	12/31/2001
Advanced Technology Materials, Inc.	Supercritical fluid-assisted deposition of materials on semiconductor substrates	7,119,418	7/31/2003
Advanced Technology Materials, Inc.	NON-FLUORIDE CONTAINING SUPERCRITICAL FLUID COMPOSITION FOR REMOVAL OF ION-IMPLANT PHOTORESIST	7,326,673	11/25/2002
Advanced Technology Materials, Inc.	NICKEL-COATED FREE-STANDING SILICON CARBIDE STRUCTURE FOR SENSING FLUORO OR HALOGEN SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS, AND PROCESSES OF MAKI	7,296,458	2/23/2004
Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR SENSING TARGET GAS SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS	7,228,724	1/16/2004
Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS	7,080,545	10/17/2002
Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS	8,109,130	8/7/2009

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Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS	7,475,588	2/14/2005
Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR SENSING FLUORO SPECIES IN SEMICONDUCTOR PROCESSING SYSTEMS	7,296,460	2/14/2005
Advanced Technology Materials, Inc.	Method for trace water analysis in cyclic siloxanes useful as precursors for low dielectric constant thin films	7,189,571	3/27/2002
Advanced Technology Materials, Inc.	RETURNABLE AND REUSABLE, BAG-IN-DRUM FLUID STORAGE AND DISPENSING CONTAINER SYSTEM	6,698,619	5/3/2002
Advanced Technology Materials, Inc.	RETURNABLE AND REUSABLE, BAG-IN-DRUM FLUID STORAGE AND DISPENSING CONTAINER SYSTEM	6,942,123	1/20/2004
Advanced Technology Materials, Inc.	RETURNABLE AND REUSABLE, BAG-IN-DRUM FLUID STORAGE AND DISPENSING CONTAINER SYSTEM	7,316,329	9/13/2005
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	6,991,671	12/9/2002
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	D545393	9/2/2004
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	7,501,010	9/15/2005
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	7,972,421	3/10/2009
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	8,506,689	6/26/2011
Advanced Technology Materials, Inc.	INFRARED THERMOPILE DETECTOR SYSTEM FOR SEMICONDUCTOR PROCESS MONITORING AND CONTROL	6,617,175	5/8/2002
Advanced Technology Materials, Inc.	INFRARED THERMOPILE DETECTOR SYSTEM FOR SEMICONDUCTOR PROCESS MONITORING AND CONTROL	7,129,519	9/23/2003

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	MONITORING SYSTEM COMPRISING INFRARED THERMOPILE DETECTOR	7,351,976	10/31/2006
Advanced Technology Materials, Inc.	MONITORING SYSTEM COMPRISING INFRARED THERMOPILE DETECTOR	7,723,685	4/1/2008
Advanced Technology Materials, Inc.	MONITORING SYSTEM COMPRISING INFRARED THERMOPILE DETECTOR	7,011,614	7/18/2003
Advanced Technology Materials, Inc.	MONITORING SYSTEM COMPRISING INFRARED THERMOPILE DETECTOR	6,821,795	12/9/2003
Advanced Technology Materials, Inc.	MONITORING SYSTEM COMPRISING INFRARED THERMOPILE DETECTOR	7,172,918	12/9/2003
Advanced Technology Materials, Inc.	Br ₂ SbCH ₃ a solid source ion implant and CVD precursor	6,767,830	8/7/2002
Advanced Technology Materials, Inc.	VAPORIZER DELIVERY AMPOULE	6,921,062	7/23/2002
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	7,487,956	10/30/2007
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	7,828,274	1/23/2009
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	8,128,073	11/5/2010
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	8,444,120	2/16/2012
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	7,300,038	6/1/2004
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	7,556,244	8/28/2007

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Advanced Technology Materials, Inc.	PRESSURE-BASED GAS DELIVERY SYSTEM AND METHOD FOR REDUCING RISKS ASSOCIATED WITH STORAGE AND DELIVERY OF HIGH PRESSURE GASES	6,857,447	6/10/2002
Advanced Technology Materials, Inc.	PRESSURE-BASED GAS DELIVERY SYSTEM AND METHOD FOR REDUCING RISKS ASSOCIATED WITH STORAGE AND DELIVERY OF HIGH PRESSURE GASES	7,328,716	2/22/2005
Advanced Technology Materials, Inc.	PRESSURE-BASED GAS DELIVERY SYSTEM AND METHOD FOR REDUCING RISKS ASSOCIATED WITH STORAGE AND DELIVERY OF HIGH PRESSURE GASES	7,614,421	2/23/2006
Advanced Technology Materials, Inc.	PRESSURE-BASED GAS DELIVERY SYSTEM AND METHOD FOR REDUCING RISKS ASSOCIATED WITH STORAGE AND DELIVERY OF HIGH PRESSURE GASES	7,798,168	11/10/2009
Advanced Technology Materials, Inc.	Composition and process for wet stripping removal of sacrificial anti-reflective material	6,849,200	7/23/2002
Advanced Technology Materials, Inc.	Gas storage and dispensing system for variable conductance dispensing of gas at constant flow rate	7,284,564	12/19/2005
Advanced Technology Materials, Inc.	Porogen material	7,342,295	3/3/2005
Advanced Technology Materials, Inc.	Porogen material	7,456,488	11/21/2002
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	6,743,278	12/10/2002
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	7,494,530	4/11/2005
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	8,002,880	2/24/2009

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Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	8,282,714	8/23/2011
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	6,939,394	1/29/2004
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	7,455,719	9/6/2005
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR INHIBITING DECOMPOSITION OF GERMANE	6,716,271	10/29/2002
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS SUCH AS FILMS INCLUDING SILICON NITRIDE, SILICON DIOXIDE AND/OR SILI	7,446,217	10/31/2003
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS	7,713,346	10/7/2008
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS	7,887,883	5/11/2010
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAING FILMS SUCH AS FILMS INCLUDING SILCON NITRIDE, SILICON DIOXIDE AND/OR SILI	8,236,097	2/15/2011
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS SUCH AS FILMS INCLUDING SILICON, SILICON NITRIDE, SILICON DIOXIDE AN	7,786,320	5/12/2009
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS SUCH AS FILMS INCLUDING SILICON, SILICON NITRIDE, SILICON DIOXIDE AN	7,910,765	7/17/2010

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Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS SUCH AS FILMS INCLUDING SILICON, SILICON NITRIDE, SILICON DIOXIDE AN	8,153,833	3/22/2011
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS SUCH AS FILMS INCLUDING SILICON NITRIDE, SILICON DIOXIDE AND/OR SILI	7,531,679	11/14/2002
Advanced Technology Materials, Inc.	Treatment of supercritical fluid utilized in semiconductor manufacturing applications	6,735,978	2/11/2003
Advanced Technology Materials, Inc.	Supercritical carbon dioxide/chemical formulation for ashed and unashed aluminum post-etch residue removal	7,223,352	10/31/2002
Advanced Technology Materials, Inc.	Precursor compositions and processes for MOCVD of barrier materials in semiconductor manufacturing	7,208,427	8/18/2003
Advanced Technology Materials, Inc.	CHEMICAL VAPOR DEPOSITION PRECURSORS FOR THE DEPOSITION OF TANTALUM-BASED MATERIALS	7,329,768	1/20/2006
Advanced Technology Materials, Inc.	CHEMICAL VAPOR DEPOSITION PRECURSORS FOR THE DEPOSITION OF TANTALUM-BASED MATERIALS	6,989,457	1/16/2003
Advanced Technology Materials, Inc.	Passivative chemical mechanical polishing composition for copper film planarization	7,300,601	12/10/2002
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	6,909,973	8/14/2003
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	7,058,519	6/21/2005
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	7,373,257	6/2/2006
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	7,711,496	5/13/2008

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Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	7,925,450	5/4/2010
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	8,244,482	4/12/2011
Advanced Technology Materials, Inc.	PHOTOMETRICALLY MODULATED DELIVERY OF REAGENTS	7,325,560	6/15/2006
Advanced Technology Materials, Inc.	In-situ gas blending and dilution system for delivery of dilute gas at a predetermined concentration	7,063,097	3/28/2003
Advanced Technology Materials, Inc.	Ion implantation and wet bench systems utilizing exhaust gas recirculation	6,770,117	10/31/2002
Advanced Technology Materials, Inc.	Ion implantation and wet bench systems utilizing exhaust gas recirculation	7,485,169	9/12/2006
Advanced Technology Materials, Inc.	SEMICONDUCTOR MANUFACTURING FACILITY UTILIZING EXHAUST RECIRCULATION	7,857,880	2/3/2009
Advanced Technology Materials, Inc.	Ion implantation and wet bench systems utilizing exhaust gas recirculation	7,105,037	9/6/2003
Advanced Technology Materials, Inc.	Photoresist removal	8,236,485	3/14/2003
Advanced Technology Materials, Inc.	POLYTETRAFLUOROETHYLENE TREATMENT	7,335,721	6/13/2006
Advanced Technology Materials, Inc.	Gas cabinet including integrated effluent scrubber	7,018,448	10/28/2003
Advanced Technology Materials, Inc.	Compositions and methods for high-efficiency cleaning/polishing of semiconductor wafers	7,119,052	6/24/2003
Advanced Technology Materials, Inc.	Chemical mechanical planarization pad	7,335,239	11/17/2003
Advanced Technology Materials, Inc.	Chemical mechanical planarization pad	7,931,713	11/13/2007

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Chemical mechanical polishing compositions for copper and associated materials and method of using same	7,736,405	5/12/2003
Advanced Technology Materials, Inc.	AUTO-SWITCHING SYSTEM FOR SWITCH-OVER OF GAS STORAGE AND DISPENSING VESSELS IN A MULTI-VESSEL ARRAY	6,955,198	9/9/2003
Advanced Technology Materials, Inc.	AUTO-SWITCHING SYSTEM FOR SWITCH-OVER OF GAS STORAGE AND DISPENSING VESSELS IN A MULTI-VESSEL ARRAY	7,104,292	10/18/2005
Advanced Technology Materials, Inc.	DELIVERY SYSTEMS FOR EFFICIENT VAPORIZATION OF PRECURSOR SOURCE MATERIAL	6,909,839	7/23/2003
Advanced Technology Materials, Inc.	DELIVERY SYSTEMS FOR EFFICIENT VAPORIZATION OF PRECURSOR SOURCE MATERIAL	7,437,060	6/21/2005
Advanced Technology Materials, Inc.	Canister guard	6,880,592	6/26/2003
Advanced Technology Materials, Inc.	FEEDBACK CONTROL SYSTEM AND METHOD FOR MAINTAINING CONSTANT POWER OPERATION OF ELECTRICALLY HEATED ELEMENTS	7,193,187	2/9/2004
Advanced Technology Materials, Inc.	FEEDBACK CONTROL SYSTEM AND METHOD FOR MAINTAINING CONSTANT RESISTANCE OPERATION OF ELECTRICALLY HEATED ELEMENTS	7,655,887	5/24/2006
Advanced Technology Materials, Inc.	Ethyleneoxide-silane and bridged silane precursors for forming low k films	7,022,864	7/15/2003
Advanced Technology Materials, Inc.	Manufacturing System with Intrinsically Safe Electric Information Storage	7,152,781	12/1/2003
Advanced Technology Materials, Inc.	Manufacturing System with Intrinsically Safe Electric Information Storage	7,370,791	12/22/2006
Advanced Technology Materials, Inc.	Composition and process for post-etch removal of photoresist and/or sacrificial anti-reflective material deposited on a substrate	8,338,087	3/3/2004

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	Fluid storage and dispensing vessels having colorimetrically verifiable leak-tightness, and method of making same	7,253,002	11/3/2003
Advanced Technology Materials, Inc.	Fluid storage and dispensing vessels having colorimetrically verifiable leak-tightness, and method of making same	8,003,391	6/30/2007
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING VESSELS HAVING COLORIMETRICALLY VERIFIABLE LEAK-TIGHTNESS, AND METHOD OF MAKING SAME	8,153,434	8/5/2011
Advanced Technology Materials, Inc.	Post chemical-mechanical planarization (CMP) cleaning composition	6,492,308	6/6/2000
Advanced Technology Materials, Inc.	Post chemical-mechanical planarization (CMP) cleaning composition	6,194,366	11/16/1999
Advanced Technology Materials, Inc.	Post chemical-mechanical planarization (CMP) cleaning composition	6,723,691	2/12/2001
Advanced Technology Materials, Inc.	Cleaning compositions	6,627,587	4/19/2001
Advanced Technology Materials, Inc.	Cleaning compositions	6,851,432	4/16/2003
Advanced Technology Materials, Inc.	GAS DELIVERY SYSTEM WITH INTEGRATED VALVE MANIFOLD FUNCTIONALITY FOR SUB-ATMOSPHERIC AND SUPER-ATMOSPHERIC PRESSURE APPLICATIONS	7,051,749	11/24/2003
Advanced Technology Materials, Inc.	GAS DELIVERY SYSTEM WITH INTEGRATED VALVE MANIFOLD FUNCTIONALITY FOR SUB-ATMOSPHERIC AND SUPER-ATMOSPHERIC PRESSURE APPLICATIONS	7,406,979	5/30/2006
Advanced Technology Materials, Inc.	GAS DELIVERY SYSTEM WITH INTEGRATED VALVE MANIFOLD FUNCTIONALITY FOR SUB-ATMOSPHERIC AND SUPER-ATMOSPHERIC PRESSURE APPLICATIONS	7,694,691	8/5/2008

