PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4602584

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
INTERMOLECULAR, INC.	03/14/2017

RECEIVING PARTY DATA

Name:	GUARDIAN INDUSTRIES CORP.
Street Address:	2300 HARMON ROAD
City:	AUBURN HILLS
State/Country:	MICHIGAN
Postal Code:	48326

PROPERTY NUMBERS Total: 34

Property Type	Number
Patent Number:	9011969
Patent Number:	8784934
Patent Number:	9296651
Patent Number:	8778514
Patent Number:	9045363
Patent Number:	9315414
Patent Number:	8747626
Patent Number:	9297938
Patent Number:	9121100
Patent Number:	9408303
Patent Number:	9052456
Patent Number:	9321676
Patent Number:	9405046
Patent Number:	9309149
Patent Number:	9499899
Patent Number:	9279910
Patent Number:	9013782
Patent Number:	9518319
Patent Number:	9416049
Patent Number:	9296650

Property Type	Number
Patent Number:	9410359
Patent Number:	9481924
Patent Number:	9448345
Patent Number:	9365450
Patent Number:	9206078
Patent Number:	9127348
Patent Number:	8974066
Patent Number:	9441119
Patent Number:	9176259
Patent Number:	9109121
Patent Number:	8883252
Patent Number:	9221976
Patent Number:	9341751
Patent Number:	9423532

CORRESPONDENCE DATA

Fax Number: (703)816-4100

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: 703-816-4000
Email: ptomail@nixonvan.com
Correspondent Name: NIXON & VANDERHYE P.C.
Address Line 1: 901 N. GLEBE ROAD
Address Line 2: 11TH FLOOR
Address Line 4: ARLINGTON, VIRGINIA 22203-1808

ATTORNEY DOCKET NUMBER:	JAR-3691-1
NAME OF SUBMITTER:	JOSEPH A. RHOA
SIGNATURE:	/Joseph A. Rhoa/
DATE SIGNED:	09/20/2017

Total Attachments: 8
source=3691-1_Assignment#page1.tif
source=3691-1_Assignment#page2.tif
source=3691-1_Assignment#page3.tif
source=3691-1_Assignment#page4.tif
source=3691-1_Assignment#page5.tif
source=3691-1_Assignment#page6.tif
source=3691-1_Assignment#page7.tif
source=3691-1_Assignment#page8.tif

Exhibit A

ASSIGNMENT OF PATENT RIGHTS

WHEREAS, Intermolecular, Inc., a Delaware corporation located at 3011 North First Street, San Jose, California 95134 ("IMI"), is the owner of the entire right, title and interest in and to some of the patent assets set forth below, is a co-owner of the other patent assets set forth below, and any other patent or application, whether US or foreign, claiming priority to or from any of the listed patents or patent applications.

Country	Title	FilingDate	ApplicationNum	PatentNum
United States	LOW-E PANEL WITH IMPROVED DIELECTRIC LAYER AND METHOD FOR FORMING THE SAME	12/27/2011	13/337,962	9011969
United States	Heat Stable SnAl and SnMg Based Dielectrics	11/28/2011	13/305,550	8784934
United States	Heat Stable SnAl and SnMg Based Dielectrics	6/9/2014	14/299,341	9296651
United States	Heat Stable SnAl and SnMg Based Dielectrics	3/12/2013	13/797,606	8778514
United States	Low-E Panels With Ternary Metal Oxide Dielectric Layer And Method For Forming The Same	12/27/2011	13/338,018	9045363
United States	Low-E Panels With Ternary Metal Oxide Dielectric Layer and Method For Forming The Same	4/30/2015	14/701,053	9315414
United States	METHOD OF GENERATING HIGH PURITY BISMUTH OXIDE	11/30/2011	13/307,301	8747626
United States	Methods and apparatuses for patterned low emissivity panels	12/14/2012	13/715,528	9297938
United States	Silver Based Conductive Layer For Flexible Electronics	12/14/2012	13/715,477	9121100
United States	Silver Based Conductive Layer For Flexible Electronics	7/23/2015	14/807,336	9408303
United States	Low-E Glazing Performance by Seed Structure Optimization	3/12/2013	13/797,412	9052456
United States	Low-E Glazing Performance by Seed Structure Optimization	5/1/2015	14/702,284	9321676
United States	High Solar Gain Low-E Panel and Method for Forming the Same	3/13/2013	13/799,100	9405046
United States	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS	12/31/2013	14/144,828	9309149
United States	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS INCLUDING A TERNARY ALLOY	12/23/2013	14/139,350	9499899

