PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY AGREEMENT	

CONVEYING PARTY DATA

Name	Execution Date
OM Group, Inc.	09/04/2013
OMG Electronic Chemicals, LLC	09/04/2013
OMG Americas, Inc.	09/04/2013
EaglePicher Technologies, LLC	09/04/2013
EaglePicher Medical Power, LLC	09/04/2013

RECEIVING PARTY DATA

Name:	PNC Bank
Street Address:	249 FIFTH AVE.
Internal Address:	ONE PNC PLAZA-2ND FLOOR
City:	PITTSBURGH
State/Country:	PENNSYLVANIA
Postal Code:	15219

PROPERTY NUMBERS Total: 73

Number
8252461
8427098
8374311
7176806
7482941
7868777
8044814
8052764
7826197
6756766
7875088

REEL: 031208 FRAME: 0876

Patent Number:	8001677
Patent Number:	6518726
Patent Number:	7190147
Patent Number:	5464701
Patent Number:	6376944
Patent Number:	7825629
Patent Number:	7928691
Patent Number:	7821230
Patent Number:	5518833
Patent Number:	6193871
Patent Number:	5840953
Patent Number:	7504177
Patent Number:	7871447
Patent Number:	7926169
Patent Number:	6475662
Patent Number:	8394520
Patent Number:	8440342
Patent Number:	8048557
Patent Number:	7545147
Patent Number:	6016048
Patent Number:	6440331
Patent Number:	7563315
Patent Number:	6716281
Patent Number:	6946027
Patent Number:	6375731
Patent Number:	5690805
Patent Number:	5492595
Patent Number:	6623787
Patent Number:	6691912
Patent Number:	6454868
Patent Number:	5985040
Patent Number:	6710259
Patent Number:	6037020
Patent Number:	7186923
Patent Number:	7211204
	PATENT

	7108795
Patent Number:	7591956
Patent Number:	7351353
Patent Number:	7153445
Patent Number:	7767009
Patent Number:	6524642
Application Number:	13839824
Application Number:	13909510
Application Number:	13738511
Application Number:	13772772
Application Number:	13961405
Application Number:	13748033
Application Number:	13790346
Application Number:	13588580
Application Number:	12614667
Application Number:	12718743
Application Number:	13836809
Application Number:	12762014
Application Number:	12432592
Application Number:	12725872
Application Number:	11751765
Application Number:	12350770
Application Number:	13453510
Application Number:	13240350
Application Number:	13597848
Application Number:	13472027
Application Number:	13130637

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 2164798386

Email: rebecca.gallagher@squiresanders.com

Correspondent Name: Steven M. Auvil
Address Line 1: 127 Public Square
Address Line 2: 4900 Key Tower

Address Line 4: Cleveland, OHIO 44114

	034397.00040	
NAME OF SUBMITTER:	Steven M. Auvil	
Signature:	/Steven M. Auvil/	
Date:	09/12/2013	

Total Attachments: 14

source=Patent, Trademark and Copyright Security Agreement - executed version#page1.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page3.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page3.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page4.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page5.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page6.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page8.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page8.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page10.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page11.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page11.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page12.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page13.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page13.tif source=Patent, Trademark and Copyright Security Agreement - executed version#page13.tif

PATENT, TRADEMARK AND COPYRIGHT SECURITY AGREEMENT

THIS PATENT, TRADEMARK AND COPYRIGHT SECURITY AGREEMENT (this "IP Security Agreement") is made and entered into as of this 4th day of September, 2013, by and among each of OM GROUP, INC., a Delaware corporation (the "Parent"), OMG Electronic Chemicals, LLC, a Delaware limited liability company, OMG Americas, Inc., an Ohio corporation, EaglePicher Technologies, LLC, a Delaware limited liability company, EaglePicher Medical Power, LLC, a Delaware limited liability company, Compugraphics U.S.A. Inc., a Delaware corporation (each a "Grantor" and collectively, the "Grantors"), and PNC BANK, NATIONAL ASSOCIATION, a national banking association, in its capacity as Administrative Agent under and pursuant to the Credit Agreement (in such capacity, the "Administrative Agent"). Capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to such terms in the Credit Agreement.