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Advanced Technology Materials, Inc.	TANTALUM AMIDE COMPLEXES FOR DEPOSITING TANTALUM-CONTAINING FILMS, AND METHOD OF MAKING SAME	6,960,675	10/14/2003
Advanced Technology Materials, Inc.	TANTALUM AMIDE COMPLEXES FOR DEPOSITING TANTALUM-CONTAINING FILMS, AND METHOD OF MAKING SAME	7,198,815	9/12/2005
Advanced Technology Materials, Inc.	TANTALUM AMIDE COMPLEXES FOR DEPOSITING TANTALUM-CONTAINING FILMS, AND METHOD OF MAKING SAME	7,371,878	1/23/2007
Advanced Technology Materials, Inc.	TANTALUM AMIDE COMPLEXES FOR DEPOSITING TANTALUM-CONTAINING FILMS, AND METHOD OF MAKING SAME	7,709,384	5/12/2008
Advanced Technology Materials, Inc.	TANTALUM AMIDE COMPLEXES FOR DEPOSITING TANTALUM-CONTAINING FILMS, AND METHOD OF MAKING SAME	7,838,073	5/4/2010
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION OF SILICON-CONTAINING FILMS INCLUDING SILICON CARBONITRIDE AND SILICON OXYCARBONI	7,601,860	6/17/2004
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION OF SILICON-CONTAINING FILMS INCLUDING SILICON CARBONITRIDE AND SILICON OXYCARBONI	7,781,605	10/13/2009
Advanced Technology Materials, Inc.	MONOSILANE OR DISILANE DERIVATIVES AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS USING THE SAME	7,863,203	1/24/2008
Advanced Technology Materials, Inc.	MONOSILANE OR DISILANE DERIVATIVES AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS USING THE SAME	8,242,032	1/4/2011

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	MONOSILANE OR DISILANE DERIVATIVES AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS USING THE SAME	8,541,318	2/9/2012
Advanced Technology Materials, Inc.	MONOSILANE OR DISILANE DERIVATIVES AND METHOD FOR LOW TEMPERATURE DEPOSITION OF SILICON-CONTAINING FILMS USING THE SAME	7,579,496	10/10/2003
Advanced Technology Materials, Inc.	Apparatus and method for hydrogen generation from gaseous hydride	7,780,747	4/28/2005
Advanced Technology Materials, Inc.	Removal of MEMS sacrificial layers using supercritical fluid/chemical formulations	7,160,815	2/19/2004
Advanced Technology Materials, Inc.	Removal of MEMS sacrificial layers using supercritical fluid/chemical formulations	7,517,809	1/8/2007
Advanced Technology Materials, Inc.	Resist, Barc and Gap Fill Material Stripping Chemical and Method	7,888,301 B2	8/10/2007
Advanced Technology Materials, Inc.	CHEMICAL VAPOR DEPOSITION OF HIGH CONDUCTIVITY, ADHERENT THIN FILMS OF RUTHENIUM	7,285,308	3/18/2004
Advanced Technology Materials, Inc.	CHEMICAL VAPOR DEPOSITION OF HIGH CONDUCTIVITY, ADHERENT THIN FILMS OF RUTHENIUM	8,034,407	5/17/2007
Advanced Technology Materials, Inc.	CHEMICAL VAPOR DEPOSITION OF HIGH CONDUCTIVITY, ADHERENT THIN FILMS OF RUTHENIUM	8,241,704	4/19/2011
Advanced Technology Materials, Inc.	Aqueous cleaner with low metal etch rate comprising alkanolamine and tetraalkylammonium hydroxide	7,365,045	3/30/2005
Advanced Technology Materials, Inc.	COMPOSITIONS FOR PROCESSING OF SEMICONDUCTOR SUBSTRATES	7,922,823	7/25/2007
Advanced Technology Materials, Inc.	COMPOSITIONS FOR PROCESSING OF SEMICONDUCTOR SUBSTRATES	7,923,423	1/27/2005
Advanced Technology Materials, Inc.	NOVEL METHODS FOR CLEANING ION IMPLANTER COMPONENTS	7,819,981	10/26/2004

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	LIQUID DISPENSING SYSTEM	7,172,096	11/15/2004
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM INCLUDING DYNAMIC FLUID MONITORING OF FLUID STORAGE AND DISPENSING VESSEL	7,966,879	5/4/2007
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM INCLUDING DYNAMIC FLUID MONITORING OF FLUID STORAGE AND DISPENSING VESSEL	8,555,705	6/28/2011
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM INCLUDING DYNAMIC FLUID MONITORING OF FLUID STORAGE AND DISPENSING VESSEL	7,955,797	10/25/2004
Advanced Technology Materials, Inc.	Composition useful for removal of post-etch photoresist and bottom anti-reflection coatings	7,994,108	7/6/2007
Advanced Technology Materials, Inc.	METALS COMPATIBLE POST-ETCH PHOTORESIST REMOVER AND/OR SACRIFICIAL ANTIREFLECTIVE COATING ETCHANT	8,058,219 B2	10/6/2008
Advanced Technology Materials, Inc.	LINER-BASED LIQUID STORAGE AND DISPENSING SYSTEMS WITH EMPTY DETECTION CAPABILITY	8,322,571	10/25/2007
Advanced Technology Materials, Inc.	HIGH THROUGHPUT CHEMICAL MECHANICAL POLISHING COMPOSITION FOR METAL FILM PLANARIZATION	8,304,344	8/7/2006
Advanced Technology Materials, Inc.	Formulations for Cleaning Ion-Implanted Photoresist Layers from Microelectronic Devices	8,114,220	4/14/2006
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEMS, AND FLUID SUPPLY PROCESSES COMPRISING SAME	7,951,225	11/3/2007
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEMS, AND FLUID SUPPLY PROCESSES COMPRISING SAME	8,282,023	5/31/2011
Advanced Technology Materials, Inc.	BORON ION IMPLANTATION USING ALTERNATIVE FLUORINATED BORON PRECURSORS, AND FORMATION OF LARGE BORON HYDRIDES FOR IMPLANTATION	7,943,204	8/30/2006

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	BORON ION IMPLANTATION USING ALTERNATIVE FLUORINATED BORON PRECURSORS, AND FORMATION OF LARGE BORON HYDRIDES FOR IMPLANTATION	8,389,068	10/27/2010
Advanced Technology Materials, Inc.	OXIDIZING AQUEOUS CLEANER FOR THE REMOVAL OF POST-ETCH RESIDUES	7,922,824	4/4/2008
Advanced Technology Materials, Inc.	NANOPOROUS ARTICLES AND METHODS OF MAKING SAME	7,862,646	7/30/2008
Advanced Technology Materials, Inc.	NANOPOROUS ARTICLES AND METHODS OF MAKING SAME	8,221,532	1/4/2011
Advanced Technology Materials, Inc.	Composition and Method for Recycling Semiconductor Wafers Having Low-K Dielectric Materials Thereon	7,960,328	11/9/2006
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR RECYCLING SEMICONDUCTOR WAFERS HAVING LOW-K DIELECTRIC MATERIALS THEREON	8,642,526	5/9/2011
Advanced Technology Materials, Inc.	PRECURSOR COMPOSITIONS FOR ATOMIC LAYER DEPOSITION AND CHEMICAL VAPOR DEPOSITION OF TITANATE, LANTHANATE, AND TANTALATE DIELECTRIC FILMS	7,638,074	9/10/2008
Advanced Technology Materials, Inc.	PRECURSOR COMPOSITIONS FOR ATOMIC LAYER DEPOSITION AND CHEMICAL VAPOR DEPOSITION OF TITANATE, LANTHANATE, AND TANTALATE DIELECTRIC FILMS	8,206,784	2/1/2012
Advanced Technology Materials, Inc.	SUPER-DRY REAGENT COMPOSITIONS FOR FORMATION OF ULTRA LOW K FILMS	8,053,375	10/27/2007
Advanced Technology Materials, Inc.	LOW TEMPERATURE DEPOSITION OF PHASE CHANGE MEMORY MATERIALS	8,288,198	11/11/2008
Advanced Technology Materials, Inc.	TANTALUM AMIDO-COMPLEXES WITH CHELATE LIGANDS USEFUL FOR CVD AND ALD OF TaN AND Ta2O5 THIN FILMS	7,750,173	1/12/2008

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	TANTALUM AMIDO-COMPLEXES WITH CHELATE LIGANDS USEFUL FOR CVD AND ALD OF TaN AND Ta2O5 THIN FILMS	7,858,816	5/30/2010
Advanced Technology Materials, Inc.	BARRIER FLUOROPOLYMER FILM-BASED LINERS AND PACKAGING COMPRISING SAME	8,313,821	6/1/2007
Advanced Technology Materials, Inc.	Passivative chemical mechanical polishing composition for copper film planarization	7,361,603	4/28/2005
Advanced Technology Materials, Inc.	Passivative chemical mechanical polishing composition for copper film planarization	8,236,695	9/19/2008
Advanced Technology Materials, Inc.	LIQUID DISPENSING SYSTEMS ENCOMPASSING GAS REMOVAL	8,336,734	12/14/2008
Advanced Technology Materials, Inc.	CLEANING OF SEMICONDUCTOR PROCESSING SYSTEMS	8,603,252	10/27/2008
Advanced Technology Materials, Inc.	ANTIMONY AND GERMANIUM COMPLEXES USEFUL FOR CVD/ALD OF METAL THIN FILMS	7,838,329	3/12/2007
Advanced Technology Materials, Inc.	ANTIMONY AND GERMANIUM COMPLEXES USEFUL FOR CVD/ALD OF METAL THIN FILMS	8,008,117	8/22/2010
Advanced Technology Materials, Inc.	ANTIMONY AND GERMANIUM COMPLEXES USEFUL FOR CVD/ALD OF METAL THIN FILMS	8,268,665	6/26/2011
Advanced Technology Materials, Inc.	PRECURSOR COMPOSITIONS FOR ALD/CVD OF GROUP II RUTHENATE THIN FILMS	8,524,931	7/17/2009
Advanced Technology Materials, Inc.	COPPER PRECURSORS FOR CVD/ALD/DIGITAL CVD OF COPPER METAL FILMS	7,964,746	3/30/2008
Advanced Technology Materials, Inc.	COMPONENT FOR SOLAR ADSORPTION REFRIGERATION SYSTEM AND METHOD OF MAKING SUCH COMPONENT	8,539,781	12/22/2009
Advanced Technology Materials, Inc.	STRONTIUM AND BARIUM PRECURSORS FOR USE IN CHEMICAL VAPOR DEPOSITION, ATOMIC LAYER DEPOSITION AND RAPID VAPOR DEPOSITION	8,455,049	2/8/2010

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	SOLVENT-FREE SYNTHESIS OF SOLUBLE NANOCRYSTALS	8,178,585	5/14/2010
Advanced Technology Materials, Inc.	AMORPHOUS GE/TE DEPOSITION PROCESS	8,093,140	10/31/2008
Advanced Technology Materials, Inc.	LOW pH MIXTURES FOR THE REMOVAL OF HIGH DENSITY IMPLANTED RESIST	8,026,200	5/1/2009
Advanced Technology Materials, Inc.	PRECURSORS FOR CVD/ALD OF METAL-CONTAINING FILMS	8,168,811	7/21/2009
Advanced Technology Materials, Inc.	HIGH CONCENTRATION NITROGEN-CONTAINING GERMANIUM TELLURIDE BASED MEMORY DEVICES AND PROCESSES OF MAKING	8,330,136	6/2/2011
Advanced Technology Materials, Inc.	IN SITU GENERATION OF RuO ₄ FOR ALD OF Ru AND Ru RELATED MATERIALS	8,663,735	2/13/2010
Advanced Technology Materials, Inc.	METHOD AND COMPOSITION FOR DEPOSITING RUTHENIUM WITH ASSISTIVE METAL SPECIES	8,574,675	9/15/2011
Advanced Technology Materials, Inc.	LOW TEMPERATURE GST PROCESS	8,617,972	11/21/2011
Advanced Technology Materials, Inc.	HOLLOW GST STRUCTURE WITH DIELECTRIC FILL	8,410,468	6/28/2010
Advanced Technology Materials, Inc.	REMOVAL OF MASKING MATERIAL	8,367,555	12/11/2009
Advanced Technology Materials, Inc.	METHOD AND APPARATUS FOR ENHANCED LIFETIME AND PERFORMANCE OF ION SOURCE IN AN ION IMPLANTATION SYSTEM	8,237,134	2/21/2012
Advanced Technology Materials, Inc.	METHOD AND APPARATUS FOR ENHANCED LIFETIME AND PERFORMANCE OF ION SOURCE IN AN ION IMPLANTATION SYSTEM	8,399,865	8/6/2012
Advanced Technology Materials, Inc.	ISOTOPICALLY-ENRICHED BORON	8,138,071	10/27/2010