United States	Color shift of high LSG low emissivity coating after heat treatment	3/13/2013	13/801,465	9279910
United States	LOW-EMISSIVITY PANELS INCLUDING MAGNETIC LAYERS	12/30/2013	14/144,319	9013782
United States	LOW-EMISSIVITY GLASS INCLUDING SPACER LAYERS COMPATIBLE WITH HEAT TREATMENT	3/10/2014	14/203,182	9518319
United States	Low-E Panels and Methods for Forming the Same	6/23/2014	14/312,104	9416049
United States	Low-E Panels and Methods for Forming the Same	10/13/2014	14/512,644	9296650
United States	Low-E Panels and Methods for Forming the Same	3/19/2015	14/662,583	9410359
United States	Seed layer for low-e applications	6/2/2014	14/293,126	9481924
United States	Novel silver barrier materials for low-emissivity applications	12/21/2012	13/725,126	9448345
United States	Base-layer consisting of two materials layer with extreme high/low index in low-e coating to improve the neutral color and transmittance performance	12/27/2012	13/728,042	9365450
United States	Barrier Layers for Silver Reflective Coatings and HPC Workflows for Rapid Screening of Materials for Such Barrier Layers	3/13/2013	13/801,635	9206078
United States	Barrier Layers for Silver Reflective Coatings and HPC Workflows for Rapid Screening of Materials for Such Barrier Layers	12/18/2014	14/574,755	9127348
United States	Optical Coatings with Plate-Shaped Particles and Methods for Forming the Same	3/14/2013	13/803,584	8974066
United States	SOL-GEL TRANSITION CONTROL OF COATINGS BY ADDITION OF SOLIDIFIERS FOR CONFORMAL COATINGS ON TEXTURED GLASS	3/28/2011	13/072,860	9441119
United States	SOL-GEL BASED ANTIREFLECTIVE (AR) COATINGS WITH CONTROLLABLE PORE SIZE USING ORGANIC NANOCRYSTALS AND DENDRIMERS	3/4/2011	13/041,137	9176259
United States	SOL-GEL BASED ANTIREFLECTIVE COATINGS USING ALKYLTRIALKOXYSILANE BINDERS HAVING LOW REFRACTIVE INDEX AND HIGH DURABILITY	10/13/2011	13/273,007	9109121

United States	ANTIREFLECTIVE COATINGS WITH SELF-CLEANING, MOISTURE RESISTANCE AND ANTIMICROBIAL PROPERTIES	6/28/2012	13/536,751	8883252
United States	Antireflective Coatings with Self-Cleaning, Moisture Resistance and Antimicrobial Properties	10/8/2014	14/509,898	9221976
United States	ANTIREFLECTIVE COATINGS WITH GRADATION AND METHODS FOR FORMING THE SAME	12/13/2012	13/713,899	9341751
United States	Anti-Reflection Coatings with Aqueous Particle Dispersions and Methods for Forming the Same	8/22/2013	13/973,858	9423532
European Patent Office	Low-E Panels With Ternary Metal Oxide Dielectric Layer and Method For Forming The Same	10/30/2012	12863280.90	
Republic of Korea	Silver Based Conductive Layer For Flexible Electronics	7/13/2015	2015-7018713	
Republic of Korea	Improved low emissivity coating with optimal base layer material and layer stack	7/13/2015	2015-7018815	
United States	ANTI-REFLECTION GLASS MADE FROM AGED SOL INCLUDING MIXTURE OF TRI-ALKOXYSILANE AND TETRA-ALKOXYSILANE	3/14/2013	13/826,011	
China	Titanium nickel niobium alloy barrier for low-emissivity coatings	11/11/2015	201480028165.80	
European Patent Office	Titanium nickel niobium alloy barrier for low-emissivity coatings	10/8/2015	14780065.00	
Russian Federation	Titanium nickel niobium alloy barrier for low-emissivity coatings	10/9/2015	2015143190.00	
United States	Titanium nickel niobium alloy barrier for low-emissivity coatings	3/18/2015	14/661,958	
United States	ANTI-REFLECTION GLASS MADE FROM SOL MADE BY BLENDING TRI-ALKOXYSILANE AND TETRA-ALKOXYSILANE INCLUSIVE SOLS	3/14/2013	13/826,288	
United States	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS	12/31/2013	14/144,915	
China	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS INCLUDING A TERNARY ALLOY	11/13/2015	201480027773.70	
European Patent Office	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS INCLUDING A TERNARY	10/12/2015	14773952.80	

