PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3617277

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
POLYONE CORPORATION	11/12/2015
COLORMATRIX HOLDINGS, INC.	11/12/2015
POLYONE DESIGNED STRUCTURES AND SOLUTIONS LLC	11/12/2015

RECEIVING PARTY DATA

Name:	U.S. BANK NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	100 WALL STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10005

PROPERTY NUMBERS Total: 70

Property Type	Number
Patent Number:	8476367
Patent Number:	8703849
Patent Number:	8912266
Patent Number:	9006301
Patent Number:	9034967
Patent Number:	9062201
Patent Number:	9085680
Patent Number:	9085681
Patent Number:	9120923
Patent Number:	9139704
Patent Number:	9175156
Application Number:	62210870
Application Number:	62209332
Application Number:	62205299
Application Number:	62146036
Application Number:	62117742
Application Number:	62114723
Application Number:	62114719

PATENT REEL: 037113 FRAME: 0144

503570650

Property Type	Number
Application Number:	62114708
Application Number:	62114701
Application Number:	62102198
Application Number:	62096012
Application Number:	62073122
Application Number:	29508224
Application Number:	29508221
Application Number:	29508218
Application Number:	29508216
Application Number:	29507855
Application Number:	29507854
Application Number:	29507851
Application Number:	29507849
Application Number:	14804859
Application Number:	14767688
Application Number:	14652054
Application Number:	14646140
Application Number:	14501050
Application Number:	14435332
Application Number:	14427340
Application Number:	14416415
Application Number:	14414584
Application Number:	14414576
Application Number:	14411719
Application Number:	14410840
Application Number:	14409699
Application Number:	14403554
Application Number:	14390454
Application Number:	14359536
Application Number:	14352715
Application Number:	14240471
Application Number:	14240548
Application Number:	14234396
Application Number:	14234259
Application Number:	14232864
Application Number:	14232587
Application Number:	14130842
Application Number:	14122298

Property Type	Number
Application Number:	14119805
Application Number:	14090706
Application Number:	14002629
Application Number:	14000726
Application Number:	13996592
Application Number:	13972030
Application Number:	13833710
Application Number:	13797333
Application Number:	13797147
Application Number:	13794134
Application Number:	13769477
Application Number:	13983327
Application Number:	14442574
Application Number:	13178661

CORRESPONDENCE DATA

Fax Number: (216)579-0212

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (216) 586-3939

Email: skoston@jonesday.com

Correspondent Name: JONES DAY

Address Line 1: 901 LAKESIDE AVENUE

Address Line 2: NORTH POINT

Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER:	701213-283006
NAME OF SUBMITTER: SHERYL H. LOVE	
SIGNATURE:	/Sheryl H. Love/
DATE SIGNED:	11/16/2015

Total Attachments: 8

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PATENT SECURITY AGREEMENT

Patent Security Agreement, dated as of November 12, 2015 by each of the undersigned (each individually, a "Pledgor", and, collectively, the "Pledgors"), in favor of U.S. BANK NATIONAL ASSOCIATION, in its capacity as collateral agent pursuant to the Security Agreement (in such capacity, the "Collateral Agent"), and the Secured Parties.

WITNESSETH:

WHEREAS, the Pledgors are party to the Modification to Security Agreement dated November 12, 2015 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent and the Secured Parties pursuant to which the Pledgors are required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, each Pledgor agrees as follows:

- Section 1. <u>Defined Terms</u>. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.
- Section 2. <u>Grant of Security Interest in Patent Collateral</u>. As collateral security for the payment and performance in full of all the Obligations, each Pledgor hereby pledges and grants to the Secured Parties and the Collateral Agent, for the benefit of the Secured Parties, a lien on and security interest in all of the right, title and interest of such Pledgor in, to and under the following Collateral, wherever located, and whether now existing or hereafter arising or acquired from time to time (collectively, the "Patent Collateral"):
- (a) the registered or applied for Patents of such Pledgor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing, including the Proceeds of any claim by such Pledgor against third parties for past, present or future infringement of any such Patent and the right to receive license fees, royalties, and other compensation for any such Patent.

Notwithstanding anything to the contrary contained herein, the security interest created by this Patent Security Agreement shall not extend to, and the term "Patent Collateral" shall not include, any Excluded Property.

Section 3. <u>Security Agreement</u>. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Secured Parties and the Collateral Agent pursuant to the Security Agreement and Pledgors hereby acknowledge and affirm that the rights and remedies of the Secured Parties and the Collateral Agent with respect to the security interest in the Patent Collateral made

and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to be inconsistent with or in conflict with the Security Agreement, the provisions of the Security Agreement shall control.