Registered Owner	Title of Patent	Registration Number	Date Filed
Advanced Technology Materials, Inc.	ISOTOPICALLY-ENRICHED BORON	8,062,965	3/15/2011
Advanced Technology Materials, Inc.	ISOTOPICALLY-ENRICHED BORON	8,598,022	11/19/2011
Entegris, Inc.	METHODS AND MATERIALS FOR MAKING A MONOLITHIC POROUS PAD CAST ONTO A ROTABLE BASE (Planarcore) (Project No. 623)	7,984,526	7/26/2011
Entegris, Inc.	METHODS AND MATERIALS FOR MAKING A MONOLITHIC POROUS PAD CAST ONTO A ROTABLE BASE (Planarcore) (Project No. 623)	8,533,895	9/17/2013
Entegris, Inc.	ULTRAPHOBIC SURFACE FOR HIGH PRESSURE LIQUIDS,/US	6,852,390	2/8/2005
Entegris, Inc.	FLUID HANDLING COMPONENT WITH ULTRAPHOBIC SURFACES, FLUID HANDLING COMPONENT WITH ULTRAPHOBIC SURFACES,	6,845,788	1/25/2005
Entegris, Inc.	METHOD AND APPARATUS FOR RECLAIMING PLASTIC	5,894,996	4/20/1999
Entegris, Inc.	MICROFLUIDIC DEVICE WITH ULTRAPHOBIC SURFACES, MICROFLUIDIC DEVICE WITH ULTRAPHOBIC SURFACES,	6,923,216	8/2/2005
Entegris, Inc.	FLOW EQUILIZATION OF A POROUS PAD FORMED ONTO A ROTABLE BASE (Planarcore)	8,092,730	1/10/2012
Entegris, Inc.	FLOW EQUILIZATION OF A POROUS PAD FORMED ONTO A ROTABLE BASE (Planarcore)	8,460,475	6/11/2013
Entegris, Inc.	Cleaning Sponge Roller (Planarcore)	D622,920	8/31/2010
Entegris, Inc.	CMP BRUSH FOR CLEANING WAFER EDGES	D682497	5/14/2013
Entegris, Inc.	Disposable Separation Module with Quick Connect Capability (Impact) (Optimizer ST) (Panelgard 123)(Connectology) (Intelligen 2 Pump) (Intelligen Mini	6,068,770	5/30/2000
Entegris, Inc.	Fluid Dispensing System Having Independently Operated Pumps (Intelligen 2 Pump)	5,772,899	6/30/1998

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	Fluid Dispensing System Having Independently Operated Pumps (Intelligen 2 Pump)	6,105,829	8/22/2000
Entegris, Inc.	Fluid Dispensing System Having Independently Operated Pumps (Intelligen 2 Pump)	6,251,293	6/26/2001
Entegris, Inc.	Fluid Dispensing System Having Independently Operated Pumps (Intelligen 2 Pump)	6,419,841	7/16/2002
Entegris, Inc.	Fluid Dispensing System (Intelligen 2 Pump)	5,516,429	5/14/1996
Entegris, Inc.	Variable Step Rate Precision Pumping Apparatus (Intelligen 2 Pump)	5,932,987	8/3/1999
Entegris, Inc.	Connector (Intelligen 2 Pump)	D423081	4/18/2000
Entegris, Inc.	Flow Controller	6,527,862	3/4/2003
Entegris, Inc.	Flow Controller	6,348,098	2/19/2002
Entegris, Inc.	Pump Controller for Precision Pumping Apparatus (CIP cases used for Intelligen Mini and HV)	8,172,546	5/8/2012
Entegris, Inc.	Hig-Strength, Chemically Resistant Laminar Film With Limited Extractables (Dispense Diaphragm for RGEN-02, valve diaphragm for Intelligen Mini)	7,407,708	8/5/2008
Entegris, Inc.	FLOW CONTROLLER AND PRECISION DISPENSE APPARATUS AND SYSTEM (OPTICHEM C AND P)	7,543,596	6/9/2009
Entegris, Inc.	FLOW CONTROLLER AND PRECISION DISPENSE APPARATUS AND SYSTEM (OPTICHEM C AND P)	8,082,946	12/27/2011
Entegris, Inc.	FLOW CONTROLLER AND PRECISION DISPENSE APPARATUS AND SYSTEM (OPTICHEM C AND P)	8,430,120	4/30/2013
Entegris, Inc.	Valve Close Control	8,082,066	12/20/2011
Entegris, Inc.	Valve Close Control	7,317,971	1/8/2008
Entegris, Inc.	Valve Close Control	7,107,128	9/12/2006
Entegris, Inc.	Low Hold Up/Variable Home Position for Dispense Systems (Used in Intelligen Mini and HV)	8,292,598	10/23/2012
Entegris, Inc.	SYSTEM AND METHOD FOR PRESSURE COMPENSATION IN A PUMP (Intelligen Mini and HV)	8,029,247	10/4/2011

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	SYSTEM AND METHOD FOR MULTISTAGE PUMP WITH REDUCED FORM FACTOR (Intelligen Mini and HV)	8,651,823	2/18/2014
Entegris, Inc.	SYSTEM AND METHOD FOR MULTISTAGE PUMP WITH REDUCED FORM FACTOR (Intelligen Mini and HV)	8,087,429	1/3/2012
Entegris, Inc.	I/O INTERFACE SYSTEM AND METHOD FOR A PUMP (Intelligen Mini and HV)	7,940,664	5/10/2011
Entegris, Inc.	O-RING-LESS LOW PROFILE FITTING AND ASSEMBLY THEREOF (design around Of Super fitting sold by Nippon Pillar) (used in Intelligen Mini and HV)	7,547,049	6/16/2009
Entegris, Inc.	SYSTEM AND METHOD FOR CONTROL OF FLUID PRESSURE (Intelligen Mini and HV)	8,382,444	2/26/2013
Entegris, Inc.	SYSTEM AND METHOD FOR CONTROL OF FLUID PRESSURE (Intelligen Mini and HV)	7,850,431	12/14/2010
Entegris, Inc.	SYSTEM AND METHOD FOR CONTROL OF FLUID PRESSURE (Intelligen Mini and HV)	7,878,765	2/1/2011
Entegris, Inc.	TrSYSTEM AND METHOD FOR CONTROL OF FLUID PRESSURE (Intelligen Mini and HV)/US	8,662,859	3/4/2014
Entegris, Inc.	SYSTEM AND METHOD FOR POSITION CONTROL OF A MECHANICAL PISTON IN A PUMP (Intelligen Mini and HV)	8,678,775	3/25/2014
Entegris, Inc.	SYSTEM AND METHOD FOR POSITION CONTROL OF A MECHANICAL PISTON IN A PUMP (Intelligen Mini and HV)	8,083,498	12/27/2011
Entegris, Inc.	SYSTEM AND METHOD FOR VALVE SEQUENCING IN A PUMP (Intelligen Mini and HV)	8,025,486	9/27/2011
Entegris, Inc.	ERROR VOLUME SYSTEM AND METHOD FOR A PUMP (Intelligen Mini and HV)	7,897,196	3/1/2011
Entegris, Inc.	COMPONENT TO COMPONENT SEALING METHOD AND APPARATUS (Flaremount)	6,652,008	11/25/2003

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	CONTAINMENT SYSTEM (Dispense Head)	6,648,182	11/18/2003
Entegris, Inc.	CONTAINMENT SYSTEM (Dispense Head)	6,079,597	6/27/2000
Entegris, Inc.	CONTAINMENT SYSTEM (Dispense Head)	6,425,502	7/30/2002
Entegris, Inc.	BLOW MOLDED DRUM	7,156,254	1/2/2007
Entegris, Inc.	BLOW MOLDED DRUM/US	6,045,000	4/4/2000
Entegris, Inc.	PLASTIC COUPLING FOR PLASTIC TUBING (Flarelock)	5,472,244	12/5/1995
Entegris, Inc.	SELF-FLARED PLASTIC FITTINGS	6,412,832	7/2/2002
Entegris, Inc.	FLUOROPOLYMER FLOWMETER,	6,973,705	12/13/2005
Entegris, Inc.	FLUOROPOLYMER FLOWMETER,	6,758,104	7/6/2004
Entegris, Inc.	HIGH VOLUME DISPENSE HEAD WITH SEAL VERIFICATION AND LOW FOAM RETURN LINE, HIGH VOLUME DISPENSE HEAD WITH SEAL VERIFICATION AND LOW FOAM RETURN LINE	6,955,185	10/18/2005
Entegris, Inc.	FULLY DRAINABLE WEIR VALVE	6,923,198	8/2/2005
Entegris, Inc.	VENT PLUG	7,201,287	4/10/2007
Entegris, Inc.	VENT PLUG	6,883,675	4/26/2005
Entegris, Inc.	CREEP RESISTANT VALVE (INTEGRA), CREEP RESISTANT VALVE (INTEGRA)	6,595,240	7/22/2003
Entegris, Inc.	EXTENDED STROKE VALVE AND DIAPHRAGM (Integra)	7,063,304	6/20/2006
Entegris, Inc.	CONNECTOR ASSEMBLY FOR FLUID TRANSFER	7,115,335	10/3/2006
Entegris, Inc.	HIGH VOLUME FLUID DISPENSE SYSTEM	8,561,855	10/22/2013
Entegris, Inc.	DRUM CAP VENTING DEVICE	7,806,151	10/5/2010
Entegris, Inc.	IDENTIFICATION AND VERIFICATION SYSTEM FOR FLUID DISPENSING SYSTEM	8,464,499	6/18/2013
Entegris, Inc.	IDENTIFICATION AND VERIFICATION SYSTEM FOR FLUID DISPENSING SYSTEM	7,760,104	7/20/2010
Entegris, Inc.	APPARATUS FOR A LIQUID CHEMICAL CONCENTRATION ANALYSIS SYSTEM (CR-288) (Jetalon)/US	7,319,523	1/15/2008

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	Method and APPARATUS FOR A LIQUID CHEMICAL CONCENTRATION ANALYSIS SYSTEM/US	7,397,547	7/8/2008
Entegris, Inc.	APPARATUS FOR A LIQUID CHEMICAL CONCENTRATION ANALYSIS SYSTEM/US	7,268,864	9/11/2007
Entegris, Inc.	METHOD FOR A LIQUID CHEMICAL CONCENTRATION ANALYSIS SYSTEM/US	7,471,379	12/30/2008
Entegris, Inc.	METAL ION CONCENTRATION ANALYSIS FOR LIQUIDS (Jetalon)/US	7,317,533	1/8/2008
Entegris, Inc.	SENSING SYSTEM AND METHOD (Jetalon)/US	8,602,640	12/10/2013
Entegris, Inc.	FLUID FLOW MEASURING AND PROPORTIONAL FLUID FLOW CONTROL DEVICE (OPTICHEM C)	7,292,945	11/6/2007
Entegris, Inc.	FLUID FLOW MEASURING AND PROPORTIONAL FLUID FLOW CONTROL DEVICE (OPTICHEM C)	7,447,600	11/4/2008
Entegris, Inc.	FLUID FLOW MEASURING AND PROPORTIONAL FLUID FLOW CONTROL DEVICE (OPTICHEM C)	7,885,773	2/8/2011
Entegris, Inc.	FLUID FLOW MEASURING AND PROPORTIONAL FLUID FLOW CONTROL DEVICE (OPTICHEM C)	8,155,896	4/10/2012
Entegris, Inc.	NON-POROUS ADHERENT INERT COATINGS AND METHODS OF MAKING	7,389,689	6/24/2008
Entegris, Inc.	System and Method for Flow Monitoring Control	7,610,117	10/27/2009
Entegris, Inc.	System and Method for Flow Monitoring Control	8,015,995	9/13/2011
Entegris, Inc.	System and Method for Flow Monitoring Control	7,740,024	6/22/2010
Entegris, Inc.	System and Method for Flow Monitoring Control	6,973,375	12/6/2005
Entegris, Inc.	PRESSURE SENSOR MODULE HAVING NON-CONTAMINATING BODY AND ISOLATION MEMBER (NT products)	5,693,887	12/2/1997

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	PRESSURE SENSOR MODULE HAVING NON-CONTAMINATING BODY AND ISOLATION MEMBER (NT products)	5,869,766	2/9/1999
Entegris, Inc.	SENSOR USABLE IN ULTRA PURE AND HIGHLY CORROSIVE ENVIRONMENT (NT part)Used in pressure transducers, flowmeters and 6500 LFCs for HF applications)	6,612,175	9/2/2003
Entegris, Inc.	SENSOR USABLE IN ULTRA PURE AND HIGHLY CORROSIVE ENVIRONMENT (NT part)Used in pressure transducers,	7,152,478	12/26/2006
Entegris, Inc.	CHEMICALLY INERT FLOW CONTROL WITH NON-CONTAMINATING BODY	7,866,337	1/11/2011
Entegris, Inc.	MAGNETIC FLOW-METER WITH UNIBODY CONSTRUCTION AND CONDUCTIVE POLYMER ELECTRODES	7,343,817	3/18/2008
Entegris, Inc.	MAGNETIC FLOW-METER WITH UNIBODY CONSTRUCTION AND CONDUCTIVE POLYMER ELECTRODES	7,155,983	1/2/2007
Entegris, Inc.	Flow Measuring Device Body	7,942,069	5/17/2011
Entegris, Inc.	Process and composition for purifying hydrogen selenide and hydrogen telluride, to remove moisture and oxidant impurities therefrom	4,865,822	9/12/1989
Entegris, Inc.	Process and composition for purifying hydrogen selenide and hydrogen telluride, to remove moisture and oxidant impurities therefrom	4,797,227	1/10/1989
Entegris, Inc.	Composition and Process for Removing Moisture from Hydrogen Halides (Gatekeeper)	7,288,201	10/30/2007
Entegris, Inc.	Reactive Matrix for Removing Moisture from a Fluorine Containing Gas and Process (Gatekeeper)	6,033,460	3/7/2000
Entegris, Inc.	POROUS SINTERED COMPOSITE MATERIAL (SUPERCRITICAL CO2 FILTER)	7,534,287	5/19/2009