	ALLOY			
Russian Federation	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS INCLUDING A TERNARY ALLOY	10/12/2015	2015143519.00	
United States	SYSTEMS, METHODS, AND APPARATUS FOR PRODUCTION COATINGS OF LOW-EMISSIVITY GLASS INCLUDING A TERNARY ALLOY	11/9/2016	15/346,884	
China	Method to generate high LSG low-emissivity coating with same color after heat treatment	10/30/2015	201480024651.20	
European Patent Office	Method to generate high LSG low-emissivity coating with same color after heat treatment	10/13/2015	14773055.00	
Russian Federation	Method to generate high LSG low-emissivity coating with same color after heat treatment	10/13/2015	2015143940.00	
United States	Method to generate high LSG low-emissivity coating with same color after heat treatment	3/14/2013	13/804,766	
European Patent Office	METHOD OF MAKING COATED ARTICLE INCLUDING ANTI-REFLECTION COATING WITH DOUBLE COATING LAYERS INCLUDING MESOPOROUS MATERIALS, AND PRODUCTS CONTAINING THE SAME	12/12/2013	13196933.90	
United States	METHOD OF MAKING COATED ARTICLE INCLUDING ANTI-REFLECTION COATING WITH DOUBLE COATING LAYERS INCLUDING MESOPOROUS MATERIALS, AND PRODUCTS CONTAINING THE SAME	12/13/2012	13/713,811	
United States	Barrier Layers for Silver Reflective Coatings and HPC Workflows for Rapid Screening of Materials for Such Barrier Layers	8/3/2015	14/816,697	
United States	Heat Treatable Coated Article Having Titanium Nitride and ITO Based IR Reflecting Layers	2/23/2017	15/440,065	
United States	Coated Article with Low-E Coating Having Doped Silver IR Reflecting Layer(s)	2/24/2017	15/441,507	
United States	Heat Treatable Coated Article Having Zirconium Nitride and ITO Based IR Reflecting Layers	2/23/2017	15/440,175	

United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and Hafnium Inclusive High Index Nitrided Dielectric Layer	3/9/2017	15/453,995	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and Doped Titanium Oxide Dielectric Layer(s) and Method of Making Same	3/3/2017	15/448,739	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and Niobium Bismuth Based High Index Layer and Method of Making Same	3/3/2017	15/448,620	
United States	Coated Article with IR Reflecting Layer(s) and Overcoat for Improving Solar Gain and Visible Transmissions	3/3/2017	15/448,629	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and Niobium -Doped Titanium Oxide Dielectric Layer(s) and Method of Making Same	3/3/2017	62/466,474	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and Doped Titanium Oxide Bi-Layer Film Dielectric and Method of Making Same	3/7/2017	15/451,448	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) And Yttrium Inclusive High Index Nitrided Dielectric Layer	3/7/2017	15/451,518	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and High Index Nitrided Dielectric Film Having Multiple Layers	3/9/2017	15/453,944	
United States	Coated Article Having Low-E Coating with IR Reflecting Layer(s) and high Index Nitrided Dielectric Layers	3/10/2017	15/455,163	
United States	Coated Article with Low-E Coating Having Protective Doped Silver Layer for Protecting Silver Based IR Reflecting Layer(s), and Method of Making Same	3/1/2017	15/446,026	
United States	Coated Article with Low-E Coating Having IR Reflecting System With Silver and Zinc Based Barrier Layer(s)	3/1/2017	15/446,023	
United States	Method of No Significant Observable Color Variatins at All Angles for High LST Triple Low-E	3/10/2017	62/469,556	

	Window Coating by 2nd Side Coatings			

("Patent Assets")

WHEREAS, Guardian Industries Corp., a Delaware Corporation, having its principal office at 2300 Harmon Road, Auburn Hills, Michigan 48326 ("Guardian"), has acquired the entire right, title and interest in and to the Patent Assets.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, IMI confirms selling, assigning, transferring and conveying unto Guardian, its successors and assigns, all right, title and interest in and to the Patent Assets, together with all claims, demands, or causes of action that IMI has or might have by reason of any infringement of any of the foregoing prior to the effective date of this Assignment, including the right to sue and collect damages for such past infringement.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Guardian, its successors, assigns and other legal representatives, and will be binding upon IMI, their successors, assigns and other legal representatives.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed by Intermolecular, Inc. on March 14, 2017.

ASSIGNOR: **Intermolecular, Inc.**
Name:
Title: PRESIDENT + CEO

STATE OF CALIFORNIA

COUNTY OF)

On March 14, 2017, before me, THY DINH, Notary Public in and for said State, CHRIS KRAMER personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____ (Seal)

See Attached.

(Signature MUST be notarized)

California Acknowledgment Form

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of SANTA CLARA } ss.

On MAR. 14, 2017 before me, Thy Dinh, Notary Public
(here insert name and title of the officer),

personally appeared CHRIS KRAMER –

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Seal

WITNESS my hand and official seal.

THY DINH
COMM. # 2123887
NOTARY PUBLIC-CALIFORNIA
COUNTY OF SANTA CLARA
MY COMM. EXP. AUG. 17, 2019

Thy Dinh

Optional Information

To help prevent fraud, it is recommended that you provide information about the attached document below.
This is not required under California State notary public law.

Document Title: Patent Asset Purchase # of Pages: 7

Notes Agreement

- Exhibit A