

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2804859

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
DARAMIC, LLC (F/K/A DARAMIC, INC.)	04/08/2014
RECEIVING PARTY DATA	
Name:	BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT
Street Address:	101 S. TRYON STREET
Internal Address:	NC1-002-15-36
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255
PROPERTY NUMBERS Total: 56	
Property Type	Number
Patent Number:	7094498
Patent Number:	7238744
Patent Number:	7498369
Patent Number:	6692868
Patent Number:	7214444
Patent Number:	6703161
Application Number:	09957622
Patent Number:	6689509
Patent Number:	6869726
Patent Number:	6852444
Patent Number:	6539615
Patent Number:	6537696
Application Number:	09918074
Patent Number:	6933075
Patent Number:	6024533
Patent Number:	6047430
Patent Number:	6021887
Patent Number:	6095316
Patent Number:	6120939
Patent Number:	5962161

PATENT

Property Type	Number
Patent Number:	5934866
Patent Number:	6124059
Patent Number:	6139795
Patent Number:	5605549
Patent Number:	5776630
Patent Number:	5221587
Patent Number:	6403264
Patent Number:	5246798
Application Number:	13239483
Application Number:	13239440
Application Number:	13239987
Application Number:	12904371
Application Number:	13772445
Application Number:	12129790
Patent Number:	8027147
Patent Number:	8404378
Application Number:	11535701
Patent Number:	7604687
Patent Number:	7445735
Application Number:	11854580
Patent Number:	7682536
Application Number:	11719344
Patent Number:	7425387
Application Number:	12589156
Application Number:	13333015
Patent Number:	6485867
Application Number:	14003304
Application Number:	61822475
Application Number:	13973001
Application Number:	14200066
Application Number:	14200102
Application Number:	61923051
Patent Number:	6142358
Application Number:	10560548
Application Number:	12021491
Application Number:	13215331

CORRESPONDENCE DATA

Fax Number: (704)444-8857

PATENT

REEL: 032631 FRAME: 0796

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone: 7043432104
Email: twitcher@mcguirewoods.com
Correspondent Name: TERRY L. WITCHER, PARALEGAL
Address Line 1: MCGUIREWOODS LLP
Address Line 2: 201 N. TRYON STREET, SUITE 3000
Address Line 4: CHARLOTTE, NORTH CAROLINA 28202

ATTORNEY DOCKET NUMBER:	4452178-3915
NAME OF SUBMITTER:	TERRY L. WITCHER, PARALEGAL
SIGNATURE:	/s/ Terry L. Witcher
DATE SIGNED:	04/08/2014

Total Attachments: 14

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PATENT SECURITY AGREEMENT

This Patent Security Agreement (this "Agreement") dated as of April 8, 2014, by and among **POLYPORE INTERNATIONAL, INC.**, a Delaware corporation (the "Borrower"), **EACH SUBSIDIARY OF THE BORROWER PARTY HERETO** (together with the Borrower, collectively, the "Grantors" and each, a "Grantor"), and **BANK OF AMERICA, N.A.**, as administrative agent (the "Administrative Agent"), for the ratable benefit of the Secured Parties, is entered into in connection with that certain Credit Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement") among the Borrower, the Lenders from time to time party thereto, the L/C Issuers and the Administrative Agent.

This Agreement is executed pursuant to the terms of that certain Guarantee and Collateral Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified, the "Guarantee and Collateral Agreement"), among the Grantors, certain other Subsidiaries of the Borrower from time to time party thereto and the Administrative Agent, for the ratable benefit of the Secured Parties. Capitalized terms used herein but not defined herein shall have the meanings assigned to them in the Guarantee and Collateral Agreement.

NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, each Grantor hereby grants, pledges and collaterally assigns to the Administrative Agent, for the ratable benefit of the Secured Parties, as collateral security for the prompt payment and performance in full when due, whether by lapse of time, acceleration, mandatory prepayment or otherwise, of the Obligations, a continuing security interest in any and all right, title and interest of such Grantor in and to all Patents (other than Excluded Assets) of the Grantor, whether now owned or existing or owned, acquired or arising hereafter, including, without limitation, the Patents described on Schedule 1 hereto.

The rights and remedies of the Administrative Agent, on behalf of the Secured Parties, with respect to the security interest granted herein are without prejudice to, and are in addition to those set forth in the Guarantee and Collateral Agreement, all terms and provisions of which are incorporated herein by reference. In the event that any provisions of this Agreement are deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall govern.