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	POROUS SINTERED COMPOSITE MATERIAL (SUPERCRITICAL CO2 FILTER)	7,112,237	9/26/2006
Entegris, Inc.	POROUS SINTERED COMPOSITE MATERIAL (SUPERCRITICAL CO2 FILTER)	7,329,311	2/12/2008
Entegris, Inc.	PURIFIER INFORMATION RETREIVAL SYSTEM	8,664,004	3/4/2014
Entegris, Inc.	Method, composition and apparatus for water removal from non-corrosive gas streams	6,059,859	5/9/2000
Entegris, Inc.	Method for Purification of Lens Gases Used in Photolithography	6,645,898	11/11/2003
Entegris, Inc.	Method for Purification of Lens Gases Used in Photolithography	7,101,416	9/5/2006
Entegris, Inc.	Method for Purification of Lens Gases Used in Photolithography	6,391,090	5/21/2002
Entegris, Inc.	Self-regenerative process for contaminant removal from ammonia (used in Infinity systems, now Aeronex branded)	7,824,628	11/2/2010
Entegris, Inc.	Self-regenerative process for contaminant removal from ammonia (used in Infinity systems, now Aeronex branded)	6,524,544	2/25/2003
Entegris, Inc.	Self-regenerative process for contaminant removal from liquid and supercritical Co2 fluid streams	6,361,696	3/26/2002
Entegris, Inc.	Method for Water Removal From Corrosive Gas Streams	5,910,292	6/8/1999
Entegris, Inc.	Offset Filter Housing	D452552	12/25/2001
Entegris, Inc.	Method for recovery and reuse of gas	6,089,282	7/18/2000
Entegris, Inc.	Gas purification system and method	6,514,313	2/4/2003
Entegris, Inc.	Method for Rapid Activation or Preconditioning of Porous Gas Purification Substrates (Clarilite Wafer)	6,869,463	3/22/2005
Entegris, Inc.	Method for Rapid Activation or Preconditioning of Porous Gas Purification Substrates (Clarilite Wafer)	6,638,341	10/28/2003
Entegris, Inc.	CARBON DIOXIDE PURIFICATION FOR THE SEMICONDUCTOR INDUSTRY (GATEKEEPER AK for purifying CO2) (I2M #343)	7,381,243	6/3/2008

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	Method for the removal of airborne molecular contaminants using oxygen gas mixtures"	7,189,291	3/13/2007
Entegris, Inc.	Method for the removal of airborne molecular contaminants using water gas mixtures	7,377,982	5/27/2008
Entegris, Inc.	Method for the removal of airborne molecular contaminants using water gas mixtures	6,913,654	7/5/2005
Entegris, Inc.	Hydride Gas Purification for the Semiconductor Industry (Gatekeeper model and Aeronex model)	7,510,692	3/31/2009
Entegris, Inc.	Method of Identifying Purification Equipment which is Optimized for Individual Fluid Purification Systems (PRODUCT WIZARD)	7,376,489	5/20/2008
Entegris, Inc.	Lithographic Projection Apparatus, Gas Purging Method, Device Manufacturing Method and Purge Gas Supply System (ASML Case)	7,384,149	6/10/2008
Entegris, Inc.	Lithographic Projection Apparatus, Gas Purging Method, Device Manufacturing Method and Purge Gas Supply System (ASML Case)	7,113,254	9/26/2006
Entegris, Inc.	CLEAN ROOM AIR FILTERING	5,626,820	5/6/1997
Entegris, Inc.	NON-WOVEN FILTER COMPOSITE (Vaporsorb)	5,582,865	12/10/1996
Entegris, Inc.	AIR FILTERING WITHIN CLEAN ENVIRONMENTS	5,607,647	3/4/1997
Entegris, Inc.	STORING SUBSTRATES BETWEEN PROCESS STEPS WITHIN A PROCESSING FACILITY	5,833,726	11/10/1998
Entegris, Inc.	PERFORMANCE MONITORING OF GAS-PHASE AIR FILTERS	5,856,198	1/5/1999
Entegris, Inc.	FILTERS EMPLOYING POROUS STRONGLY ACIDIC POLYMERS (Silverset)	6,610,128	8/26/2003
Entegris, Inc.	FILTERS EMPLOYING POROUS STRONGLY ACIDIC POLYMERS	7,022,164	4/4/2006
Entegris, Inc.	FILTERS EMPLOYING POROUS STRONGLY ACIDIC POLYMERS	6,447,584	9/10/2002

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	SYSTEM AND METHOD FOR DETERMINING AND CONTROLLING CONTAMINATION	6,620,630	9/16/2003
Entegris, Inc.	SYSTEM AND METHOD FOR DETERMINING AND CONTROLLING CONTAMINATION	6,759,254	7/6/2004
Entegris, Inc.	FILTERS EMPLOYING BOTH ACIDIC POLYMERS AND PHYSICAL-ADSORPTION MEDIA (ISOSORB) (SilverSet)	6,761,753	7/13/2004
Entegris, Inc.	FILTERS EMPLOYING BOTH ACIDIC POLYMERS AND PHYSICAL-ADSORPTION MEDIA (ISOSORB) (SilverSet)	7,014,693	3/21/2006
Entegris, Inc.	FILTERS EMPLOYING BOTH ACIDIC POLYMERS AND PHYSICAL-ADSORPTION MEDIA (ISOSORB) (SilverSet)	6,740,147	5/25/2004
Entegris, Inc.	System and Methods for Detecting Contaminants	7,430,893	10/7/2008
Entegris, Inc.	SYSTEM AND METHOD FOR MONITORING CONTAMINATION	7,092,077	8/15/2006
Entegris, Inc.	Reactive Gas Filter	7,132,011	11/7/2006
Entegris, Inc.	AIR HANDLING AND CHEMICAL FILTRATION SYSTEM AND METHOD	7,329,308	2/12/2008
Entegris, Inc.	Systems and Method for Removing Contaminants	8,398,753	3/19/2013
Entegris, Inc.	REMOVAL OF LOW MOLECULAR SILOXANES FROM HUMID GAS MATRIX (SILVERSET)	7,922,791	4/12/2011
Entegris, Inc.	Low Profile Surface Mount Filter (WAFERGARD) (project #355)	7,806,949	10/5/2010
Entegris, Inc.	Low Profile Surface Mount Filter (WAFERGARD) (project #355)	7,967,882	6/28/2011
Entegris, Inc.	Low Profile Surface Mount Filter (WAFERGARD) (project #355)	7,575,616	8/18/2009
Entegris, Inc.	APPARATUS AND METHOD FOR REDUCING PARTICLE CONTAMINATION IN A VACUUM CHAMBER	8,172,923	5/8/2012
Entegris, Inc.	Thermoplastic Hollow Fiber Membrane Module and Method of Manufacture (UPE Hollow Fiber Membrane Cartridge)	5,695,702	12/9/1997

Registered Owner	Title of Patent	Registration Number	Date Filed
Entegris, Inc.	Low Volume Disposable Filter Module (LHVD) (Impact) (Intelligen 2 Pump) (Intelligen Mini)	5,762,789	6/9/1998
Entegris, Inc.	Surface Modified Porous Membrane and Process (QuickChange)	6,273,271	8/14/2001
Entegris, Inc.	Surface Modified Porous Membrane and Process (QuickChange)	6,354,443	3/12/2002
Entegris, Inc.	Process for Making Surface Modified Porous Membrane with Perfluorocarbon Copolymer (QuickChange)	5,928,792	7/27/1999
Entegris, Inc.	Article of Manufacture Including a Surface Modified Membrane and Process (QuickChange)	5,976,380	11/2/1999
Entegris, Inc.	Surface Modified Polymeric Substrate and Process (QuickChange)	6,179,132	1/30/2001
Entegris, Inc.	Microporous Hollow Fiber Membranes from Perfluorinated Thermoplastic Fibers (Submarine Fibers) (pHasor and Fluorline HF)	6,802,973	10/12/2004
Entegris, Inc.	Microporous Hollow Fiber Membranes from Perfluorinated Thermoplastic Fibers (Submarine Fibers) (pHasor and Fluorline HF)	6,802,972	10/12/2004
Entegris, Inc.	Method for Manufacturing Hollow Fiber Membranes (pHasor)	6,663,745	12/16/2003
Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN, IntelliGen Mini, Impact, Panelgard 1-2-3)	7,350,821	4/1/2008
Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN, IntelliGen Mini, Impact, Panelgard 1-2-3)	7,037,424	5/2/2006
Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN, IntelliGen Mini, Impact, Panelgard 1-2-3)	7,815,805	10/19/2010
Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN, IntelliGen Mini, Impact, Panelgard 1-2-3)	7,021,667	4/4/2006

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Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN, IntelliGen Mini, Impact, Panelgard 1-2-3)	7,296,582	11/20/2007
Entegris, Inc.	Connector Apparatus and System Including Connector Apparatus (LHVD Connectology, Intelligen 2, RGEN	6,378,907	4/30/2002
Entegris, Inc.	Filtration Module Including Unitary Filter Cartridge-Bowl Construction (Chemlock)	6,533,933	3/18/2003
Entegris, Inc.	Filtration Module Including Unitary Filter Cartridge-Bowl Construction (Chemlock)	8,070,945	12/6/2011
Entegris, Inc.	Filtration Module Including Unitary Filter Cartridge-Bowl Construction (Chemlock)	7,445,710	11/4/2008
Entegris, Inc.	Skinned Hollow Fiber Membrane and Method of Manufacture (pHasor)	6,921,482	7/26/2005
Entegris, Inc.	Skinned Hollow Fiber Membrane and Method of Manufacture (pHasor)	6,977,043	12/20/2005
Entegris, Inc.	Hollow Fiber Membrane Contactor (pHasor) (Project No. 313)	6,582,496	6/24/2003
Entegris, Inc.	Hollow Fiber Membrane Contactor (pHasor) (Project No. 313)	6,805,731	10/19/2004
Entegris, Inc.	A Perfluorinated Thermoplastic Filter Cartridge	7,347,937	3/25/2008
Entegris, Inc.	Filtration Cartridge and Process for Filtering a Slurry	7,247,245	7/24/2007
Entegris, Inc.	Disposable Fluid Separation Device and Manifold Assembly Design With Easy Change-Out Feature (Solaris Connectology)	7,056,436	6/6/2006
Entegris, Inc.	Disposable Fluid Separation Device and Manifold Assembly Design With Easy Change-Out Feature (Solaris Connectology)	7,378,017	5/27/2008
Entegris, Inc.	Disposable Fluid Separation Device and Manifold Assembly Design With Easy Change-Out Feature (Solaris Connectology)	6,652,749	11/25/2003
Entegris, Inc.	Housing Design With Twist Ring To Engage And Disengage Bowl Or Bowl Assembly (Chemlock)	6,635,175	10/21/2003
Entegris, Inc.	Optimizer Filter and Manifold	D513304 S	12/27/2005
Entegris, Inc.	Porous or Non-Porous Substrate Coated with a Cross-Linked Polymeric Composition Having Sulfonyl Groups and Hydrophilic Functional Groups and Process	7,094,469	8/22/2006

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Entegris, Inc.	FLUID EXCHANGE DEVICE (pHasor X heat exchanger)	7,308,932	12/18/2007
Entegris, Inc.	FLUID EXCHANGE DEVICE (pHasor X heat exchanger)	8,091,618	1/10/2012
Entegris, Inc.	FILTER CARTRIDGE CONSTRUCTION (Chemlock)	7,101,479	9/5/2006
Entegris, Inc.	FILTER CARTRIDGE CONSTRUCTION (Chemlock)	7,520,984	4/21/2009
Entegris, Inc.	FILTER CARTRIDGE CONSTRUCTION (Chemlock)	7,169,302	1/30/2007
Entegris, Inc.	HOLLOW FIBER MEMBRANE CONTACT APPARATUS (pHASOR)	7,717,405	5/18/2010
Entegris, Inc.	FILTER APPARATUS (SS CHEMLOCK (MTO))	7,138,053	11/21/2006
Entegris, Inc.	Ion Exchange Polyethylene Membrane and Process (LICENSED FROM MILLIPORE)	5,531,899	7/2/1996
Entegris, Inc.	THERMAL MANAGEMENT, HEAT EXCHANGER	7,822,586	10/26/2010
Entegris, Inc.	Filter Device Having Pleated Filter Integral With Housing (Optimizer D300 and 600)	7,404,493	7/29/2008
Entegris, Inc.	ATMOSPHERIC PLASMA TREATED PTFE MEMBRANE	7,963,401	6/21/2011
Entegris, Inc.	ATMOSPHERIC PLASMA TREATED PTFE MEMBRANE	8,668,093	3/11/2014
Entegris, Inc.	CONNECTOR	423,081	4/18/2000
Entegris, Inc.	Filter apparatus with easy air vent (PROCESSGARD ink jet filter sold to Hitachi)	7,997,420	8/16/2011
Entegris, Inc.	Filter apparatus with easy air vent (PROCESSGARD ink jet filter sold to Hitachi)	8,167,140	5/1/2012
Entegris, Inc.	RETICLE-PELLICLE APPARATUS WITH PURGED PELLICLE-TO-RETICLE GAP	7,052,809	5/30/2006
Entegris, Inc.	WAFER CARRIER BOX HINGE	6,000,550	12/14/1999
Entegris, Inc.	SHOCK RESISTANT VARIABLE LOAD TOLERANT WAFER SHIPPER	6,550,619	4/22/2003
Entegris, Inc.	THIN WAFER INSERT, THIN WAFER INSERT	8,141,712	3/27/2012
Entegris, Inc.	THIN WAFER INSERT, THIN WAFER INSERT	7,219,802	5/22/2007
Entegris, Inc.	THIN WAFER CARRIER, THIN WAFER CARRIER	6,758,339	7/6/2004