Recitals:

- A. The Parent, certain subsidiaries of the Parent from time to time party thereto, including the Grantors, the Lenders party thereto as the "Lenders", and PNC Bank, National Association, as the "Administrative Agent," the "Domestic Swing Loan Lender" and the "Issuing Lender", are the parties to that certain Credit Agreement dated as of September 4, 2013 (as amended, restated, supplemented and replaced from time to time, the "Credit Agreement").
- B. It is a condition precedent to the effectiveness of the Credit Agreement that the Grantors deliver this IP Security Agreement.
- C. The Parent and the other Grantors are party to a Security Agreement dated as of September 4, 2013 (as amended, amended and restated, restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Administrative Agent.

Agreements:

NOW THEREFORE, in consideration of the foregoing Recitals, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor and the Administrative Agent hereby agree as follows:

- 1. <u>INCORPORATION OF CREDIT AGREEMENT AND SECURITY AGREEMENT</u>. The Credit Agreement and the Security Agreement and the terms and provisions thereof are hereby incorporated herein in their entirety by this reference.
- 2. <u>SECURITY INTEREST IN PATENTS, TRADEMARKS, COPYRIGHTS, ETC.</u> Each Grantor hereby pledges and grants to the Administrative Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Collateral of such Grantor (collectively, the "IP Collateral"):

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- (a) registered or applied for Patents, Trademarks and Copyrights of such Grantor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing, provided, however, that the IP Collateral shall not include any Excluded Property.
- 3. <u>SECURITY AGREEMENT</u>. The security interest granted pursuant to this IP Security Agreement is granted in conjunction with the security interest granted to the Administrative Agent pursuant to the Security Agreement and Grantors hereby acknowledge and affirm that the rights and remedies of the Administrative Agent with respect to the security interest in the Patents, Trademarks and Copyrights made and granted hereby are more fully set forth in the Security Agreement. In the event that any provision of this IP Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Administrative Agent shall otherwise determine.
- 4. <u>TERMINATION</u>. Upon the payment in full of the Obligations and termination of the Security Agreement, the Administrative Agent shall execute, acknowledge, and deliver to the Grantors an instrument in writing in recordable form releasing the IP Collateral.
- 5. <u>COUNTERPARTS</u>. This IP Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this IP Security Agreement by signing and delivering one or more counterparts.
- 6. <u>GOVERNING LAW</u>. <u>Section 11.11.1</u> through <u>Section 11.11.5</u> of the Credit Agreement are incorporated herein, *mutatis mutandis*, as if a part hereof.

[Signatures Follow on Next Page]

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IN WITNESS WHEREOF, the parties hereto have executed this Patent, Trademark and Copyright Security Agreement as of the date first above written.

GRANTORS:

OM GROUP, INC. By:	
Name: Christopher M. Hix Title: Vice President and Chief Financial Officer COMPUGRAPHICS U.S.A. INC. OMG ELECTRONIC CHEMICALS, LLC OMG AMERICAS, INC. By: Name: Christopher M. Hix Title: Vice President EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC By: Name: Emily Russell	OM GROUP, INC.
COMPUGRAPHICS U.S.A. INC. OMG ELECTRONIC CHEMICALS, LLC OMG AMERICAS, INC. By: Name: Christopher M. Hix Title: Vice President EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC By: Name: Emily Russell	***************************************
COMPUGRAPHICS U.S.A. INC. OMG ELECTRONIC CHEMICALS, LLC OMG AMERICAS, INC. By:	
OMG ELECTRONIC CHEMICALS, LLC OMG AMERICAS, INC. By:	Title: Vice President and Chief Financial Officer
OMG AMERICAS, INC. By:	COMPUGRAPHICS U.S.A. INC.
OMG AMERICAS, INC. By:	OMG ELECTRONIC CHEMICALS, LLC
Name: Christopher M. Hix Title: Vice President EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC By: Name: Emily Russell	
Title: Vice President EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC By: Name: Emily Russell	By Chityle 2 1/2
Title: Vice President EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC By: Name: Emily Russell	Name: Christopher M. Hix
By:	* * * * * * * * * * * * * * * * * * * *
By: Name: Emily Russell	
By:	
Name: Emily Russell	EAGLEPICHER MEDICAL POWER, LLC
· · · · · · · · · · · · · · · · · · ·	
Title: Secretary	Name: Emily Russell
	Title: Secretary

IN WITNESS WHEREOF, the parties hereto have executed this Patent, Trademark and Copyright Security Agreement as of the date first above written.