Upon the termination of the Guarantee and Collateral Agreement in accordance with its terms, the Administrative Agent shall execute, acknowledge, and deliver to each Grantor an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patents under this Agreement.

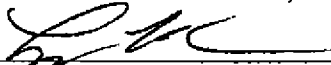
THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties have duly executed this Patent Security Agreement on the day and year first written above.

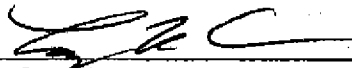
GRANTORS:

POLYPORE INTERNATIONAL, INC.

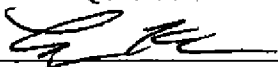
By: 
Name: Lynn Amos
Title: Chief Financial Officer, Treasurer
and Secretary

CELGARD, LLC

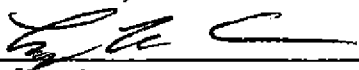
By: Polypore International, Inc.,
its Sole Member

By: 
Name: Lynn Amos
Title: Chief Financial Officer, Treasurer
and Secretary

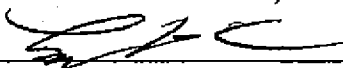
DARAMIC ACQUISITION CORPORATION

By: 
Name: Lynn Amos
Title: Chief Financial Officer and Secretary

DARAMIC ASIA, INC.

By: 
Name: Lynn Amos
Title: Executive Vice President, Chief Financial
Officer, Treasurer and Secretary

DARAMIC INTERNATIONAL, INC.

By: 
Name: Lynn Amos
Title: Executive Vice President, Chief Financial
Officer, Treasurer and Secretary

DARAMIC, LLC

By: Polypore International, Inc.,
its Sole Member

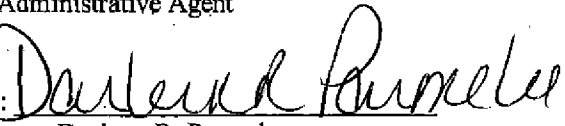
By: 
Name: Lynn Amos
Title: Chief Financial Officer, Treasurer
and Secretary

Patent Security Agreement
Signature Page

54656285

Acknowledged and accepted:

BANK OF AMERICA, N.A.,
as Administrative Agent

By: 
Name: Darleen R. Parmelee
Title: Vice President

Patent Security Agreement
Signature Page

54656285

PATENT
REEL: 032631 FRAME: 0800

SCHEDULE 1
PATENTS

CELGARD, LLC (f/k/a CELGARD, INC.)
U.S. Patents

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	Trilayer Battery Separator	09/059126 4/13/98	6080507 6/27/00
USA	Separator for Gel Electrolyte Battery	09/016024 1/30/98	6322923 11/27/01
USA	Pressure Vessel: Overmolding a Polyolefin Onto a Polyolefin	08/719668 9/25/96	5916647 6/29/99
USA	Pressure Vessel: Overmolding a Polyolefin Onto a Polyolefin	09/250116 2/16/99	6299820 10/9/01
USA	Polypropylene Microporous Membrane for Battery Separator	09/105516 6/22/01	6368742 4/9/02
USA	Method for Debubbling an Ink	09/816730 3/22/01	6558450 5/6/03
USA	Method for Debubbling an Ink	10/364873 2/12/03	US6790262 09/14/04
USA	A Secondary Lithium Battery Construction for Improved Heat Transfer	09/726633 11/30/00	US6716552 04/06/04
USA	Structurally Stable, Fusible Battery Separators and Method of Making Same	09/296682 4/20/99	6346350 2/12/02
USA	Shutdown Battery Separator Made With a Blend of Polymer and Oligomer	09/546262 4/10/00	US6749961 06/15/04
USA	Separator for a High Energy Rechargeable Lithium Battery	09/546266 4/10/00	6432586 8/13/02
USA	Battery Separators with Reduced Splitting Propensity	09/385933 8/30/99	6602593 8/5/03
USA	Degassing a Liquid with a Membrane Contractor	09/586369 6/2/00	6402818 6/11/02