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Entegris, Inc.	RETICLE CARRIER	7,139,066	11/21/2006
Entegris, Inc.	RETICLE CARRIER	6,825,916	11/30/2004
Entegris, Inc.	SMIF CONTAINER INCLUDING A RETICLE SUPPORT STRUCTURE	6,216,873	4/17/2001
Entegris, Inc.	SUBSTRATE SUPPORT APPARATUS FOR A SUBSTRATE HOUSING, SUBSTRATE SUPPORT APPARATUS FOR A SUBSTRATE HOUSING	5,823,361	10/20/1998
Entegris, Inc.	SUBSTRATE SUPPORT APPARATUS FOR A SUBSTRATE HOUSING, SUBSTRATE SUPPORT APPARATUS FOR A SUBSTRATE HOUSING	5,984,116	11/16/1999
Entegris, Inc.	SUBSTRATE HOUSING AND DOCKING SYSTEM, SUBSTRATE HOUSING AND DOCKING SYSTEM	5,785,186	7/28/1998
Entegris, Inc.	SUBSTRATE HOUSING AND DOCKING SYSTEM, SUBSTRATE HOUSING AND DOCKING SYSTEM	5,834,915	11/10/1998
Entegris, Inc.	MODULAR SMIF POD BREATHER, ADSORBENT, AND PURGE CARTRIDGES	6,319,297	11/20/2001
Entegris, Inc.	MOLECULAR CONTAMINATION CONTROL SYSTEM	6,368,411	4/9/2002
Entegris, Inc.	SMIF CONTAINER INCLUDING AN ELECTROSTATIC DISSIPATIVE RETICLE SUPPORT STRUCTURE (ESD)	6,513,654	2/4/2003
Entegris, Inc.	ADVANCED WAFER SHIPPER (Crystal Pak)	5,992,638	11/30/1999
Entegris, Inc.	WAFER SUSPENSION BOX (Crystal Pak)	5,555,981	9/17/1996
Entegris, Inc.	WAFER SUSPENSION BOX (Crystal Pak)	5,749,467	5/12/1998
Entegris, Inc.	WAFER CONTAINER DOOR WITH PARTICLE COLLECTION STRUCTURE	7,325,698	2/5/2008
Entegris, Inc.	WAFER CONTAINER WITH SEALABLE DOOR	7,578,407	8/25/2009
Entegris, Inc.	ISOLATION SYSTEM FOR RETICLE POD (Extreme Ultraviolet (EUV))	7,607,543	10/27/2009
Entegris, Inc.	RETICLE POD WITH INTERNAL ENVIRONMENT CONTROL MEANS (RSP3 SMIF POD and CLARILITE)	7,400,383	7/15/2008
Entegris, Inc.	RETICLE POD WITH ISOLATION FRAME,	8,231,005	7/31/2012

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Entegris, Inc.	RETICLE POD WITH ISOLATION FRAME,	8,613,359	12/24/2013
Entegris, Inc.	CONTAINER WITH SHOCK ABSORBING CORNERS	8,292,077	10/23/2012
Entegris, Inc.	Reusable Resilient Cushion for Wafer Container (ULTRAPAK Edgegard)	8,528,738	9/10/2013
Entegris, Inc.	RETICLE POD PURGE PORT LOCATION (Clarilite)	8,146,623	4/3/2012
Entegris, Inc.	SUBSTRATE SHIPPER	D664851	8/7/2012
Entegris, Inc.	SUBSTRATE SHIPPER/US	D673853	1/8/2013
Entegris, Inc.	TRANSPORT MODULE	7,370,764	5/13/2008
Entegris, Inc.	TRANSPORT MODULE	6,010,008	1/4/2000
Entegris, Inc.	TRANSPORT MODULE	6,736,268	5/18/2004
Entegris, Inc.	WAFER ENCLOSURE WITH DOOR	5,957,292	9/28/1999
Entegris, Inc.	WAFER CARRIER	5,788,082	8/4/1998
Entegris, Inc.	WAFER CONTAINER WITH DOOR (Defensive case) (FOUP or FASB)	5,711,427	1/27/1998
Entegris, Inc.	WAFER CONTAINER WITH MINIMAL CONTACT, WAFER CONTAINER WITH MINIMAL CONTACT	6,776,289	8/17/2004
Entegris, Inc.	TRANSPORT MODULE WITH LATCHING DOOR (F300 FOUP)	5,915,562	6/29/1999
Entegris, Inc.	DOOR GUIDE FOR A WAFER CONTAINER	6,464,081	10/15/2002
Entegris, Inc.	DOOR GUIDE FOR A WAFER CONTAINER	6,206,196	3/27/2001
Entegris, Inc.	WAFER CARRIER WITH WAFER RETAINING SYSTEM	6,951,284	10/4/2005
Entegris, Inc.	WAFER SEALING ARRANGEMENT FOR WAFER CONTAINERS, WAFER SEALING ARRANGEMENT FOR WAFER CONTAINERS	6,848,578	2/1/2005
Entegris, Inc.	FRONT OPENING WAFER CONTAINER WITH PATH TO GROUND EFFECTUATED BY DOOR, FRONT OPENING WAFER CONTAINER WITH PATH TO GROUND EFFECTUATED BY DOOR	7,886,910	2/15/2011

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Entegris, Inc.	FRONT OPENING WAFER CONTAINER WITH PATH TO GROUND EFFECTUATED BY DOOR, FRONT OPENING WAFER CONTAINER WITH PATH TO GROUND EFFECTUATED BY DOOR	8,276,759	10/2/2012
Entegris, Inc.	WAFER CARRIER DOOR WITH FORM FITTING MECHANISM COVER, WAFER CARRIER DOOR WITH FORM FITTING MECHANIS	6,749,067	6/15/2004
Entegris, Inc.	WAFER CARRIER DOOR AND LATCHING MECHANISM WITH HOURGLASS SHAPED KEY SLOT, WAFER CARRIER DOOR AND LA	6,712,213	3/30/2004
Entegris, Inc.	WAFER CARRIER DOOR AND TWO-POSITION SPRING BIASED LATCHING MECHANISM (for FOUP), WAFER CARRIER DOOR	7,168,587	1/30/2007
Entegris, Inc.	WAFER CARRIER DOOR AND TWO-POSITION SPRING BIASED LATCHING MECHANISM (for FOUP), WAFER CARRIER DOOR	6,880,718	4/19/2005
Entegris, Inc.	WAFER CARRIER DOOR AND LATCHING MECHANISM WITH C-SHAPED CAM FOLLOWER	6,955,382	10/18/2005
Entegris, Inc.	WAFER CONTAINER CUSHION SYSTEM	6,644,477	11/11/2003
Entegris, Inc.	SYSTEM FOR PREVENTING IMPROPER INSERTION OF FOUP DOOR INTO FOUP, SYSTEM FOR PREVENTING IMPROPER INSERTION OF FOUP DOOR INTO FOUP	6,663,148	12/16/2003
Entegris, Inc.	TRANSPORTABLE CONTAINER INCLUDING AN INTERNAL ENVIRONMENT MONITOR (SMART FOUP)	7,156,129	1/2/2007
Entegris, Inc.	TRANSPORTABLE CONTAINER INCLUDING AN INTERNAL ENVIRONMENT MONITOR (SMART FOUP)	7,490,637	2/17/2009
Entegris, Inc.	TRANSPORTABLE CONTAINER INCLUDING AN INTERNAL ENVIRONMENT MONITOR (SMART FOUP)	6,901,971	6/7/2005

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Entegris, Inc.	TRANSPORT MODULE WITH LATCHING DOOR, TRANSPORT MODULE WITH LATCHING DOOR	6,945,405	9/20/2005
Entegris, Inc.	CUSHIONED WAFER CONTAINER	6,267,245	7/31/2001
Entegris, Inc.	300MM SHIPPING CONTAINER (CRYSTALPAK)	5,803,269	9/8/1998
Entegris, Inc.	SUBSTRATE CONTAINER (SPECTRA)	7,347,329	3/25/2008
Entegris, Inc.	FRONT OPENING SUBSTRATE CONTAINER WITH BOTTOM PLATE (SPECTRA)	7,866,480	1/11/2011
Entegris, Inc.	FRONT OPENING SUBSTRATE CONTAINER WITH BOTTOM PLATE (SPECTRA)	7,201,276	4/10/2007
Entegris, Inc.	WAFER CARRIER DOOR (SPECTRA)	7,344,030	3/18/2008
Entegris, Inc.	WAFER CONTAINER AND DOOR WITH VIBRATION DAMPENING LATCHING MECHANISM (Spectra)	7,677,393	3/16/2010
Entegris, Inc.	WAFER CONTAINER AND DOOR WITH VIBRATION DAMPENING LATCHING MECHANISM (Spectra)	7,182,203	2/27/2007
Entegris, Inc.	WAFER CONTAINER WITH DOOR ACTUATED WAFER RESTRAINT (SPECTRA)	7,900,776	3/8/2011
Entegris, Inc.	WAFER CONTAINER WITH DOOR ACTUATED WAFER RESTRAINT (SPECTRA)	7,100,772	9/5/2006
Entegris, Inc.	WAFER CONTAINER AND DOOR WITH CAM LATCHING MECHANISM (SPECTRA)	7,325,693	2/5/2008
Entegris, Inc.	WAFER CONTAINER WITH SECONDARY WAFER RESTRAINT SYSTEM (SPECTRA)	7,523,830	4/28/2009
Entegris, Inc.	KINEMATIC COUPLING WITH TEXTURED CONTACT SURFACES (Spectra)	7,422,107	9/9/2008
Entegris, Inc.	DIAMOND LIKE COATINGS TO REDUCE PERMEATION	8,012,586	9/6/2011
Entegris, Inc.	DIAMOND LIKE COATINGS TO REDUCE PERMEATION	8,426,024	4/23/2013
Entegris, Inc.	DIAMOND LIKE COATINGS TO REDUCE PERMEATION/US	8,603,632	12/10/2013
Entegris, Inc.	Wafer Carrier Door	D611437	3/9/2010
Entegris, Inc.	Exterior 450mm Container configuration.	D668865	10/16/2012

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Entegris, Inc.	Exterior 450mm Container configuration./US	D689696	9/17/2013
Entegris, Inc.	CLIPLESS TRAY	6,079,565	6/27/2000
Entegris, Inc.	MATRIX TRAY WITH TACKY SURFACES	6,926,937	8/9/2005
Entegris, Inc.	INTEGRATED CIRCUIT TRAY WITH SELF ALIGNING POCKET (Licensed to DIC)	5,791,486	8/11/1998
Entegris, Inc.	SHIPPER WITH TOOTH DESIGN FOR IMPROVED LOADING	6,994,217	2/7/2006
Entegris, Inc.	COMPOSITE SUBSTRATE CARRIER,	7,168,564	1/30/2007
Entegris, Inc.	COMPOSITE SUBSTRATE CARRIER,	6,871,741	3/29/2005
Entegris, Inc.	COMPOSITE SUBSTRATE CARRIER,	6,428,729	8/6/2002
Entegris, Inc.	COMPOSITE SUBSTRATE CARRIER,	6,808,668	10/26/2004
Entegris, Inc.	ENCLOSED SEALABLE PURGIBLE SEMICONDUCTOR WAFER HOLDER (kinematic coupling)	5,476,176	12/19/1995
Entegris, Inc.	ENCLOSED SEALABLE PURGIBLE SEMICONDUCTOR WAFER HOLDER (kinematic coupling)	5,755,332	5/26/1998
Entegris, Inc.	SUBSTRATE CONTAINER WITH FLUID-SEALING FLOW PASSAGEWAY (SMIF POD)	7,328,727	2/12/2008
Entegris, Inc.	COMPOSITIONS COMPRISING CARBON NANOTUBES AND ARTICLES FORMED THEREFROM (TEGO)	8,652,391	2/18/2014
Entegris, Inc.	MILLED CARBON FIBER REINFORCED POLYMER COMPOSITION	5,686,521	11/11/1997
Poco Graphite, Inc.	APPARATUS FOR ADJUSTABLE STACKER BAR ASSEMBLY HAVING QUICK CHANGE FEATURES	D641029	7/5/2011
Poco Graphite, Inc.	ADJUSTABLE HOT GLASS TRANSFER DEVICE	5,741,343	4/21/1998
Poco Graphite, Inc.	PROCESS FOR MAKING POROUS GRAPHITE AND ARTICLES PRODUCED THEREFROM (HTC),/US	6,776,936	8/17/2004
Poco Graphite, Inc.	SYSTEM, METHOD AND APPARATUS FOR CONVERSION BONDING OF PRECURSOR SUBCOMPONENT INTO A UNITARY MONOLITH	7,931,853	4/26/2011