GRANTORS:

OM GROUP, INC.	
By:	
Name: Christopher M. Hix	
Title: Vice President and Chief Financial Office	r
COMPUGRAPHICS U.S.A. INC. OMG ELECTRONIC CHEMICALS, LLC OMG AMERICAS, INC.	
By:	
Name: Christopher M. Hix	
Title: Vice President	

EAGLEPICHER TECHNOLOGIES, LLC EAGLEPICHER MEDICAL POWER, LLC

Name: Emily Russell
Title: Secretary

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Accepted and Agreed:

PNC BANK, NATIONAL ASSOCIATION, as Administrative Agent

By: _

Name: Christian S. Brown Title: Senior Vice President

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SCHEDULE I

to

IP SECURITY AGREEMENT

PATENT REGISTRATIONS AND PATENT APPLICATIONS

Patents

Patent Name	Country	Registration Number	Record Owner
Lithium-Sulfur Battery and Cathode Therefore	USA	8,252,461	EaglePicher Technologies, LLC
Hybrid Energy Storage System, Renewable Energy System Including the Storage System, and Method of Using Same	USA	8,427,098	EaglePicher Technologies, LLC
System and Method for Verifying the Correct Ordering of a Stack of Components	USA	8,374,311	EaglePicher Technologies, LLC
Physical Key to Facilitate an Inactive Mode State- of-Charge Indicator Within a Battery	USA	7176806	EaglePicher Technologies, LLC
Physical Key to Facilitate an Inactive Mode State- of-Charge Indicator Within a Battery	USA	7482941	EaglePicher Technologies, LLC
Physical Key to Facilitate an Inactive Mode State- of-Charge Indicator Within a Battery	USA	7868777	EaglePicher Technologies, LLC
Physical Key to Facilitate an Inactive Mode for a State-of-Charge Indicator Within a Battery	USA	8,044,814	EaglePicher Technologies, LLC
System and Method for Manufacturing A Thermal Battery	USA	8,052,764	EaglePicher Technologies, LLC
Modular Energy Storage Device and Method of Making the Same	USA	7826197	EaglePicher Technologies, LLC

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Autoclavalbe Battery Pack	USA	6756766	EaglePicher Technologies, LLC
Automated Tracking and Storage System for Use with an Automated Thermal Battery Manufacturing System	USA	7875088	EaglePicher Technologies, LLC
Automated Tracking and Storage System for Use with an Automated Thermal Battery Manufacturing System	USA	8,001,677	EaglePicher Technologies, LLC
Battery Charger and Charge Control System	USA	6518726	EaglePicher Technologies, LLC
Battery with Complete Discharge Device	USA	7190147	EaglePicher Technologies, LLC
Leakproof Valve Regulated Maintenance Free Lead Acid Battery	USA	5464701	EaglePicher Technologies, LLC
Electrical Power Generator	USA	6376944	EaglePicher Technologies, LLC
Method and System for Cell Equalization with Charging Sources and Shunt Regulators	USA	7825629	EaglePicher Technologies, LLC
Method and System for Cell Equalization with Isolated Charging Sources	USA	7928691	EaglePicher Technologies, LLC
Method and System for Cell Equalization with Switched Charging Sources	USA	7821230	EaglePicher Technologies, LLC
Non Woven Electrode Construction	USA	5518833	EaglePicher Technologies, LLC
Physical Key to Facilitate an Inactive Mode State- of-Charge Indicator Within a Battery	USA	7176806	EaglePicher Technologies, LLC

Process of Forming a Nickel Electrode	USA	6193871	EaglePicher Technologies, LLC
Purified Tetraethoxysilane and Method of Purifying	USA	5840953	EaglePicher Technologies, LLC
Reserve Battery with Set Back Mechanism for Delayed Battery Activision	USA	7504177	EaglePicher Technologies, LLC
System and Method for Manufacturing a Thermal Battery	USA	7871447	EaglePicher Technologies, LLC
System and Method for Manufacturing a Thermal Battery	USA	7,926,169	EaglePicher Technologies, LLC
Thermal Battery	USA	6475662	EaglePicher Technologies, LLC
Thermal Battery Electrolyte Materials, Electrode-Electrolyte Composites, and Batteries Including Same	USA	8,394,520	EaglePicher Technologies, LLC
Thermal Battery Cathode Materials and Batteries Including Same	USA	8,440,342	EaglePicher Technologies, LLC
Electrochemical Device	USA	8,048,557	EaglePicher Technologies, LLC
System and Method for Nondestructive Testing of Thermal Batteries	USA	7545147	EaglePicher Technologies, LLC
Temperature Compensated Battery Charger System	USA	6016048	EaglePicher Technologies, LLC
Aqueous Carbon Composition and Method for Coating a Non Conductive Substrate	USA	6440331	OMG Electronic Chemicals, LLC