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	A Hydrophilic Polyolefin Membrane Having a Coating Containing a Surfactant and an Evoh	09/134622 8/14/98	6287730 9/11/01
USA	Porous Membrane Having Single Layer Structure, Battery Separator Made Thereof, Preparations Thereof and Battery Separator for Polymer Battery	07/992181 12/17/92	5453333 9/26/95
USA		09/851479 5/8/01	US6881515 04/19/05
USA	A Thermoplastic, Unibody Transfer Device	09/206351 12/7/98	6207053 3/27/01
USA	Ethylene-Vinyl Alcohol Copolymer Battery Separator	08/969235 11/13/97	6057061 5/2/00
USA	Battery Separator	10/225018 8/21/02	US6921608 07/26/05
USA	Microporous Hollow Fiber Blood Oxygenator	09/046341 3/23/98	6350411 2/26/02
USA	Shell-Less Hollow Fiber Membrane Fluid Contactor	09/265064 3/8/99	6149817 11/21/00
USA	Fiber-Reinforced, Composite Body Contactors	09/041577 3/13/98	6063277 5/16/00
USA	Device for Removing Entrained Gases from Liquids	09/168632 10/8/98	6267926 7/31/01
USA	A Method of Making a Trilayer Battery Separator	08/839664 4/15/97	5952120 9/14/99
USA	Portable Power Tools Having Low Rate, Rechargeable Batteries	08/979017 11/26/97	6007940 12/28/99
USA	Portable Power Tools Having Low Rate, Rechargeable Batteries	09/391247 9/7/99	6106971 8/22/00
USA	Trilayer Battery Separator	09/041163 3/12/98	6180280 1/30/01
USA	Ultra-Thin, Single-Ply Battery Separator	08/896513 6/22/97	6057060 5/2/00
USA	Ultra-Thin, Single-Ply Battery Separator	09/441418 11/16/99	6132654 10/17/00
USA	Crosslinking of Polymers	09/027709	6020394

Country	Title	Application No. Filing Date	Patent No. Issue Date
		2/23/98	2/1/00
USA	Hollow Fiber Membrane Contactor	09/886653 6/21/01	6616841 09/09/03
USA	Device for Removal of Gas Bubbles and Dissolved Gases in Liquid	09/530309 10/23/00	6503225 01/07/03
USA	Shutdown, Trilayer Battery Separator	08/650210 05/20/96	5691077 11/25/97
USA	Battery Separator - Pin Removal	09/976982 10/12/01	US6692867 02/17/04
USA	Degassing Liquids: Apparatus and Method	08/644770 05/10/96	5695545 12/09/97
USA	Shutdown, Bilayer Battery Separator	08/348630 12/02/94	5565281 10/15/96
USA	Diffusion Membrane	10/005846 12/03/01	
USA	Composite Porous membranes and Methods of Making the Same	587891 09/25/90	5102552 04/07/92
USA	Oxidation Resistant Separator for a Battery	10/371461 02/21/03	
USA	High Melt Integrity Battery Separator for Lithium Ion Batteries	10/621234 07/15/03	US7087343 08/08/06
USA	Battery separator with Z-direction stability	10/971,310 10/22/04	
USA	A hollow fiber membrane contactor and method of making same	US10793573 03/04/04	US7264725 09/04/07
USA	Battery Separator for Lithium Polymer Battery	US11671486 02/06/07	US7794511 09/14/10
USA	Battery Separator and Method of Making Same	US11683022 03/07/07	US20070148538 6/28/07(pub)
USA	Separator for Battery Having Zinc Electrode	US12834922 07/13/10	US7981549 07/19/11
USA	Three-port high performance mini hollow fiber membrane contactor	US20320704 04/09/04	USD538749 03/20/07