Section 4. <u>Termination</u>. In accordance with the provisions of the Security Agreement (including Section 11.4 thereto), the Secured Parties and the Collateral Agent shall execute, acknowledge, and deliver to the Pledgors an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patent Collateral under this Patent Security Agreement.

Section 5. <u>Counterparts</u>. This Patent 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 Patent Security Agreement by signing and delivering one or more counterparts. Delivery of any executed counterpart of a signature page of this Patent Security Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually executed counterpart of this Patent Security Agreement.

Section 6. <u>Governing Law</u>. This Patent Security Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Patent Security Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise, shall be construed in accordance with and governed by the laws (including statutes of limitation) of the State of New York, without regard to conflicts of law principles that would require the application of the laws of another jurisdiction.

Section 7. <u>Existing Patent Security Agreement</u>. This Patent Security Agreement supplements and amends, but does not replace, that certain Patent Security Agreement dated December 21, 2011 by certain Pledgors in favor of Secured Parties and the Collateral Agent.

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, each Pledgor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

POLYONE CORPORATION

Name: Scott J. Leffler

Title: Vice President and Treasurer

COLORMATRIX HOLDINGS, INC.

Name: Scott J. Leffler

Title: Treasurer

POLYONE DESIGNED STRUCTURES AND

SOLUTIONS LLC

Name: Scott J. Leffler

Title: Chief Financial Officer

SCHEDULE I TO PATENT SECURITY AGREEMENT

PATENT REGISTRATIONS AND PATENT APPLICATIONS

New Patents and Patent Applications:

Appln. No.	Patent No.	Appln. Date	Issue Date	Grantor	Title
13/017317	8476367	13-Jan-2011	02-Jul-2013	PolyOne Designed Structures and Solutions LLC	PELLETIZED PLASTIC COMPOUNDS AND METHOD OF MANUFACTURE
13/519956	8703849	29-Jun-2012	22-Apr-2014	PolyOne Corporation	PROCESSES FOR MAKING HIGH PURITY RENEWABLE SOURCE-BASED PLASTICIZERS AND PRODUCTS MADE THEREFROM
14/137182	8912266	20-Dec-2013	16-Dec-2014	PolyOne Corporation	THERMOPLASTIC ELASTOMERS EXHIBITING SUPERIOR BARRIER PROPERTIES
	9,006,301	16/04/2012	4/14/2015	COLORMATRIX HOLDINGS, INC	LIQUID FORMULATION
14/343191	9034967	06-Mar-2014	19-May-2015	PolyOne Corporation	NON-HALOGENATED POLYOLEFIN COMPOUNDS HAVING GOOD PROCESSING PROPERTIES
14/111232	9062201	04-Dec-2013	23-Jun-2015	PolyOne Corporation	FLAME RETARDANT POLYLACTIC ACID COMPOUNDS
13/981288	9085680	23-Jul-2013	21-Jul-2015	PolyOne Corporation	LOW GLOSS CAPSTOCK
13/984775	9085681	09-Aug-2013	21-Jul-2015	PolyOne Corporation	LOW GLOSS IONOMER- BASED CAPSTOCK
14/122287	9120923	26-Nov-2013	01-Sep-2015	PolyOne Corporation	THERMOPLASTIC ELASTOMER COMPOUNDS EXHIBITING SUPERIOR COMPRESSION SET PROPERTIES
	9139704	19/12/2011	9/2/2015	COLORMATRIX HOLDINGS, INC	POLYMERIC MATERIALS
14/344043	9175156	10-Mar-2014	03-Nov-2015	PolyOne Corporation	SUSTAINABLE THERMOPLASTIC COMPOUNDS
62/210870		27-Aug-2015		PolyOne Corporation	POLYVINYL BUTYRAL-G- POLYLACTIDE COPOLYMER
62/209332		24-Aug-2015		PolyOne Corporation	CHEMICALLY RESISTANT AND TOUGH CYCLIC OLEFIN COPOLYMER COMPOUNDS