Composition and Method for Preparing Chemically-Resistant Copper Surfaces for Bonding to Substrates Roughened	USA	7563315	OMG Electronic Chemicals, LLC
Composition and Method for Preparing Chemically-Resistant Roughened Copper Surfaces for Bonding to Substrates	USA	6716281	OMG Electronic Chemicals, LLC
Composition and Method for Preparing Chemically-Resistant Roughened Copper Surfaces for Bonding to Substrates	USA	6946027	OMG Electronic Chemicals, LLC
Conditioning of Through Holes and Glass	USA	6375731	OMG Electronic Chemicals, LLC
Direct Metallization Process	USA	5690805	OMG Electronic Chemicals, LLC
Method for Treating an Oxidized Copper Film	USA	5492595	OMG Electronic Chemicals, LLC
Method to Improve the Stability of Dispersions of Carbon	USA	6623787	OMG Electronic Chemicals, LLC
Methods of Avoiding Blowhole Formation by Conditioning Through Holes and Glass	USA	6691912	OMG Electronic Chemicals, LLC
Permanganate Desmear Process for Printed Wiring Boards	USA	6454868	OMG Electronic Chemicals, LLC
Permanganate Desmear Process for Printed Wiring Boards	USA	5985040	OMG Electronic Chemicals, LLC
Printed Wiring Boards and Methods for Making Them	USA	6710259	OMG Electronic Chemicals, LLC

Ultrasonic Mixing of Through Hole Treating Compositions	USA	6037020	OMG Electronic Chemicals, LLC
Printed Wiring Boards and Methods for Making Them	USA	7186923	OMG Electronic Chemicals, LLC
Additives to Stop Copper Attack by Alkaline Etching Agents Such as Ammonia and Monoethanol Amine (M EA)	USA	7211204	OMG Electronic Chemicals, LLC
Composition and Method for Preparing Chemically-Resistant Roughened Copper Surfaces for Bonding to Substrates	USA	7108795	OMG Electronic Chemicals, LLC
Method and Composition for Selectively Stripping Nickel from a Substrate	USA	7591956	OMG Electronic Chemicals, LLC
Method for Roughening Copper Surfaces for Bonding to Substrates	USA	7351353	OMG Electronic Chemicals, LLC
Method for Roughening Copper Surfaces for Bonding to Substrates	USA	7153445	OMG Electronic Chemicals, LLC
Method for Roughening Copper Surfaces for Bonding to Substrates	USA	7563315	OMG Electronic Chemicals, LLC
Solution and Process for Improving the Solderability of a Metal Surface	USA	7767009	OMG Electronic Chemicals, LLC
Electroless Metal- Plating Process	USA	6524642	OMG Electronic Chemicals, LLC

Patent Applications

Application Name	Country	Application Number	Applicant
Wound Thermal Batteries and Methods of Manufacturing the Same	USA	13/839,824	EaglePicher Technologies, LLC
Contoured Battery Case Based on Cell Shapes	USA	13/909,510	EaglePicher Technologies, LLC
Ceramic Enclosed Thermal Battery	USA	13/738,511	EaglePicher Technologies, LLC
Battery and Method of Manufacturing a Battery	USA	13/772,772	EaglePicher Technologies, LLC
Underwater Charging Station	USA	13/961,405	EaglePicher Technologies, LLC
Welding Along a Seam Using a Multiple-Point Alignment Method	USA	13/748,033	EaglePicher Technologies, LLC
Li-Si-Sn Alloy, Anode Material of the Alloy, and Batteries Including Same	USA	13/790,346	EaglePicher Technologies, LLC
Systems and Methods for Determining Battery State-of-Health	USA	13/588,580	EaglePicher Technologies, LLC
Non-Aqueous Cell Having Amorphous or Semi-Crystalline Copper Manganese Oxide Cathode Material	USA	12/614,667	EaglePicher Technologies, LLC
End of Life Indication System and Method for Non-Aqueous Cell Having Amorphous or Semi-Crystalline Copper Manganese Oxide Cathode Material	USA	12/718,743	EaglePicher Technologies, LLC
Hybrid Energy Storage System, Renewable Energy System Including the Storage System, and Method of Using Same	USA	13/836,809	EaglePicher Technologies, LLC
Activation Mechanism for a Reserve Battery Cell	USA	12/762,014	EaglePicher Technologies, LLC
System and Method for Nondestructive Testing of Thermal Batteries	USA	12/432,592	EaglePicher Technologies, LLC