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	Three-port high performance mini hollow fiber membrane contactor	US29249675 10/17/06	USD546768 07/17/07
USA	Three-port high performance mini hollow fiber membrane contactor	US29249676 10/17/06	USD546769 07/17/07
USA	Three-port high performance mini hollow fiber membrane contactor	US10812450 03/30/04	US7638049 12/29/09
USA	ULTRA HIGH MELT TEMPERATURE MICROPOROUS HIGH TEMPERATURE BATTERY SEPARATORS AND RELATED METHODS	13/193,691 07/29/11	US2012-0028086 2/2/12 (pub)
USA	BIAXIALLY ORIENTED POROUS MEMBRANES, COMPOSITES, AND METHODS OF MANUFACTURE AND USE	US13/044708 03/10/11	US2011-0223486 9/15/11 (pub)
USA	X-RAY SENSITIVE BATTERY SEPARATORS AND RELATED METHODS	12/689,418 01/19/10	US20110176661 7/21/11 (pub)
USA	Wafer-shaped hollow fiber module	US33802909 06/03/09	USD638096 05/17/11
USA	HIGH PRESSURE LIQUID DEGASSING MEMBRANE CONTACTORS AND METHODS OF MANUFACTURING AND USE	12/857,199 08/16/10	8506685 8/13/13
USA	HIGH PRESSURE LIQUID DEGASSING MEMBRANE CONTACTORS AND METHODS OF MANUFACTURING AND USE	US13389604 08/17/10	US2012-0137879 6/7/12
USA	HIGH PRESSURE LIQUID DEGASSING MEMBRANE CONTACTORS AND METHODS OF MANUFACTURING AND USE	US13964594 08/12/13	US20130327219 12/12/13(pub)
USA	A WAFER-SHAPED HOLLOW FIBER MODULE FOR IN-LINE USE IN A PIPING SYSTEM	US12477340 06/03/09	US8158001 04/17/12
USA	A WAFER-SHAPED HOLLOW FIBER MODULE FOR IN-LINE USE IN A PIPING SYSTEM	US13/419477 03/14/12	US8318022 11/27/12
USA	A WAFER-SHAPED HOLLOW FIBER MODULE FOR IN-LINE USE IN A PIPING SYSTEM	US13/657965 10/23/12	US8551338 10/08/13
USA	Direct methanol fuel cell	US10974490 10/27/04	US7547486 06/16/09

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	A contained liquid membrane contactor and a method of manufacturing the same	US12112071 04/30/08	US7803274 09/28/10
USA	Degassing a liquid using a gravity fed apparatus	US11548713 10/12/06	US7682421 03/23/10
USA	X-RAY SENSITIVE BATTERY SEPARATOR AND A METHOD FOR DETECTING THE POSITION OF A SEPARATOR IN A BATTERY	11/858364 09/20/07	US 7662510 02/16/10
USA	CO-EXTRUDED, MULTI-LAYERED BATTERY SEPARATOR	11/560,911 11/17/06	US20080118827 5/22/08 (pub)
USA	Membrane contactor	11/447,188 06/05/06	US 7641795 01/05/10
USA	Multilayer separator exhibiting improved strength and stability	12/755471 04/07/10	US8486556 07/16/13
USA	Membrane made of a blend of UHMW polyolefins	11386612 03/22/06	US20070221567 9/27/07 (pub)
USA	BIAXIALLY ORIENTED MICROPOROUS MEMBRANE	11/674,180 02/13/07	US20070196638 8/23/07
USA	Hollow fiber module	11/043,351 01/26/05	US 7628916 12/08/09
USA	Membrane contactor and method of making the same	10/966,193 10/15/04	
USA	Li/MnO2 battery separators with selective ion transport	10/877,958 06/25/04	
USA	Battery separator with antistatic properties	10/836,732 04/30/04	
USA	Battery separator with Z-direction stability	11/575506 10/18/2005	US20080268345 10/30/08
USA	Battery separator with Z-direction stability	11/619,002 1/2/2007	7,790,320 9/7/2010
USA	Oxidation resistant separator for a battery	11/549273 10/13/2006	US20070072068 3/29/07
USA	Multilayer Battery Separators	11/744,930 05/07/07	

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	Surface Modified Polymeric Materials	13/551883 07/18/12	
USA	Separator Membranes	13/960924 8/7/13	US20140045033 2/13/14(pub)
USA	Testing and Measuring Devices, Systems, Components and Methods	13/879683 10/20/11	
USA	Thin Battery Separators	14/030158 9/18/13	
USA	Porous Membranes, Materials, Composites	14/037845 9/26/13	US20140093687 4/3/14(pub)
USA	Copolymer Membranes, Fibers, Products	14/072117 11/5/13	
USA	Surface Modifying Agents	14/157561 1/17/14	
USA	Method and System for Optical Camber Measurement	14/205849 3/12/14	
USA	Multilayer Hybrid Battery Separators	14/210507 3/14/14	
USA	Electrically Conductive, Transparent, Translucent	61/830404 6/3/13	
USA	Porous Membranes Filled with Nano-Particles	61/879175 9/18/13	
USA	Surface Treated Particle Fillers	61/879179 9/18/13	
USA	Porous Membrane Wipes	61/892730 10/18/13	
USA	Continuous Web Inline Testing	61/895572 10/25/13	
USA	Embossed Microporous Membrane Wipes (75% owner)	61/955272 3/19/14	
USA	Embossed Microporous Membrane Battery Separator	61/955285 3/19/14	