Registered Owner	Title of Patent	Registration Number	Date Filed
Poco Graphite, Inc.	SYSTEM, METHOD AND APPARATUS FOR INTERCHANGEABLY ACCOMMODATING BOTH FIXED AND FLOATING TAKEOUT INSERTS	7,418,834	9/2/2008
Poco Graphite, Inc.	SYSTEM, METHOD AND APPARATUS FOR ADJUSTABLE STACKER BAR ASSEMBLY HAVING VERTICLE ACCOMONDATION FEATURES	7,814,766	10/19/2010
Poco Graphite, Inc.	PROCESS FOR MAKING A CARBON FOAM INDUCED BY PROCESS DEPRESSURIZATION (HTC),	6,576,168	6/10/2003

Patent Applications

Registered Owner	Title of Patent	Application Number	Date Filed
Advanced Technology Materials, Inc.	SCALABLE LEAD ZIRCONIUM TITANATE (PZT) THIN FILM MATERIAL AND DEPOSITION METHOD, AND FERROELECTRIC MEMORY DEVICE STRUCTURES COMPRISING SUCH THIN FILM	13/960,412	8/6/2013
Advanced Technology Materials, Inc.	AQUEOUS CLEANING COMPOSITION CONTAINING COPPER-SPECIFIC CORROSION INHIBITOR FOR CLEANING INORGANIC RESIDUES ON SEMICONDUCTOR SUBSTRATE	13/658,415	10/23/2012
Advanced Technology Materials, Inc.	LIQUID HANDLING SYSTEM WITH ELECTRONIC INFORMATION STORAGE	13/438,285	4/3/2012
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR DISPENSING HIGH VISCOSITY LIQUID	13/953,497	7/29/2013
Advanced Technology Materials, Inc.	RECTANGULAR PARALLELEPIPED FLUID STORAGE AND DISPENSING VESSEL	13/966,091	8/13/2013
Advanced Technology Materials, Inc.	METHOD AND APPARATUS TO HELP PROMOTE CONTACT OF GAS WITH VAPORIZED MATERIAL	13/862,412	4/13/2013
Advanced Technology Materials, Inc.	GAS STORAGE AND DISPENSING SYSTEM WITH MONOLITHIC CARBON ADSORBENT	13/601,377	8/31/2012
Advanced Technology Materials, Inc.	Photoresist Removal	13/568,790	8/7/2012
Advanced Technology Materials, Inc.	Composition and process for post-etch removal of photoresist and/or sacrificial anti-reflective material deposited on a substrate	13/718,830	12/18/2012
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR LOW TEMPERATURE CHEMICAL VAPOR DEPOSITION OF SILICON-CONTAINING FILMS INCLUDING SILICON CARBONITRIDE AND SILICON OXYCARBONI	12/862,739	8/24/2010
Advanced Technology Materials, Inc.	NOVEL METHODS FOR CLEANING ION IMPLANTER COMPONENTS	11/577,852	3/13/2008

Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM INCLUDING DYNAMIC FLUID MONITORING OF FLUID STORAGE AND DISPENSING VESSEL	14/054,497	10/15/2013
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEM INCLUDING DYNAMIC FLUID MONITORING OF FLUID STORAGE AND DISPENSING VESSEL	13/155,237	6/7/2011
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR SELECTIVE REMOVAL OF METAL OR METAL ALLOY AFTER METAL SILICIDE FORMATION	11/917,453	6/13/2006
Advanced Technology Materials, Inc.	Metal and Dielectric Compatible Sacrificial Anti-Reflective Coating Cleaning and Removal Composition	11/916,891	6/7/2006
Advanced Technology Materials, Inc.	LINER-BASED LIQUID STORAGE AND DISPENSING SYSTEMS WITH EMPTY DETECTION CAPABILITY	13/667,182	11/2/2012
Advanced Technology Materials, Inc.	MATERIAL STORAGE AND DISPENSING PACKAGES AND METHODS	11/912,629	10/25/2007
Advanced Technology Materials, Inc.	MATERIAL STORAGE AND DISPENSING PACKAGES AND METHODS	13/854,882	4/1/2013
Advanced Technology Materials, Inc.	FLUID STORAGE AND DISPENSING SYSTEMS AND PROCESSES	13/149,844	5/31/2011
Advanced Technology Materials, Inc.	APPARATUS AND PROCESS FOR INTEGRATED GAS BLENDING	13/964,745	8/12/2013
Advanced Technology Materials, Inc.	BORON ION IMPLANTATION USING ALTERNATIVE FLUORINATED BORON PRECURSORS, AND FORMATION OF LARGE BORON HYDRIDES FOR IMPLANTATION	13/726,826	12/26/2012
Advanced Technology Materials, Inc.	COMPOSITION AND METHOD FOR SELECTIVELY ETCHING GATE SPACER OXIDE MATERIAL	12/089,346	10/4/2006
Advanced Technology Materials, Inc.	OXIDIZING AQUEOUS CLEANER FOR THE REMOVAL OF POST-ETCH RESIDUES	13/084,173	4/11/2011
Advanced Technology Materials, Inc.	PRECURSOR COMPOSITIONS FOR ATOMIC LAYER DEPOSITION AND CHEMICAL VAPOR DEPOSITION OF TITANATE, LANTHANATE, AND TANTALATE DIELECTRIC FILMS	13/370,072	2/9/2012
Advanced Technology Materials, Inc.	SYSTEMS AND METHODS FOR MANAGING MATERIAL STORAGE VESSELS HAVING INFORMATION STORAGE ELEMENTS	12/307,957	1/8/2009

Advanced Technology Materials, Inc.	LOW TEMPERATURE DEPOSITION OF PHASE CHANGE MEMORY MATERIALS	13/610,928	9/12/2012
Advanced Technology Materials, Inc.	LIQUID DISPENSING SYSTEMS ENCOMPASSING GAS REMOVAL	13/713,078	12/13/2012
Advanced Technology Materials, Inc.	SOLID PRECURSOR-BASED DELIVERY OF FLUID UTILIZING CONTROLLED SOLIDS MORPHOLOGY	12/438,502	2/23/2009
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR THE REMOVAL OF PHOTORESIST FOR A WAFER REWORK APPLICATION	13/286,281	11/1/2011
Advanced Technology Materials, Inc.	ANTIMONY AND GERMANIUM COMPLEXES USEFUL FOR CVD/ALD OF METAL THIN FILMS	13/622,233	9/18/2012
Advanced Technology Materials, Inc.	PRECURSORS FOR SILICON DIOXIDE GAP FILL	12/665,929	12/21/2009
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR THE SELECTIVE REMOVAL OF SILICON NITRIDE	12/520,138	6/19/2009
Advanced Technology Materials, Inc.	LIQUID CLEANER FOR THE REMOVAL OF POST-ETCH RESIDUES	12/520,121	6/19/2009
Advanced Technology Materials, Inc.	COMPOSITION AND PROCESS FOR THE SELECTIVE REMOVAL OF TiSiN	12/525,600	8/3/2009
Advanced Technology Materials, Inc.	COMPONENT FOR SOLAR ADSORPTION REFRIGERATION SYSTEM AND METHOD OF MAKING SUCH COMPONENT	14/035,834	9/24/2013
Advanced Technology Materials, Inc.	NEW ANTIOXIDANTS FOR POST-CMP CLEANING FORMULATIONS	12/409,267	5/23/2009
Advanced Technology Materials, Inc.	ION SOURCE CLEANING IN SEMICONDUCTOR PROCESSING SYSTEMS	13/201,188	8/11/2011
Advanced Technology Materials, Inc.	STRONTIUM AND BARIUM PRECURSORS FOR USE IN CHEMICAL VAPOR DEPOSITION, ATOMIC LAYER DEPOSITION AND RAPID VAPOR DEPOSITION	13/892,526	5/13/2013
Advanced Technology Materials, Inc.	TELLURIUM COMPOUNDS USEFUL FOR DEPOSITION OF TELLURIUM CONTAINING MATERIALS	13/911,622	6/6/2013
Advanced Technology Materials, Inc.	Blow Molded Liner for Overpack Container and Method of Manufacturing the Same	12/745605	6/1/2010
Advanced Technology Materials, Inc.	NON-SELECTIVE OXIDE ETCH WET CLEAN COMPOSITION AND METHOD OF USE	12/921,262	9/7/2010
Advanced Technology Materials, Inc.	AMORPHOUS GE/TE DEPOSITION PROCESS	13/346,701	1/9/2012

Advanced Technology Materials, Inc.	ANTIMONY COMPOUNDS USEFUL FOR DEPOSITION OF ANTIMONY-CONTAINING MATERIALS	12/990,459	10/29/2010
Advanced Technology Materials, Inc.	GeSbTe MATERIAL INCLUDING SUPERFLOW LAYER(S), AND USE OF Ge TO PREVENT INTERACTION OF Te FROM Sb _x Tey AND GexTey RESULTING IN HIGH Te CONTENT AND FILM	12/997,551	12/10/2010
Advanced Technology Materials, Inc.	COPPER CLEANING AND PROTECTION FORMULATIONS	13/124,942	4/19/2011
Advanced Technology Materials, Inc.	LITHOGRAPHIC TOOL IN SITU CLEAN FORMULATIONS	13/146,438	7/27/2011
Advanced Technology Materials, Inc.	NON-AMINE POST-CMP COMPOSITION AND MEHTOD FOR USE	12/709,054	2/19/2010
Advanced Technology Materials, Inc.	TPIR APPARATUS FOR MONITORING TUNGSTEN HEXAFLUORIDE PROCESSING TO DETECT GAS PHASE NUCLEATION, AND METHOD AND SYSTEM UTILIZING SAME	13/375,053	11/29/2011
Advanced Technology Materials, Inc.	FLUID PROCESSING SYSTEMS AND METHODS	13/375,462	11/30/2011
Advanced Technology Materials, Inc.	LOW TEMPERATURE GST PROCESS	14/104,984	12/12/2013
Advanced Technology Materials, Inc.	DOPED ZrO ₂ CAPACITOR MATERIALS AND STRUCTURES	13/264,745	10/15/2011
Advanced Technology Materials, Inc.	CARBON MATERIALS FOR CARBON IMPLANTATION	12/842,006	7/22/2010
Advanced Technology Materials, Inc.	CARBON MATERIALS FOR CARBON IMPLANTATION	13/682,416	11/20/2012
Advanced Technology Materials, Inc.	FLUID MONITORING APPARATUS	13/381,332	12/28/2011
Advanced Technology Materials, Inc.	Substantially Rigid Collapsible Liner and Flexible Gusseted or Non-Gusseted Liners and Methods of Manufacturing the Same and Methods for Limiting Chok	13/382,743	1/6/2012
Advanced Technology Materials, Inc.	VENTILATION GAS MANAGEMENT SYSTEMS AND PROCESSES	13/522,000	7/12/2012
Advanced Technology Materials, Inc.	LIQUID DISPENSING SYSTEMS WITH GAS REMOVAL AND SENSING CAPABILITIES	13/520,557	7/4/2012
Advanced Technology Materials, Inc.	REMOVAL OF MASKING MATERIAL	13/733,540	1/3/2013
Advanced Technology Materials, Inc.	Closure/Connectors for Liner-Based Dispense Containers	12/982,160	12/30/2010

Advanced Technology Materials, Inc.	CARBON PYROLYZATE ADSORBENT HAVING UTILITY FOR CO2 CAPTURE AND METHODS OF MAKING AND USING THE SAME	13/981,376	7/24/2013
Advanced Technology Materials, Inc.	METHOD AND APPARATUS FOR ENHANCED LIFETIME AND PERFORMANCE OF ION SOURCE IN AN ION IMPLANTATION SYSTEM	13/840,961	3/15/2013
Advanced Technology Materials, Inc.	ENRICHED SILICON PRECURSOR COMPOSITIONS AND APPARATUS AND PROCESSES FOR UTILIZING SAME	13/898,809	5/21/2013
Advanced Technology Materials, Inc.	GERMANIUM ANTIMONY TELLURIDE MATERIALS AND DEVICES INCORPORATING SAME	13/637,018	9/24/2012
Advanced Technology Materials, Inc.	COMPOSITION FOR AND METHOD OF SUPPRESSING TITANIUM NITRIDE CORROSION	13/878,684	4/10/2013
Advanced Technology Materials, Inc.	FORMULATIONS FOR THE REMOVAL OF PARTICLES GENERATED BY CERIUM-CONTAINING SOLUTIONS	13/978,825	7/9/2013
Advanced Technology Materials, Inc.	GERMANIUM ANTIMONY TELLURIDE MATERIALS AND DEVICES INCORPORATING SAME	13/698,642	11/17/2012
ATMI, Inc.	ION IMPLANTATION SYSTEM AND METHOD	13/502,855	4/19/2012
Advanced Technology Materials, Inc.	RECOVERY OF Xe AND OTHER HIGH VALUE COMPOUNDS	13/704,552	12/14/2012
Advanced Technology Materials, Inc.	DOPING OF ZrO2 FOR DRAM APPLICATIONS	13/808,165	1/3/2013
Advanced Technology Materials, Inc.	ENDPOINT DETERMINATION FOR CAPILLARY-ASSISTED FLOW CONTROL	13/704,612	12/15/2012
Advanced Technology Materials, Inc.	Substantially Rigid Collapsible Liner, Container and/or Liner for Replacing Glass Bottles, and Enhanced Flexible Liners	13/878,930	4/11/2013
Advanced Technology Materials, Inc.	LINER-BASED ASSEMBLY FOR REMOVING IMPURITIES	13/881,757	4/26/2013
Advanced Technology Materials, Inc.	SUSTAINABLE PROCESS FOR RECLAIMING PRECIOUS METALS AND BASE METALS FROM E-WASTE	13/817,868	2/20/2013
Advanced Technology Materials, Inc.	LINER-BASED DISPENSER	13/988,785	5/22/2013
Advanced Technology Materials, Inc.	AQUEOUS CLEANER FOR THE REMOVAL OF POST-ETCH RESIDUES	13/810,060	1/14/2013
Advanced Technology Materials, Inc.	ION IMPLANTATION TOOL CLEANING APPARATUS AND METHOD	13/291,342	11/8/2011