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Non-Aqueous Electrochemical Cell Having a Mixture of At Least Three Cathode Materials Therein	USA	12/725,872	EaglePicher Technologies, LLC
Method for Assembling a Stacked Plate Electrochemical Device	USA	11/751,765	EaglePicher Technologies, LLC
Integral Electrochemical Device	USA	12/350,770	EaglePicher Technologies, LLC
Method of Forming Encapsulated Solid Electrochemical Component	USA	13/453,510	EaglePicher Technologies, LLC
Electrolyte Materials, Thermal Battery Components, and Thermal Batteries for Intermediate Temperature Applications	USA	13/240,350	EaglePicher Technologies, LLC
High Rate and Energy Cathode Material for Lithium Batteries	USA	13/597,848	EaglePicher Technologies, LLC
Low Profile Igniter	USA	13/472,027	EaglePicher Technologies, LLC
Electroless Palladium Plating Solution and Method of Use	USA	13/130,637	OMG Americas, Inc.

TRADEMARK REGISTRATIONS AND TRADEMARK APPLICATIONS

$\underline{Trademarks}$

Name	Country	Registration Number	Record Owner
CALCIPLEX	USA	3437612	OM Group, Inc.
CAREFREE	USA	953,058	EaglePicher Technologies, LLC
CEM-ALL	USA	900,551	OMG Americas, Inc.
COBRA BOND	USA	2546314	OMG Electronic Chemicals, LLC
CO-BRA ETCH	USA	1154332	OMG Electronic Chemicals, LLC
CO-BRA SOL	USA	999465	OMG Electronic Chemicals, LLC
CONTEGO	USA	3,402,478	EaglePicher Technologies, LLC

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CUR-RX (Stylized Letters)	USA	1,562,871	OMG Americas, Inc.
DRI-RX (Stylized Letters)	USA	1,562,872	OMG Americas, Inc.
EAGLEPICHER	USA	4297182	EaglePicher Technologies, LLC
ELECTRO-BRITE	USA	810910	OMG Electronic Chemicals, LLC
EPISTATIC (Stylized)	USA	896,288	EaglePicher Technologies, LLC
FRIC-SHUN	USA	2,955,703	OMG Americas, Inc.
HEX-CEM	USA	807,719	OMG Americas, Inc.
HYDRO-CURE	USA	1,056,381	OMG Americas, Inc.
HYDRO-NAP	USA	1,267,478	OMG Americas, Inc.
KEEPER (AND DESIGN)	USA	1,179,937	EaglePicher Technologies, LLC
LIN-ALL	USA	635,764	OMG Americas, Inc.
MAGNUM	USA	1,157,119	EaglePicher Technologies, LLC
NAP-ALL	USA	806,188	OMG Americas, Inc.
NEO-NAP	USA	947,074	OMG Americas, Inc.
OMG (Stylized Letters)	USA	1,873,473	OMG Americas, Inc.
PERMA-ETCH	USA	1111136	OMG Electronic Chemicals, LLC
POLY-CURE	USA	695,507	OMG Americas, Inc.
REEL SATIN	USA	2,088,101	OMG Electronic Chemicals, LLC
REEL-BRIGHT	USA	2,338,895	OMG Electronic Chemicals, LLC
SHADOW	USA	1910943	OMG Electronic Chemicals, LLC
SKINO	USA	864,793	OMG Americas, Inc.
SPURSO	USA	868,592	OMG Americas, Inc.
TEN-CEM	USA	806,189	OMG Americas, Inc.

Trademark Applications

Application Name	Country	Application Number	<u>Applicant</u>
FELT	USA	85/658125	OM Group, Inc.

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COPYRIGHT REGISTRATIONS AND COPYRIGHT APPLICATIONS

Copyrights

Copyright Name	Country	Registration Number	Record Owner
#321 Cork	USA	GP 113482	EaglePicher Technologies, LLC
#372 Zebra	USA	GP 113484	EaglePicher Technologies, LLC
#375 Western Cedar	USA	GP 115230	EaglePicher Technologies, LLC
#379 Herringbone	USA	GP 113483	EaglePicher Technologies, LLC
Eagle-Picher Giant Paint Color Samples	USA	KK75119	EaglePicher Technologies, LLC
Souvenir Guide	USA	AA227009	EaglePicher Technologies, LLC
Repels water & 8 other titles	USA	VA537415	Compugraphics U.S.A. LLC

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RECORDED: 09/12/2013