Country	Title	Application No. Filing Date	Patent No. Issue Date
USA	Seam Tape and Method	61/968602 3/21/14	
USA	Asymmetric PMP Membrane	61/952180 3/13/14	
USA	Multi-Cartridge Membrane Contactors Testing	61/869125 8/23/13	
USA	LIQUID DEGASSING MEMBRANE CONTACTORS, COMPONENTS, SYSTEMS AND RELATED METHODS	13/247213 09/28/11	8449659 5/28/13
USA	LIQUID DEGASSING MEMBRANE CONTACTORS, COMPONENTS, SYSTEMS AND RELATED METHODS	13/895432 05/16/13	8690994 04/8/14
USA	Flat Panel Contactors	13/485966 6/1/12	
USA	Improved Contactors	13/697799 9/12/12	
USA	Membrane Contactors and Systems	14/210660 3/14/14	
USA	MULTILAYER SEPARATOR EXHIBITING IMPROVED STRENGTH AND STABILITY	12/755471 4/7/10	8486556 7/16/13
USA	THIN BATTERY SEPARATORS AND METHODS	14/030,158 9/18/13	US20140079980 3/20/14(pub)

DARAMIC, LLC (f/k/a DARAMIC, INC.)

U.S. Patents

USA	Battery Separator with Battlemented Rib	10/161345 05/31/02	US7094498 08/22/06
USA	UHMW Polyethylene Articles and Method of Manufacture (VEL)	10/121278 04/12/02	US7238744 07/03/07
USA	UHMW Polyethylene Articles and Method of Manufacture (VEL)	11070511 03/02/05	US7498369 03/03/09
USA	Melt-Blown Battery Separator	10/025285 12/19/01	US6692868 02/17/04
USA	Melt-Blown Battery Separator	US10668422 09/23/03	US7214444 05/08/07
USA	Multilayer Separator for Lead-Acid Batteries	10/076019 09/20/01	US6703161 03/09/04
USA	Laminated Multilayer Separator for Lead-Acid Batteries	09/957622 09/20/01	
USA	Laminated Multilayer Separator for Lead-Acid Batteries	US10076229 02/14/02	US6689509 02/10/04
USA	Reinforced Multilayer Separator for Lead-Acid Batteries	10/075167 09/20/01	US6869726 03/22/05
USA	Reinforced Multilayer Separator for Lead-Acid Batteries	US09957602 09/20/01	US6852444 02/08/05
USA	In-Line Lug Brushing Assembly	09/781170 02/12/01	6,539,615 04/01/03
USA	Non-woven Separator for a Nickel-Metal Hydride Battery	09/745026 12/20/00	6,537,696 03/25/03
USA	Porous Material for Storing of Aromatic Scents and Lures	09/918074	
USA	Sleeve Type Separator and Equipment to Make it	08/21/00 10/297362 06/06/00	US6933075 08/23/05

USA	Battery Plate Feeding and Handling Apparatus	09/164151 09/30/98	6,024,533 02/15/00
USA	Battery Plate Feeding and Handling Apparatus	09/299414 04/26/99	6,047,430 04/11/00
USA	Battery Plate Feeding and Handling Apparatus	09/318384 05/25/99	6,021,887 02/08/00
USA	Battery Plate Feeding and Handling Apparatus	09/299413 04/26/99	6,095,316 08/01/00
USA	Meltblown Fiber Battery Separator	09/006362 01/13/98	6,120,939 09/19/00
USA	Recombinant Battery Separator ("Polypore")	09/003653 01/07/98	5,962,161 10/05/99
USA	Plate Feeder Apparatus	08/812372 03/05/97	5,934,866 08/10/99
USA	Separator for Sealed Lead Accumulators	09/101400 09/01/98	6,124,059 09/26/00
USA	Use of Microporous Polyolefine for Absorbing Sweat and other Bodily Exhalations	09/155952 12/28/98	6,139,795 10/31/00
USA	Battery Electrolyte Pad with Gelling Agents and Method	08/608152 02/28/96	5,605,549 02/25/97
USA	Separator with Longitudinal and Traverse Ribs for Use in Accumulators	08/718342 10/03/96	5,776,630 07/07/98
USA	Lead/Sulphuric Acid Storage Battery	07/839867 02/21/92	5,221,587 06/22/93
USA	Lead/Sulphuric Acid-Accumulator, Separator for Lead/Sulphuric Acid Accumulators and Process to Reduce the Formation of Coloured Deposits in a Lead/Sulphuric Acid Accumulators	09/468180 12/21/99	6,403,264 06/11/02
USA	Lead and Sulphuric Acid Accumulator, Separator for a	07/842786	5,246,798
	Lead/Sulphuric Acid Accumulator and Process to Reduce the Formation of Dark Deposits in a Lead/Sulphuric Acid Accumulator	12/26/92	09/21/93
USA	IMPROVED SEPARATORS, BATTERIES, SYSTEMS, AND METHODS FOR IDLE START STOP VEHICLES	2011US-13239483 09/22/11	US2012-0070713 3/22/12 (pub)
USA	BATTERIES, SEPARATORS, COMPONENTS, AND	2011US-13239440	US2012-0070714