Advanced Technology Materials, Inc.	ISOTOPICALLY-ENRICHED BORON-CONTAINING COMPOUNDS, AND METHODS	14/095,575	12/3/2013
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR PREPARATION OF COMPOUNDS OR INTERMEDIATES THEREOF FROM A SOLID MATERIAL, AND USING SUCH COMPOUNDS AND INTERMEDIATES	13/219,706	8/28/2011
Advanced Technology Materials, Inc.	COMPOSITION AND PROCESS FOR SELECTIVELY ETCHING METAL NITRIDES	13/877,777	4/4/2013
Advanced Technology Materials, Inc.	CONNECTORS FOR LINER-BASED DISPENSE CONTAINERS	13/879,433	4/15/2013
Advanced Technology Materials, Inc.	GENERAL CYLINDRICALLY-SHAPED LINER FOR USE IN PRESSURE DISPENSE SYSTEMS AND METHODS OF MANUFACTURING THE SAME	13/991,641	6/5/2013
ATMI Packaging, Inc.	LINER-BASED SHIPPING AND DISPENSING CONTAINERS	14/039,847	9/27/2013
Advanced Technology Materials, Inc.	ION IMPLANTER SYSTEM INCLUDING REMOTE DOPANT SOURCE, AND METHOD COMPRISING SAME	13/990,760	5/30/2013
Advanced Technology Materials, Inc.	METHOD FOR RECYCLING OF OBSOLETE PRINTED CIRCUIT BOARDS	13/641,371	10/15/2012
Advanced Technology Materials, Inc.	CLEANING AGENT FOR SEMICONDUCTOR PROVIDED WITH METAL WIRING	13/575,452	7/26/2012
Advanced Technology Materials, Inc.	ETCHING SOLUTION FOR COPPER OR COPPER ALLOY	13/816,862	2/13/2013
Advanced Technology Materials, Inc.	LINER-BASED DISPENSING SYSTEMS	13/988,792	5/22/2013
Advanced Technology Materials, Inc.	REFILLABLE AMPOULE WITH PURGE CAPABILITY	14/119,402	11/21/2013
Advanced Technology Materials, Inc.	PVDF PYROLYZATE ADSORBENT AND GAS STORAGE AND DISPENSING SYSTEM UTILIZING SAME	13/329,254	12/17/2011
Advanced Technology Materials, Inc.	CLUSTER ION IMPLANTATION OF ARSENIC AND PHOSPHORUS	14/006,662	9/21/2013
Advanced Technology Materials, Inc.	NESTED BLOW MOLDED LINER AND OVERPACK	14/001,713	8/27/2013
Advanced Technology Materials, Inc.	CARBON ADSORBENT AND PROCESS FOR SEPARATING HIGH-OCTANE COMPONENTS FROM LOW-OCTANE COMPONENTS IN A NAPHTHA RAFFINATE STREAM USING SUCH CARBON ADSORBENT	14/111,547	10/12/2013

Advanced Technology Materials, Inc.	CYCLOPENTADIENYL TITANIUM ALKOXIDES WITH OZONE ACTIVATED LIGANDS FOR ALD OF TiO ₂	61/939,211	2/12/2014
Advanced Technology Materials, Inc.	CYCLOPENTADIENYL TITANIUM ALKOXIDES WITH OZONE ACTIVATED	61/919,795	12/22/2013
Advanced Technology Materials, Inc.	METHOD FOR PREVENTING THE COLLAPSE OF HIGH ASPECT RATIO STRUCTURES DURING DRYING	13/819,249	2/26/2013
Advanced Technology Materials, Inc.	HIGH-K PEROVSKITE MATERIALS AND METHODS OF MAKING AND USING THE SAME	14/128,043	12/20/2013
Advanced Technology Materials, Inc.	METHOD FOR THE RECOVERY OF LITHIUM COBALT OXIDE FROM LITHIUM BATTERIES	14/127,714	12/19/2013
Advanced Technology Materials, Inc.	SYSTEMS AND METHODS FOR SUPPLYING PHOSPHINE FOR FUMIGATION APPLICATIONS	14/240,404	2/23/2014
Advanced Technology Materials, Inc.	CLEANING AGENT FOR SEMICONDUCTOR	61/909,432	11/27/2013
Advanced Technology Materials, Inc.	AQUEOUS CERIUM-CONTAINING SOLUTION HAVING AN EXTENDED BATH LIFETIME FOR REMOVING MASK MATERIAL	13/295,677	11/14/2011
Advanced Technology Materials, Inc.	CARBON ADSORBENT FOR HYDROGEN SULFIDE REMOVAL FROM GASES CONTAINING SAME, AND REGENERATION OF ADSORBENT	13/904,988	5/29/2013
Advanced Technology Materials, Inc.	COPPER CLEANING AND PROTECTION FORMULATIONS	61/814,518	4/22/2013
Advanced Technology Materials, Inc.	Storage, Transportation, and/or Dispense Packaging	29418169	4/12/2012
Advanced Technology Materials, Inc.	PHASE CHANGE MEMORY STRUCTURE COMPRISING PHASE CHANGE ALLOY CENTER-FILLED WITH DIELECTRIC MATERIAL	13/872,087	4/27/2013
Advanced Technology Materials, Inc.	Use Indicator for use with Dispensing Container and Methods for Manufacturing Same	61/782,415	3/14/2013
Advanced Technology Materials, Inc.	Fitment Adapter for Dispensing Systems and Methods for Manufacturing Same	61/757,236	3/15/2013
Advanced Technology Materials, Inc.	Fitment and Fitment Adapter for Dispensing Systems and Methods for Manufacturing Same	61/908,858	11/26/2013
Advanced Technology Materials, Inc.	SULFOLANE MIXTURES AS AMBIENT APROTIC POLAR SOLVENTS	61/781,820	3/14/2013

Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR FILLING AND DISPENSING OXYGEN- AND MOISTURE-SENSITIVE MATERIALS UTILIZING LINER-BASED CONTAINER	61/845,315	7/11/2013
Advanced Technology Materials, Inc.	THE hYDROMETALLURGICAL RECYCLING OF RARE EARTH ELEMENTS	61/872,313	8/30/2013
Advanced Technology Materials, Inc.	ALD PROCESSES FOR LOW LEAKAGE CURRENT AND LOW EQUIVALENT OXIDE THICKNESS BiTaO FILMS	61/895,380	10/24/2013
Advanced Technology Materials, Inc.	ALD PROCESSES FOR LOW LEAKAGE CURRENT AND LOW EQUIVALENT OXIDE THICKNESS BiTaO FILMS	61/903,491	11/13/2013
Advanced Technology Materials, Inc.	ENHANCING THE CONDUCTIVITY OF NANOCRYSTAL-BASED FILMS	61/783,411	3/14/2013
Advanced Technology Materials, Inc.	STABILIZATION AND DELIVERY OF DICOBALT HEXACARBONYL TERT-BUTYLACETYLENE	61/806,374	3/28/2013
Advanced Technology Materials, Inc.	ADSORBENT HAVING UTILITY FOR CO ₂ CAPTURE FROM GAS MIXTURES	13/857,385	4/5/2013
Advanced Technology Materials, Inc.	REMOTE DELIVERY OF CHEMICAL REAGENTS	61/857,587	7/23/2013
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR REMOVING CERIA PARTICLES FROM A SURFACE	61/824,714	5/17/2013
Advanced Technology Materials, Inc.	DOPANT PRECURSORS FOR MONO-LAYER DOPING	61/909,459	11/27/2013
Advanced Technology Materials, Inc.	PREPARATION OF HIGH PRESSURE BF ₃ /H ₂ MIXTURES	61/824,709	5/17/2013
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR SELECTIVELY ETCHING TITANIUM NITRIDE	61/831,928	6/6/2013
Advanced Technology Materials, Inc.	AQUEOUS AND SEMI-AQUEOUS CLEANERS FOR THE REMOVAL OF POST-ETCH RESIDUES WITH TUNGSTEN AND COBALT COMPATIBILITY	61/840,205	6/27/2013
Advanced Technology Materials, Inc.	IMPROVED GAS STORAGE AND DELIVERY	61/834,866	6/13/2013
Advanced Technology Materials, Inc.	AQUEOUS FORMULATIONS FOR REMOVING METAL HARD MASK AND POST-ETCH RESIDUE WITH Cu/W COMPATIBILITY	61/860,385	7/31/2013
Advanced Technology Materials, Inc.	SILICON IMPLANTATION IN SUBSTRATES AND PROVISION OF SILICON PRECURSOR COMPOSITIONS THEREFOR	61/866,918	8/16/2013

Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR PRESSURE DISPENSING OF HIGH VISCOSITY LIQUID-CONTAINING MATERIALS	61/880,330	9/20/2013
Advanced Technology Materials, Inc.	APPARATUS AND METHOD FOR DIRECT CONTACT PRESSURE DISPENSING USING FLOATING LIQUID EXTRACTION ELEMENT	61/899,060	11/1/2013
Advanced Technology Materials, Inc.	ULTRAHIGH PURITY DICOBALT HEXACARBONYL TERT-BUTYLACETYLENE, CORRESPONDING DERIVATIVES, AND METHODS FOR MAKING AND USING THE SAME	61/875,065	9/8/2013
Advanced Technology Materials, Inc.	DIP TUBE ASSEMBLIES AND METHODS OF MANUFACTURING THE SAME	61/892,529	10/18/2013
Advanced Technology Materials, Inc.	COMPOSITIONS AND METHODS FOR SELECTIVELY ETCHING TITANIUM NITRIDE	61/872,297	8/30/2013
Advanced Technology Materials, Inc.	CARBON MONOLITHS FOR ADSORPTION REFRIGERATION AND HEATING APPLICATIONS	61/910,072	11/28/2013
Advanced Technology Materials, Inc.	FLUORINE-FREE TUNGSTEN VAPOR DEPOSITION PROCESS	61/884,984	9/30/2013
Advanced Technology Materials, Inc.	USE OF NON-OXIDIZING STRONG ACIDS FOR THE REMOVAL OF ION-IMPLANTED RESIST	61/919,177	12/20/2013
Advanced Technology Materials, Inc.	FORMULATIONS TO SELECTIVELY ETCH SILICON AND GERMANIUM	61/922,187	12/31/2013
Advanced Technology Materials, Inc.	Ni:NiGe:Ge SELECTIVE ETCH FORMULATIONS	61/916,543	12/16/2013
Advanced Technology Materials, Inc.	COBALT PRECURSORS	61/943,494	2/23/2014
ATMI, Inc.	POST CHEMICAL MECHANICAL POLISHING FORMULATIONS AND METHOD OF USE	61/933,010	1/29/2014
ATMI, Inc.	POST CHEMICAL MECHANICAL POLISHING FORMULATIONS AND METHOD OF USE	61/933,015	1/29/2014
Entegris, Inc.	METHODS AND MATERIALS FOR MAKING A MONOLITHIC POROUS PAD CAST ONTO A ROTABLE BASE (Planarcore) (Pro/US	14/029471	8/8/2003
Entegris, Inc.	FLOW EQUILIZATION OF A POROUS PAD FORMED ONTO A ROTABLE BASE (Planarcore)/US	13/915241	12/6/2005

Entegris, Inc.	CMP PAD CONDITIONER (PLANARGEM) (Project No./US	14/004152	3/7/2011
Entegris, Inc.	PLANARCORE PVA BRUSH MADE WITH ALTERNATE NODULE SHAPE (000455)/US	PCT/US2012/057337	9/26/2011
Entegris, Inc.	POST-CMP CLEANING BRUSH/US	13/580423	2/22/2010
Entegris, Inc.	Coated CMP Retaining Ring/US	61/845008	7/11/2013
Entegris, Inc.	CMP Brush/US	61/885333	10/1/2013
Entegris, Inc.	Nodule ratios for targeted enhanced cleaning performance/US	61/942231	2/20/2014
Entegris, Inc.	Pump Controller for Precision Pumping Apparatus (CIP cases used for Intelligen Mini and HV)	13/316093	11/23/1998
Entegris, Inc.	FLOW CONTROLLER AND PRECISION DISPENSE APPARATUS AND SYSTEM (OPTICHEM C AND P)/US	13/853674	7/19/2002
Entegris, Inc.	Low Hold Up/Variable Home Position for Dispense Systems (Used in Intelligen Mini and HV)/US	13/554746	11/23/2004
Entegris, Inc.	SYSTEM AND METHOD FOR PRESSURE COMPENSATION IN A PUMP (Intelligen Mini and HV)	13/251976	12/2/2005
Entegris, Inc.	SYSTEM AND METHOD FOR MULTISTAGE PUMP WITH REDUCED FORM FACTOR (Intelligen Mini and HV)	12/218325	12/5/2005
Entegris, Inc.	SYSTEM AND METHOD FOR MULTISTAGE PUMP WITH REDUCED FORM FACTOR (Intelligen Mini and HV)	14/019163	12/5/2005
Entegris, Inc.	I/O INTERFACE SYSTEM AND METHOD FOR A PUMP (Intelligen Mini and HV)	13/081308	12/2/2005
Entegris, Inc.	I/O INTERFACE SYSTEM AND METHOD FOR A PUMP (Intelligen Mini and HV)	13/104468	12/2/2005
Entegris, Inc.	SYSTEM AND METHOD FOR POSITION CONTROL OF A MECHANICAL PISTON IN A PUMP (Intelligen Mini and HV)/US	14/152866	12/2/2005
Entegris, Inc.	SYSTEM AND METHOD FOR OPERATION OF A PUMP (Intelligen Mini and HV)	11/948585	11/30/2006
Entegris, Inc.	Split Two-Stage Pump (Project Martha)/US	13/805601	6/28/2010
Entegris, Inc.	A NEW METHOD OF PREVENTING TRAPPED BUBBLES BETWEEN PLEATED MEMBRANE DURING FILTERS STARTUP	13/277684	10/20/2010
Entegris, Inc.	Processes for Filter AutoPriming for Lithographic Dispense (IntelliGen Mini and HV)	12/714126	2/26/2010