Signature Page to Patent Security Agreement NAI-1500639865v4

Appln. No.	Patent No. Appln. Date	Issue Date	Grantor	Title
	1111		2100	
62/205299	14-Aug-2015		PolyOne Corporation	SUPER-VIBRATION
				DAMPING THERMOPLASTIC
(2/14/02/	10 A 2015		PolyOne Corporation	ELASTOMER BLENDS
62/146036	10-Apr-2015		PolyOne Corporation	CHEMICALLY RESISTANT AND TOUGH CYCLIC OLEFIN
				COPOLYMER COMPOUNDS
62/117742	18-Feb-2015		Dal-One Componetion	MASTERBATCH
02/11 / /42	18-Feb-2015		PolyOne Corporation	CONTAINING DECORATIVE
				ADDITIVE
62/114723	11-Feb-2015		PolyOne Corporation	SOUND DAMPING
02/114/23	11-1-0-2013		1 diy One Corporation	THERMOPLASTIC
				ELASTOMER ARTICLES
62/114719	11-Feb-2015		PolyOne Corporation	DAMPING THERMOPLASTIC
02/114/17	11-160-2013		1 ory One Corporation	ELASTOMER ARTICLES
				WITH LOW COMPRESSION
				SET COMPRESSION
62/114708	11-Feb-2015		PolyOne Corporation	DAMPING THERMOPLASTIC
02/11//00	11 1 60 2010		Tory one corporation	ELASTOMERS
62/114701	11-Feb-2015		PolyOne Corporation	DAMPING THERMOPLASTIC
02/111/01	11 1 60 2013		Tory One Corporation	ELASTOMERS
62/102198	12-Jan-2015		PolyOne Corporation	SUPPORT MATERIAL FOR 3D
02/102176	12-3411-2013		1 diyone corporation	PRINTING OF POLYMER
				COMPOUNDS
62/096012	23-Dec-2014		PolyOne Corporation	FLAME RETARDANT
02/070012	25 Dec 2014		1 ory one corporation	POLYBUTYLENE SUCCINATE
				COMPOUND
62/073122	31-Oct-2014		PolyOne Designed	NESTED PACKAGING
02,010122	51 33. 2 81.		Structures and	ASSEMBLIES
			Solutions LLC	
29/508224	04-Nov-2014		PolyOne Designed	SURFACE TREATMENT FOR
			Structures and	PLASTIC SHEET
			Solutions LLC	
29/508221	04-Nov-2014		PolyOne Designed	SURFACE TREATMENT FOR
			Structures and	PLASTIC SHEET
			Solutions LLC	
29/508218	04-Nov-2014		PolyOne Designed	SURFACE TREATMENT FOR
			Structures and	VEHICLE FLOOR MATS OR
			Solutions LLC	TRAYS OR CARGO LINERS
29/508216	04-Nov-2014		PolyOne Designed	SURFACE TREATMENT FOR
			Structures and	VEHICLE FLOOR MATS OR
			Solutions LLC	TRAYS OR CARGO LINERS
29/507855	31-Oct-2014		PolyOne Designed	PACKAGING ASSEMBLY
			Structures and	
20/505054	21.0 . 2014		Solutions LLC	DAGE AGENCIA
29/507854	31-Oct-2014		PolyOne Designed	PACKAGING ASSEMBLY
			Structures and	
20/507951	21.0 - 2014		Solutions LLC	DACWACINIC ACCEMINA
29/507851	31-Oct-2014		PolyOne Designed Structures and	PACKAGING ASSEMBLY
20/507940	31-Oct-2014		Solutions LLC	PACKAGING ASSEMBLY
29/507849	31-00:-2014		PolyOne Designed Structures and	FACKAUINU ASSEMBL I
			Solutions LLC	
			SOIUHOIIS LLC	

Appln. No.	Patent No. Appln. Date	Issue Date Grantor	Title
14/804859	21-Jul-2015	PolyOne Designed Structures and Solutions LLC	METHODS AND SYSTEMS FOR USE IN FORMING AN ARTICLE FROM A MULTI- LAYER SHEET STRUCTURE
14/767688	13-Aug-2015	PolyOne Corporation	INKJET INK CONTAINERS HAVING OXYGEN SCAVENGING PROPERTIES
14/652054	12-Jun-2015	PolyOne Corporation	FURFURYL-BASED ESTERS
14/646140	20-May-2015	PolyOne Corporation	SELF-LUBRICATING POLYMER COMPOSITION AND METHOD OF LUBRICATING AN ARTICLE
14/501050	30-Sep-2014	ColorMatrix Group, Inc.	IN-LINE COLOR MIXER
14/435332	13-Apr-2015	PolyOne Corporation	FLAME RETARDANT POLYLACTIC ACID COMPOUNDS
14/427340	11-Mar-2015	PolyOne Corporation	HYDROLYTICALLY STABLE FUNCTIONALIZED POLYPHOSPHONATE FLAME RETARDANT
14/416415	22-Jan-2015	PolyOne Corporation	NON-HALOGENATED FLAME RETARDANT POLYCARBONATE COMPOUNDS
14/414584	13-Jan-2015	PolyOne Corporation	POLYETHYLENE COMPOUNDS HAVING NON- MIGRATORY SLIP PROPERTIES
14/414576	13-Jan-2015	PolyOne Corporation	POLYPROPYLENE COMPOUNDS HAVING NON- MIGRATORY SLIP PROPERTIES
14/411719	6/28/2013	COLORMATRIX HOLDINGS INC	POLYMERIC MATERIALS
14/410840	23-Dec-2014	PolyOne Corporation	LOW SPECIFIC GRAVITY THERMOPLASTIC COMPOUNDS FOR NEUTRAL BUOYANCY UNDERWATER ARTICLES
14/409699	19-Dec-2014	PolyOne Corporation	PVC-ACRYLATE BLENDS
14/403554	24-Nov-2014	PolyOne Corporation	OXYGEN SCAVENGING COPOLYMERS MADE FROM CYCLIC ALIPHATIC MONOMERS
14/390454	03-Oct-2014	PolyOne Corporation	POLYOLEFIN INTUMESCENT PHOSPHOROUS FLAME RETARDANT SYSTEM
14/359536	20-May-2014	PolyOne Corporation	COUPLED FLY ASH FILLED POLYMER COMPOUNDS