	COMPOSITIONS WITH HEAVY METAL REMOVAL CAPABILITY AND RELATED METHODS	09/22/11	3/22/12 (pub)
USA	IMPROVED LEAD ACID BATTERY SEPARATORS, BATTERIES AND RELATED METHODS	2011US-13239987 09/22/11	US2012-0070747 3/22/12(pub)
USA	BATTERY SEPARATORS WITH CROSS RIBS AND RELATED METHODS	2010US-12904371 10/14/10	US2011-0091761 4/21/11(pub)
USA	BATTERY SEPARATOR FOR A STORAGE BATTERY	2010US-12768821 04/28/10	8404378 3/26/13
USA	BATTERY SEPARATOR FOR A STORAGE BATTERY	2013US-13772445 02/21/13	US20130164596 6/27/13(pub)
USA	LEAD-ACID BATTERY SEPARATOR HAVING ENHANCED STIFFNESS	2008US-12129790 05/30/08	US2008-0299462 12/4/08 (pub)
USA	AN ULTRACAPACITOR AND METHOD OF MANUFACTURING THE SAME	2008US-12021491 01/29/08	8027147 9/27/11
USA	A battery separator for extending the cycle life of a battery	2006US-11535701 09/27/06	US2008-0076028 3/27/08 (pub)
USA	Gas filtration media	2006US-11445357 06/01/06	US7604687 10/20/09
USA	A MICROPOROUS MATERIAL AND A METHOD OF MAKING SAME	2004US-11006333 12/07/04	US7445735 11/04/08
USA	A MICROPOROUS MATERIAL AND A METHOD OF MAKING SAME	2007US-11854580 09/13/07	US2008-0300332 12/4/08 (pub)
USA	A MICROPOROUS MATERIAL AND A METHOD OF MAKING SAME	2008US-12199079 08/27/08	US7682536 03/23/10
USA	A MICROPOROUS MATERIAL AND A METHOD OF MAKING SAME	2005US-11719344 11/22/05	US2009-0305127 12/10/09 (pub)
USA	SEPARATOR FOR A LEAD BATTERY	2004US-10566928 07/31/04	US7425387 09/16/08
USA	Battery Separator with Improved Oxidation Stability	2009US-12589156 10/19/09	US2010-0104946 4/29/10(pub)
USA	Battery Separator with Improved Oxidation Stability	2003US-13333015 12/21/11	US2012-0094183 4/19/12
USA	USE OF LIGNINS IN THERMOPLASTICS	US09702598 10/31/00	US6485867 11/26/02
USA	Embossed Separators, Batteries and Methods	14003304 9/5/13	US20130344373 12/26/13(pub)

USA	Reduced Lead Content SLI Batteries	61/822475 5/13/13	
USA	Gel Impregnated Nonwoven	13/973001 8/22/13	US20140057154 2/27/14(pub)
USA	Laminated Oxidation Protected Separator	14/200066 3/7/14	
USA	Oxidation Protected Separator	14/200102 3/7/14	
USA	Multilayer Separator and Methods	61/923051 1/2/14	
USA	Wafer-to-wafer transfer of microstructures using break-away tethers	US08866954 05/31/97	US6142358 11/07/00
USA	Separator material for forming a separator for an acid accumulator	10560548 1/30/06	US2006-0141350 6/29/06 (pub)
USA	Ultracapacitor and method of manufacturing the same	12/021491 1/29/2008	8,027,147 9/27/2011
USA	Ultracapacitor and method of manufacturing the same	13/215331 8/23/11	