Entegris, Inc.	Processes for Filter AutoPriming for Lithographic Dispense (IntelliGen Mini and HV)/US	14/175573	2/26/2010
Entegris, Inc.	Method and System for Optimizing Operation of a Pump (Advanced Filtration System (AFS) for IntelliGen Mini and HV)	12/714148	2/26/2010
Entegris, Inc.	SYSTEM AND METHOD FOR DETECTING BUBBLES IN A FLUID/US	14/239737	8/19/2011
Entegris, Inc.	WELDED DIAPHRAGM VALVE	12/160037	1/6/2006
Entegris, Inc.	Full Rinse Manifold Mixing Valve	12/373840	7/14/2006
Entegris, Inc.	METHOD OF ATTACHING PFA FILM TO PE FILM (Bag in a Bag in a Bottle Project)	12/200590	8/28/2007
Entegris, Inc.	CONTAINER WITH BAG AND DISPENSE HEAD WITH DOWN TUBE/US	61/816583	4/26/2013
Entegris, Inc.	CRITICAL ANGLE OPTICAL SENSOR APPARATUS (Jetalon)/US	13/401765	2/21/2012
Entegris, Inc.	PrimeLock nut locker/US	61/895245	10/24/2013
Entegris, Inc.	Device and Method to measure sub part per billion concentrations of dissolved oxygen in liquids/US	61/898906	11/1/2013
Entegris, Inc.	Device and Method to measure the concentration of dissolved oxygen in liquids/US	61/899605	11/1/2013
Entegris, Inc.	Integral Face Seal	12/741153	11/2/2007
Entegris, Inc.	Improved barrier layers for pressure sensors/US	61/832382	6/7/2013
Entegris, Inc.	Improved barrier layers for pressure sensors/US	61/836390	6/7/2013
Entegris, Inc.	Laser laminated isolators for pressure sensors/US	61/869417	8/23/2013
Entegris, Inc.	Sintered Porous Material Comprising Particles of Different Average Sizes (FV-50DXL) (Project No. 000332, 362 and 354)	13/375844	6/18/2009
Entegris, Inc.	High Efficiency and Permeability metal membrane from fiber and powder blends/US	13/982936	2/4/2011
Entegris, Inc.	Analytical Method for the Measurement of Trace Level Acidic and Basic AMC using Liquid-Free Sample T/US	61/874706	9/6/2013
Entegris, Inc.	Analytical Method for the Measurement of Trace Level Acidic and Basic AMC using Liquid-Free Sample T/US	61/933294	9/6/2013
Entegris, Inc.	Analytical Method for the Measurement of Moisture and Trace Level Gas Contamination in Carbon Dioxid/US	61/874721	9/6/2013

Entegris, Inc.	A Method for the Combined Measurement of Volatile and Condensable Organic AMC in Semiconductor Appli/US	61/874743	9/6/2013
Entegris, Inc.	A Method for the Combined Measurement of Volatile and Condensable Organic AMC in Semiconductor Appli/US	61/933299	9/6/2013
Entegris, Inc.	Multilayered Microporous Ultra-High Molecular Weight Polyethylene Membrane	11/793639	12/22/2004
Entegris, Inc.	POTTED EXCHANGE DEVICES AND METHODS OF MAKING This is a combination of 200300150 and 200400016 (PHASOR)	10/583904	12/22/2003
Entegris, Inc.	reducing microbubbles in chemicals	11/919110	4/25/2005
Entegris, Inc.	ATMOSPHERIC PLASMA TREATED PTFE MEMBRANE/US	14/067887	4/3/2006
Entegris, Inc.	FILTRATION MODULE (Panelgard EX)	11/922551	7/11/2005
Entegris, Inc.	APPARATUS AND METHOD FOR MAKING DILUTE BUBBLE FREE SOLUTIONS OF GAS IN A LIQUID (CO2 System but not limited to CO2 gas, would be appropriate for inje	12/993791	5/19/2008
Entegris, Inc.	NON-DEWETTING POROUS MEMBRANES (Solvay)	13/262743	4/6/2009
Entegris, Inc.	POROUS COMPOSITE MEMBRANE	13/255349	4/13/2009
Entegris, Inc.	Purifier for use in the process of manufacturing the lithium-ion secondary battery (408223)	13/510676	12/17/2009
Entegris, Inc.	PTFE MEMBRANE MODIFICATION VIA RADIATION ASSISTED CHEMICAL ETCHING - EB/US	13/695561	5/6/2010
Entegris, Inc.	POROUS COMPOSITE MEMBRANE INCLUDING MICROPOROUS MEMBRANE LAYERS AND NANOFIBER LAYER/US	14/114868	5/9/2011
Entegris, Inc.	MODULAR FILTRATION SYSTEM (EZ STACK)/US	PCT/US2012/000437	10/3/2011
Entegris, Inc.	Modular Filtration Cassette (EZ Stack)/US	PCT/US2012/000427	10/3/2011
Entegris, Inc.	Filter Cover/US	61/856099	7/19/2013
Entegris, Inc.	Purification Cassette(EZ Stack)/US	14/043620	10/1/2012
Entegris, Inc.	Microporous polyamide-imide membranes /US	61/904029	11/14/2013
Entegris, Inc.	EZ Stack Individual Fluid Connectors/US	61/935473	2/4/2014
Entegris, Inc.	Microporous membrane with grafted anion exchange groups/US	61/938730	2/12/2014
Entegris, Inc.	RETICLE POD WITH INTERNAL ENVIRONMENT CONTROL MEANS (RSP3 SMIF POD and CLARILITE)	12/173160	4/4/2005

Entegris, Inc.	RETICLE POD WITH ISOLATION FRAME./US	14/139653	9/27/2005
Entegris, Inc.	THIN WAFER SHIPPER (ULTRAPAK) (100mm version)/US	13/583886	3/11/2010
Entegris, Inc.	RETICLE POD WITH METAL SHIELD/US	61/838435	10/31/2013
Entegris, Inc.	ARSP pod door design/US	61/917114	12/17/2013
Entegris, Inc.	ARSP pod door gasket design/US	61/917641	12/18/2013
Entegris, Inc.	Wafer Container and Method of Manufacture (450 mm)/US	13/847345	1/13/2008
Entegris, Inc.	WAFER CONTAINER WITH TUBULAR ENVIRONMENTAL CONTROL COMPONENTS (Purge Tower and Getter)	12/922408	3/13/2008
Entegris, Inc.	UNIVERSAL SHIPPING CASSETTE	13/510569	11/18/2009
Entegris, Inc.	POROUS POLYETHYLENE FILTER/WATER BARRIER FOR MICRO ENVIRONMENTS	13/515129	12/10/2009
Entegris, Inc.	Wafer Container with Robotic Flange having shell deflection minimization/US	13/880710	10/19/2010
Entegris, Inc.	Wafer cushion V with inclined ramp having a dual inclinations on lower leg/US	13/880711	10/19/2010
Entegris, Inc.	Front opening container with latches and wafer cushion for door deflection minimization (450 mm)/US	13/880944	10/20/2010
Entegris, Inc.	WAFER CONTAINER WITH DOOR GUIDE AND SEAL/US	13/880948	10/20/2010
Entegris, Inc.	Exterior 450mm Container configuration./US	29/467250	10/19/2010
Entegris, Inc.	Wafer container with particle shield (getter wafer/particle shield/26th wafer, EBM)/US	14/115626	5/3/2011
Entegris, Inc.	Wafer Carrier (MAC)/US	14/238693	8/12/2011
Entegris, Inc.	Mechanical Retention of Purge Filter/US (I2M #893)	61/728644	11/20/2012
Entegris, Inc.	LATCHING MECHANISM FOR WAFER CARRIER/US	61/816576	4/26/2013
Entegris, Inc.	LATCHING MECHANISM FOR WAFER CARRIER/US	61/818343	5/1/2013
Entegris, Inc.	450 mm FOUP/MAC Center of Gravity Ballast/US	61/836572	6/18/2013
Entegris, Inc.	Corrugated Solid Getter/US	61/874697	9/6/2013
Entegris, Inc.	Pressure control within a porous media geometry to control purge gas in a microenvironment./US	61/890611	10/14/2013
Entegris, Inc.	Pressure control within a porous media geometry to control purge gas in a microenvironment./US	61/940744	2/17/2014
Entegris, Inc.	Substrate Container with QCL Sensing/US	61/886568	10/3/2013

Entegris, Inc.	LARGE DIAMETER SHIPPING SYSTEM/US	61/886589	10/3/2013
Entegris, Inc.	COMPOSITE SUBSTRATE CARRIER,/US	13/747171	11/21/2011
Entegris, Inc.	SUBSTRATE CONTAINER WITH FLUID-SEALING FLOW PASSAGEWAY (SMIF POD)	12/026336	4/18/2004
Entegris, Inc.	ELECTROSTATIC DISSIPATIVE (ESD) BEHAVIOR OF SINGLE WALL CARBON NANTUBES (SWNT) COMPOSITES (408271)	12/087914	2/22/2006
Entegris, Inc.	Polymer blends containing finely milled carbon fiber/US	14/234120	7/21/2011
Entegris, Inc.	SYSTEMS FOR PURGING RETICLE STORAGE (Clarilite)	12/305895	6/19/2006
Entegris, Inc.	FILM FRAME SHIPPER	61/607962	3/7/2012
Entegris, Inc.	Film Frame Shipper	29/423843	6/5/2012
Entegris, Inc.	WAFER CARRIER RING/US	29/430855	8/30/2012
Entegris, Inc.	Perimeter Support Ring for Wafer with Flat/US	61/944455	2/25/2014
Entegris, Inc.	Electrostatic chuck with protrusions that distribute chucking force	12/454336	5/19/2008
Entegris, Inc.	Electrostatic Chuck	13/266657	5/15/2009
Entegris, Inc.	Electrostatic Chuck/US	13/667516	5/15/2009
Entegris, Inc.	ALON COATED QUARTZ SUBSTRATE/US	14/234023	8/10/2011
Entegris, Inc.	HIGH CONDUCTIVITY ELECTROSTATIC CHUCK (Varian and Entegris)/US	13/818339	9/8/2010
Entegris, Inc.	Wafer Clamp Bump Pattern Optimized for Wafer Bonding Applications /US	61/764170	2/13/2013
Entegris, Inc.	Wafer Clamp Bump Pattern Optimized for Wafer Bonding Applications /US	61/831656	2/13/2013
Entegris, Inc.	Wafer Clamp Bump Pattern Optimized for Wafer Bonding Applications /US	61/834748	2/13/2013
Entegris, Inc.	Silicon Carbide Substrate Carrier with Graphite Core/US	61/916633	12/16/2013
Entegris, Inc.	Addition of an Interlayer of Yttria Coating Deposition/US	61/879804	9/19/2013
Entegris, Inc.	UltraC coating on Beryllium-copper parts /US	61/925312	1/9/2014
Entegris, Inc.	Aluminum-oxynitride Coating for Chamber Components in Plasma Cleaning Systems /US	61/907214	11/21/2013
Entegris, Inc.	Electrostatic Chuck and Method of Making Same/US	61/937135	2/7/2014
Entegris, Inc.	Entegris - Varian Provisional/US	13/699279	5/28/2010

Poco Graphite, Inc.	A PROCESS TO INCREASE YIELD AND REDUCE DOWN TIME IN SEMICONDUCTOR FABRS BY CLEANING EQUIPMENT COMPONENTS USING SUB-APERTURE REACTIVE ATOMIC ETCH	12/997205	6/9/2008
Poco Graphite, Inc.	COATED GRAPHITE ARTICLE AND REACTIVE ION ETCH MANUFACTURING AND REFURBISHMENT OF GRAPHITE ARTICLE	13/583316	4/21/2010
Poco Graphite, Inc.	TAKE OUT JAWS WITH SEATED COMPONENTRY (201000005 AND 201000007 rolled into PCT)/US	13/824909	9/17/2010
Poco Graphite, Inc.	Replaceable Graphite Locking Insert For Silicon Carbide Interface/US	61/765428	2/15/2013
Poco Graphite, Inc.	Ideas conceived for Chemical Vapor Composite process modifications January 14, 2013/US	61/895230	10/24/2013