Appln. No.	Patent No. Appln. Date	Issue Date Grantor	Title
14/352715	18-Apr-2014	PolyOne Corporation	THERMOPLASTIC ELASTOMER COMPOUNDS EXHIBITING HIGH LATENT HEAT OF FUSION IN SOLID STATE
14/240471	24-Feb-2014	PolyOne Corporation	HEAT RESISTANT POLYLACTIC ACID COMPOUNDS
14/240,548	8/21/2012	COLORMATRIX HOLDINGS, INC	SCAVENGING OXYGEN
14/234396	23-Jan-2014	PolyOne Corporation	CROSSLINKABLE BIOPLASTICIZERS
14/234,259	7/23/2012	COLORMATRIX HOLDINGS, INC	POLYMERIC MATERIALS
14/232864	14-Jan-2014	PolyOne Corporation	POLYAMIDE COMPOUNDS CONTAINING PITCH CARBON FIBER
14/232587	13-Jan-2014	PolyOne Corporation	NON-HALOGENATED FLAME RETARDANT POLYCARBONATE COMPOUNDS
14/130842	03-Jan-2014	PolyOne Corporation	PREPARATION OF IMIDE OLIGOMERS
14/122298	26-Nov-2013	PolyOne Corporation	THERMOPLASTIC ELASTOMER COMPOUNDS EXHIBITING SHAPE MEMORY VIA THERMO- MECHANICAL ACTION
14/119805	22-Nov-2013	PolyOne Corporation	THERMOPLASTIC ELASTOMERS MOLDABLE UNDER LOW SHEAR CONDITIONS
14/090706	26-Nov-2013	PolyOne Corporation	SUSTAINABLE POLY(VINYL CHLORIDE) MIXTURES FOR FLOORING PRODUCTS
14/002629	30-Aug-2013	PolyOne Corporation and REVOLUTIONARY PLASTICS LLC	CYCLE TIME REDUCTION MASTERBATCHES AND THEIR USE IN THERMOPLASTIC COMPOUNDS
14/000726	21-Aug-2013	PolyOne Corporation	POLYESTER COMPOUNDS SUITABLE FOR HYDROCLAVING
13/996,592	19/12/2011	COLORMATRIX HOLDINGS, INC	POLYMERIC MATERIALS
13/972030	21-Aug-2013	PolyOne Corporation	METHOD FOR REDUCING RESIDUAL LACTAM MONOMER FROM POLYAMIDE COMPOUNDS
13/833710	15-Mar-2013	ColorMatrix Holdings, Inc.	FORMULATIONS

Appln. No.	Patent No. Appln. Date	Issue Date	Grantor	Title
13/797333	12-Mar-2013		PolyOne Corporation	HEAT RESISTANT, FLAME RETARDANT POLYLACTIC ACID COMPOUNDS
13/797147	12-Mar-2013		PolyOne Corporation	HEAT RESISTANT, FLAME RETARDANT POLYLACTIC ACID COMPOUNDS
13/794134	11-Mar-2013		PolyOne Corporation	THERMOPLASTIC ELASTOMERS WITH SILKY FEEL
13/769477	18-Feb-2013		PolyOne Designed Structures and Solutions LLC	MULTI-LAYER SHEET STRUCTURE HAVING MOISTURE BARRIER PROPERTIES
13,983,327	01/02/2012		COLORMATRIX HOLDINGS, INC	SCAVENGING OXYGEN
10-2012-7034069	7/5/2011		COLORMATRIX HOLDINGS, INC	PLASTIC PROCESSING METHOD & APPARATUS
US14442574	11/8/2013		COLORMATRIX HOLDINGS INC	COLOUR AND EFFECTS IN PLASTIC MATERIALS
Not Yet Known	Not Yet Known		COLORMATRIX HOLDINGS, INC	SCAVENGING OXYGEN
Not Yet Known	1/13/2014		COLORMATRIX HOLDINGS INC	COLORMATRIX HOLDINGS INC

RECORDED: 11/16/2015